

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

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June 1999

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ACKNOWLEDGEMENT

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

Abstract

This report presents the results from the analysis of the 50th set of environmental quality assessment samples (QAP-L) that were received on or before June 3, 1999.

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 56th 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)		

*Please note this is a corrected report number.

RESULTS

The results from the analysis of QAP-L samples received on or before June 3, 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
Tissue	Bq kg ⁻¹
Vegetation	Bq kg ⁻¹
Water	Bq L ⁻¹

The values for elemental uranium are reported in µg filter⁻¹, g, or mL. Some programs require the use of pCi as reporting units, the conversion can be found on page 2.

The 'EML value' listed in the tables to which the contractors' results are compared is the mean of replicate determinations for each nuclide. The EML uncertainty is the standard 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-L 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. 3).

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.

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Results Ordered by Matrix/Nuclide

Air

²⁴¹ Am	215
Bq U	218
⁵⁷ Co	219
⁶⁰ Co	222
¹³⁷ Cs	226
Gross Alpha (GA)	230
Gross Beta (GB)	233
²³⁸ Pu	236
²³⁹ Pu	238
¹²⁵ Sb	240
⁹⁰ Sr	244
²³⁴ U	246
²³⁸ U	248
µg U	250

Soil

²²⁸ Ac	251
²⁴¹ Am	254
²¹⁴ Bi	257
Bq U	260
¹³⁷ Cs	261
⁴⁰ K	265
²¹² Pb	269
²¹⁴ Pb	272
²³⁸ Pu	275
²³⁹ Pu	276

⁹⁰ Sr	.....	279
²³⁴ Th	.....	281
²³⁴ U	.....	283
²³⁸ U	.....	285
µg U	.....	287
 Vegetation		
²⁴¹ Am	.....	288
²⁴⁴ Cm	.....	290
⁶⁰ Co	.....	292
¹³⁷ Cs	.....	295
⁴⁰ K	.....	298
²³⁸ Pu	.....	301
²³⁹ Pu	.....	302
⁹⁰ Sr	.....	304
 Water		
²⁴¹ Am	.....	306
Bq U	.....	309
⁶⁰ Co	.....	310
¹³⁷ Cs	.....	314
⁵⁵ Fe	.....	318
Gross Alpha (GA)	.....	319
Gross Beta (GB)	.....	322
³ H	.....	325
⁶³ Ni	.....	328
²³⁸ Pu	.....	329
²³⁹ Pu	.....	331
⁹⁰ Sr	.....	334
²³⁴ U	.....	337
²³⁸ U	.....	339
µg U	341

List of Labcodes of Participating Laboratories for EML QAP XLVII

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QAP 50 Statistical Summary

Nuclide	EML Value	EML Error	Reported Values			No.* of Reported Values
			Mean	Median	Std. Dev.	
Matrix: AI						
AM241	0.134	0.001	1.150	1.099	0.236	65
Bq U	0.123	0.004	1.177	1.170	0.189	17
CO57	3.010	0.140	1.017	1.017	0.098	78
CO60	4.960	0.280	1.029	1.028	0.091	118
CS137	6.050	0.300	1.036	1.025	0.101	120
GROSS ALPHA	1.610	0.160	1.050	1.028	0.166	72
GROSS BETA	1.560	0.160	1.010	0.997	0.137	76
PU238	0.272	0.001	1.000	1.014	0.097	48
PU239	0.124	0.003	1.045	1.046	0.125	49
SB125	3.590	0.310	1.076	1.086	0.140	106
SR90	0.644	0.014	1.001	0.978	0.212	39
U234	0.060	0.002	1.162	1.146	0.190	40
U238	0.061	0.003	1.145	1.090	0.212	40
ug U	4.945	0.227	1.137	1.102	0.156	18
Matrix: SO						
AC228	47.150	2.989	1.087	1.076	0.179	80
AM241	4.894	0.969	1.044	0.981	0.268	63
BI214	69.900	5.660	0.966	0.959	0.117	77
Bq U	291.000	3.000	1.011	1.020	0.109	18
CS137	659.500	24.950	1.052	1.069	0.104	115
PB212	47.925	2.572	1.063	1.061	0.135	72
PB214	71.000	7.035	1.024	1.014	0.151	81
PU238	0.364	0.085	1.243	1.182	0.564	7
PU239	8.112	1.068	1.002	0.982	0.137	65
SR90	32.400	0.529	1.098	1.048	0.343	49
TH234	138.000	4.080	1.124	1.101	0.252	50
U234	140.667	1.155	0.980	0.995	0.073	43
U238	145.000	1.732	0.981	0.985	0.092	47
ug U	11.800	0.300	0.963	0.992	0.068	27
Matrix: VE						
AM241	3.522	0.590	1.057	0.965	0.306	53
CM244	1.671	0.541	1.206	1.239	0.206	30
CO60	21.450	1.000	1.080	1.077	0.140	85
CS137	467.000	20.000	1.108	1.118	0.121	88
PU238	0.419	0.010	0.906	0.951	0.077	5
PU239	5.204	0.428	0.967	0.966	0.102	48
SR90	736.100	7.700	0.927	0.951	0.137	47

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

QAP 50 Statistical Summary

Nuclide	EML Value	EML Error	<u>Reported Values</u> EML Value			No.* of Reported Values
			Mean	Median	Std. Dev.	
Matrix: WA						
AM241	1.146	0.051	1.046	1.047	0.119	70
Bq U	0.541	0.025	1.104	1.109	0.114	23
CO60	51.100	3.000	1.062	1.063	0.055	124
CS137	39.375	2.405	1.062	1.067	0.058	125
FE55	97.400	1.650	0.919	0.920	0.105	17
GROSS ALPHA	1090.000	20.000	0.981	1.006	0.124	68
GROSS BETA	1100.000	40.000	0.999	1.000	0.125	75
H3	121.080	6.780	1.087	1.056	0.178	84
NI63	114.000	10.000	0.925	0.965	0.105	17
PU238	0.772	0.037	1.023	1.037	0.075	59
PU239	1.009	0.058	0.996	0.991	0.068	61
SR90	4.104	0.045	0.938	0.927	0.120	62
U234	0.269	0.015	1.071	1.062	0.098	50
U238	0.262	0.016	1.075	1.069	0.084	50
ug U	0.021	0.001	1.076	1.085	0.079	24

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 50 Control Limits* by Matrix

Nuclide	Lower Limit	Lower Middle Limit	Upper Middle Limit	Upper Limit
Matrix: AI				
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
PU238	0.74	0.89	1.15	1.40
PU239	0.76	0.90	1.19	1.44
SB125	0.61	0.83	1.19	1.43
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 U	0.72	0.90	1.29	1.93
Matrix: SO				
AC228	0.79	0.87	1.31	1.75
AM241	0.63	0.79	1.48	2.31
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
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 U	0.46	0.67	1.10	1.22
Matrix: VE				
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
PU238	0.66	0.81	2.89	7.94
PU239	0.68	0.86	1.23	1.59

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

QAP 50 Control Limits* by Matrix

Nuclide	Lower Limit	Lower Middle Limit	Upper Middle Limit	Upper Limit
SR90	0.50	0.73	1.13	1.33
Matrix: WA				
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 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 50 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	6	1	0	7	86	14	0
SO	7	2	0	9	78	22	0
AI	8	0	1	9	89	0	11
Totals:	21	3	1	25	84%	12%	4%
Lab: AF Air Force Analytical Lab, Brooks AFB							
SO	4	4	4	12	33	33	33
WA	8	1	2	11	73	9	18
AI	5	5	1	11	45	45	9
VE	4	2	0	6	67	33	0
Totals:	21	12	7	40	53%	30%	18%
Lab: AG Paragon Analytics, Inc, Fort Collins, CO							
WA	11	1	0	12	92	8	0
AI	12	0	0	12	100	0	0
SO	14	0	0	14	100	0	0
VE	7	0	0	7	100	0	0
Totals:	44	1	0	45	98%	2%	0%
Lab: AM American Radiation Services, Inc., Baton Rouge							
SO	9	3	1	13	69	23	8
WA	8	1	3	12	67	8	25
AI	3	4	5	12	25	33	42
VE	4	1	1	6	67	17	17
Totals:	24	9	10	43	56%	21%	23%
Lab: AN Argonne National Laboratory							
WA	9	0	0	9	100	0	0
AI	8	2	0	10	80	20	0
SO	7	0	0	7	100	0	0
Totals:	24	2	0	26	92%	8%	0%
Lab: AR Accu-Labs Research Inc., Golden, CO							
SO	12	1	0	13	92	8	0
WA	5	4	4	13	38	31	31
AI	10	2	0	12	83	17	0
VE	1	5	0	6	17	83	0
Totals:	28	12	4	44	64%	27%	9%

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: AS USACHPPM, Aberdeen Proving Ground, MD							
SO	4	4	0	8	50	50	0
WA	5	2	0	7	71	29	0
AI	7	0	0	7	100	0	0
Totals:	16	6	0	22	73%	27%	0%
Lab: AT ATL International inc., Germantown, MD							
VE	3	1	0	4	75	25	0
SO	3	0	0	3	100	0	0
WA	5	0	0	5	100	0	0
AI	2	0	0	2	100	0	0
Totals:	13	1	0	14	93%	7%	0%
Lab: AU ORISE RSAT/ESSAP, Oak Ridge							
VE	6	0	0	6	100	0	0
AI	8	3	0	11	73	27	0
WA	8	1	2	11	73	9	18
SO	11	0	1	12	92	0	8
Totals:	33	4	3	40	83%	10%	8%
Lab: AW Argonne West National Lab							
WA	2	0	0	2	100	0	0
AI	3	0	1	4	75	0	25
Totals:	5	0	1	6	83%	0%	17%
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	1	2	7	57	14	29
AI	6	3	0	9	67	33	0
Totals:	13	4	2	19	68%	21%	11%
Lab: BC BWX Technologies, Inc, Naval Nuclear Fuel Division, Lynchburg, VA							
VE	4	0	0	4	100	0	0
SO	8	1	1	10	80	10	10
WA	4	2	1	7	57	29	14
AI	9	0	0	9	100	0	0
Totals:	25	3	2	30	83%	10%	7%

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: BE RUST Geotech, Grand Junction, CO							
SO	11	2	0	13	85	15	0
WA	14	0	0	14	100	0	0
VE	7	0	0	7	100	0	0
AI	12	1	0	13	92	8	0
Totals:	44	3	0	47	94%	6%	0%
Lab: BL Barringer Laboratories Inc., Golden, CO							
VE	9	0	0	9	100	0	0
SO	17	0	0	17	100	0	0
WA	15	3	1	19	79	16	5
AI	10	10	0	20	50	50	0
Totals:	51	13	1	65	78%	20%	2%
Lab: BM Battelle Memorial Institute, Columbus, OH							
VE	4	1	0	5	80	20	0
SO	5	1	0	6	83	17	0
WA	6	2	0	8	75	25	0
AI	5	3	0	8	63	38	0
Totals:	20	7	0	27	74%	26%	0%
Lab: BN Brookhaven National Laboratory, Upton, NY							
SO	6	12	0	18	33	67	0
VE	7	2	0	9	78	22	0
WA	12	3	3	18	67	17	17
AI	4	4	10	18	22	22	56
Totals:	29	21	13	63	46%	33%	21%
Lab: BP Battelle Pacific Northwest National Laboratory							
WA	3	0	0	3	100	0	0
Totals:	3	0	0	3	100%	0%	0%
Lab: BQ Becquerel Laboratories Inc., Mississauga, Ontario, Canada							
VE	1	1	1	3	33	33	33
SO	4	2	2	8	50	25	25
WA	5	2	0	7	71	29	0
AI	3	2	1	6	50	33	17
Totals:	13	7	4	24	54%	29%	17%

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: BU Autoridad Regulatoria, Buenos Aires, Argentina							
SO	8	2	0	10	80	20	0
WA	12	0	0	12	100	0	0
VE	4	3	0	7	57	43	0
AI	10	1	0	11	91	9	0
Totals:	34	6	0	40	85%	15%	0%
Lab: BX B&W Nuclear Envir. Services, Lynchburg, VA							
VE	4	0	3	7	57	0	43
SO	9	1	2	12	75	8	17
WA	11	1	1	13	85	8	8
AI	10	1	1	12	83	8	8
Totals:	34	3	7	44	77%	7%	16%
Lab: CA Atomic Energy Control Board, Ottawa, Canada							
WA	2	2	3	7	29	29	43
AI	6	0	0	6	100	0	0
Totals:	8	2	3	13	62%	15%	23%
Lab: CB Radiation Protection Bureau, Ontario, Canada							
AI	14	1	0	15	93	7	0
WA	11	0	0	11	100	0	0
Totals:	25	1	0	26	96%	4%	0%
Lab: CD Gentilly-2 Nuclear Power Plant, Quebec Canada							
VE	3	0	0	3	100	0	0
SO	6	0	0	6	100	0	0
WA	4	0	0	4	100	0	0
AI	5	0	0	5	100	0	0
Totals:	18	0	0	18	100%	0%	0%
Lab: CH California State Dept. Health Serv., Sanitation & Radiation Laboratory							
VE	5	2	0	7	71	29	0
SO	12	2	0	14	86	14	0
WA	14	1	0	15	93	7	0
AI	11	3	0	14	79	21	0
Totals:	42	8	0	50	84%	16%	0%
Lab: CL Core Laboratories, Casper, WY							
VE	1	3	3	7	14	43	43

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AI	4	6	1	11	36	55	9
SO	7	4	2	13	54	31	15
WA	10	1	1	12	83	8	8
Totals:	22	14	7	43	51%	33%	16%
Lab: CM Metropolitan Water Reclamation District of Greater Chicago							
SO	3	2	0	5	60	40	0
WA	4	1	0	5	80	20	0
Totals:	7	3	0	10	70%	30%	0%
Lab: CN China Institute for Radiation Protection							
VE	4	0	0	4	100	0	0
SO	6	0	0	6	100	0	0
AI	1	4	0	5	20	80	0
Totals:	11	4	0	15	73%	27%	0%
Lab: CO Bedford Institute of Oceanography, Dartmouth. Nova Scotia, Canada							
VE	8	1	0	9	89	11	0
SO	15	0	3	18	83	0	17
AI	3	9	0	12	25	75	0
Totals:	26	10	3	39	67%	26%	8%
Lab: CR Laboratorio de Fisica Nuclear Aplicada, Costa Rica							
VE	3	0	0	3	100	0	0
SO	4	2	0	6	67	33	0
AI	0	1	2	3	0	33	67
Totals:	7	3	2	12	58%	25%	17%
Lab: CS Boeing North American, Canoga Park, CA							
VE	3	0	1	4	75	0	25
AI	5	1	0	6	83	17	0
SO	7	2	0	9	78	22	0
WA	2	0	1	3	67	0	33
Totals:	17	3	2	22	77%	14%	9%
Lab: CW Carlsbad Environmental Monitoring Research Center, NM							
VE	12	0	0	12	100	0	0
SO	12	0	0	12	100	0	0
WA	12	0	0	12	100	0	0
AI	9	0	0	9	100	0	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	45	0	0	45	100%	0%	0%
Lab: DC Datachem Laboratories, Salt Lake City							
SO	4	1	1	6	67	17	17
WA	2	2	1	5	40	40	20
Totals:	6	3	2	11	55%	27%	18%
Lab: DH Duke Engineering Services Hanford							
AI	7	0	0	7	100	0	0
WA	2	0	2	4	50	0	50
SO	3	0	0	3	100	0	0
Totals:	12	0	2	14	86%	0%	14%
Lab: EC Envirocare of Utah							
SO	7	0	0	7	100	0	0
WA	2	0	0	2	100	0	0
Totals:	9	0	0	9	100%	0%	0%
Lab: EG LMITCO/INEL, Scoville							
VE	7	1	0	8	88	13	0
SO	8	0	0	8	100	0	0
WA	10	2	0	12	83	17	0
AI	10	0	0	10	100	0	0
Totals:	35	3	0	38	92%	8%	0%
Lab: EL Energy Laboratories, Inc., Casper, WY							
VE	3	2	3	8	38	25	38
SO	3	4	5	12	25	33	42
WA	0	0	6	6	0	0	100
AI	0	0	8	8	0	0	100
Totals:	6	6	22	34	18%	18%	65%
Lab: EM 3M, Empore Disks, St. Paul, MN							
WA	2	0	0	2	100	0	0
Totals:	2	0	0	2	100%	0%	0%
Lab: EP US EPA, Las Vegas							
WA	8	0	1	9	89	0	11

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AI	6	0	0	6	100	0	0
SO	2	0	0	2	100	0	0
VE	3	0	0	3	100	0	0
Totals:	19	0	1	20	95%	0%	5%
Lab: FG FGL Environmental, Santa Paula, CA							
WA	6	1	1	8	75	13	13
AI	4	2	1	7	57	29	14
SO	4	2	0	6	67	33	0
Totals:	14	5	2	21	67%	24%	10%
Lab: FL Florida Dept of Health & Rehab. Serv., Orlando							
VE	4	0	0	4	100	0	0
SO	4	0	0	4	100	0	0
WA	6	1	1	8	75	13	13
AI	6	1	0	7	86	14	0
Totals:	20	2	1	23	87%	9%	4%
Lab: FM Florida Mobile Emergency Radiological Laboratory, Orlando							
WA	3	0	0	3	100	0	0
AI	3	2	0	5	60	40	0
Totals:	6	2	0	8	75%	25%	0%
Lab: FN Fermi Lab, Batavia, IL							
WA	3	0	0	3	100	0	0
AI	3	1	0	4	75	25	0
SO	2	0	0	2	100	0	0
VE	3	0	0	3	100	0	0
Totals:	11	1	0	12	92%	8%	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							
VE	5	1	0	6	83	17	0
SO	6	1	0	7	86	14	0
WA	7	1	1	9	78	11	11
AI	9	1	0	10	90	10	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	27	4	1	32	84%	13%	3%
Lab: GC Georgia Power Company Environmental Lab							
WA	11	2	0	13	85	15	0
AI	8	1	0	9	89	11	0
SO	15	3	0	18	83	17	0
VE	9	0	0	9	100	0	0
Totals:	43	6	0	49	88%	12%	0%
Lab: GE Environmental Physics, Inc., Charleston, SC							
AI	12	0	0	12	100	0	0
SO	13	0	0	13	100	0	0
WA	12	1	1	14	86	7	7
VE	6	1	0	7	86	14	0
Totals:	43	2	1	46	93%	4%	2%
Lab: GP GPU Nuclear, Inc., Harrisburg, PA							
AI	12	0	1	13	92	0	8
WA	12	0	1	13	92	0	8
VE	7	0	0	7	100	0	0
SO	7	0	1	8	88	0	13
Totals:	38	0	3	41	93%	0%	7%
Lab: GT Georgia Institute of Technology							
VE	6	0	0	6	100	0	0
SO	6	0	0	6	100	0	0
WA	9	0	1	10	90	0	10
AI	7	3	0	10	70	30	0
Totals:	28	3	1	32	88%	9%	3%
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	0	2	6	67	0	33
WA	2	2	4	8	25	25	50

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	6	2	6	14	43%	14%	43%
Lab: HU Water Resources Research Centre (VITUKI), Hungary							
SO	5	1	0	6	83	17	0
AI	3	2	0	5	60	40	0
VE	3	0	0	3	100	0	0
Totals:	11	3	0	14	79%	21%	0%
Lab: ID Institute of Radiation Protection and Dosimetry, IRD/ CNEN, Brazil							
VE	3	1	1	5	60	20	20
SO	11	1	1	13	85	8	8
WA	8	0	0	8	100	0	0
AI	9	0	0	9	100	0	0
Totals:	31	2	2	35	89%	6%	6%
Lab: IE Severn Trent Laboratories, Whippany, NJ							
VE	1	0	3	4	25	0	75
SO	7	1	0	8	88	13	0
WA	7	0	2	9	78	0	22
AI	3	1	1	5	60	20	20
Totals:	18	2	6	26	69%	8%	23%
Lab: IL ISU Environmental Monitoring Program, Pocatello, ID							
WA	3	0	1	4	75	0	25
AI	5	0	1	6	83	0	17
SO	6	0	0	6	100	0	0
VE	3	0	0	3	100	0	0
Totals:	17	0	2	19	89%	0%	11%
Lab: IN Lockheed Martin Idaho Technical Corp., Analytical Laboratory							
SO	12	0	0	12	100	0	0
WA	8	0	0	8	100	0	0
AI	2	1	0	3	67	33	0
VE	3	0	0	3	100	0	0
Totals:	25	1	0	26	96%	4%	0%
Lab: IS Quanterra- St. Louis							
VE	17	1	2	20	85	5	10
SO	17	5	5	27	63	19	19
WA	23	3	0	26	88	12	0
AI	16	5	10	31	52	16	32

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	73	14	17	104	70%	13%	16%
Lab: IT	Quanterra- Richland Laboratory						
WA	7	5	1	13	54	38	8
AI	12	1	0	13	92	8	0
VE	6	1	0	7	86	14	0
SO	13	1	0	14	93	7	0
Totals:	38	8	1	47	81%	17%	2%
Lab: JE	Jacobs Engineering, Oak Ridge, TN						
WA	4	0	0	4	100	0	0
SO	6	0	0	6	100	0	0
Totals:	10	0	0	10	100%	0%	0%
Lab: JL	Jefferson Lab, Newport News, VA						
WA	4	0	0	4	100	0	0
AI	7	1	0	8	88	13	0
Totals:	11	1	0	12	92%	8%	0%
Lab: KA	Knolls Atomic Power Lab, Schenectady						
SO	4	0	0	4	100	0	0
WA	8	1	0	9	89	11	0
AI	2	0	0	2	100	0	0
Totals:	14	1	0	15	93%	7%	0%
Lab: KO	Korea Institute of Nuclear Safety						
VE	6	1	0	7	86	14	0
SO	8	1	0	9	89	11	0
WA	9	3	0	12	75	25	0
AI	13	0	0	13	100	0	0
Totals:	36	5	0	41	88%	12%	0%
Lab: LA	Los Alamos National Laboratory, NM						
VE	2	3	4	9	22	33	44
AI	10	2	12	24	42	8	50
SO	20	6	6	32	63	19	19
WA	23	2	5	30	77	7	17
Totals:	55	13	27	95	58%	14%	28%

QAP 50 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							
VE	2	1	0	3	67	33	0
SO	2	0	0	2	100	0	0
WA	5	1	3	9	56	11	33
AI	6	0	1	7	86	0	14
Totals:	15	2	4	21	71%	10%	19%
Lab: LL LLNL Chemistry and Material Science/Environmental							
VE	5	0	0	5	100	0	0
SO	10	0	0	10	100	0	0
AI	11	0	0	11	100	0	0
WA	8	1	1	10	80	10	10
Totals:	34	1	1	36	94%	3%	3%
Lab: LN Los Alamos National Lab, ES&H							
AI	2	3	0	5	40	60	0
WA	0	1	1	2	0	50	50
Totals:	2	4	1	7	29%	57%	14%
Lab: LV UNLV, Dept of Health Physics							
VE	3	1	0	4	75	25	0
SO	4	4	0	8	50	50	0
WA	4	2	4	10	40	20	40
AI	5	0	4	9	56	0	44
Totals:	16	7	8	31	52%	23%	26%
Lab: LW Lawrence Livermore National Lab, Waste							
SO	3	1	0	4	75	25	0
WA	3	0	0	3	100	0	0
Totals:	6	1	0	7	86%	14%	0%
Lab: MA ORNL Health Sciences Research Div.							
VE	0	2	2	4	0	50	50
SO	5	1	1	7	71	14	14
AI	2	1	0	3	67	33	0
Totals:	7	4	3	14	50%	29%	21%
Lab: ME Radiation Control Program, Jamaica Plain, MA							
VE	3	6	3	12	25	50	25
SO	5	4	7	16	31	25	44

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
WA	5	7	0	12	42	58	0
AI	13	3	2	18	72	17	11
Totals:	26	20	12	58	45%	34%	21%

Lab: MH Maine Health & Environmental Testing Laboratory

AI	4	2	0	6	67	33	0
WA	7	2	0	9	78	22	0
VE	2	2	0	4	50	50	0
SO	7	0	1	8	88	0	13
Totals:	20	6	1	27	74%	22%	4%

Lab: ML Babcock & Wilcox of Ohio, Mound, Miamisburg, Ohio

VE	1	0	0	1	100	0	0
SO	2	1	0	3	67	33	0
WA	5	0	0	5	100	0	0
AI	4	0	0	4	100	0	0
Totals:	12	1	0	13	92%	8%	0%

Lab: MS Manufacturing Sciences Corporation, Oak Ridge

SO	6	1	0	7	86	14	0
WA	5	0	0	5	100	0	0
AI	5	1	0	6	83	17	0
Totals:	16	2	0	18	89%	11%	0%

Lab: NA US EPA NAREL, Montgomery, AL

SO	9	1	0	10	90	10	0
VE	4	1	0	5	80	20	0
WA	6	1	1	8	75	13	13
AI	5	1	0	6	83	17	0
Totals:	24	4	1	29	83%	14%	3%

Lab: NF Nuclear Fuel Services, Erwin, TN

SO	0	1	0	1	0	100	0
WA	1	1	2	4	25	25	50
AI	1	1	1	3	33	33	33
Totals:	2	3	3	8	25%	38%	38%

Lab: NJ NJ Department of Health and Senior Services

WA	25	0	0	25	100	0	0
AI	14	0	0	14	100	0	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	39	0	0	39	100%	0%	0%
Lab: NL Fluor Daniel Fernald, Inc., Ohio							
SO	11	1	0	12	92	8	0
WA	7	0	0	7	100	0	0
AI	8	1	0	9	89	11	0
Totals:	26	2	0	28	93%	7%	0%
Lab: NM Environmental Evaluation Group, Carlsbad, NM							
SO	9	1	0	10	90	10	0
WA	4	1	0	5	80	20	0
AI	4	1	0	5	80	20	0
Totals:	17	3	0	20	85%	15%	0%
Lab: NP JAF Environmental Laboratory, New York Power Authority							
WA	4	0	0	4	100	0	0
AI	5	0	0	5	100	0	0
Totals:	9	0	0	9	100%	0%	0%
Lab: NQ New Mexico Department of Health, Albuquerque							
WA	7	2	0	9	78	22	0
AI	5	2	0	7	71	29	0
SO	10	1	0	11	91	9	0
Totals:	22	5	0	27	81%	19%	0%
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	4	0	0	4	100	0	0
Totals:	9	0	0	9	100%	0%	0%
Lab: NS State Lab of Public Health, North Carolina							
WA	4	1	1	6	67	17	17
AI	6	0	0	6	100	0	0
Totals:	10	1	1	12	83%	8%	8%

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: OB OBG Laboratories, East Syracuse, NY							
WA	3	0	3	6	50	0	50
AI	5	0	0	5	100	0	0
SO	3	2	2	7	43	29	29
VE	3	0	0	3	100	0	0
Totals:	14	2	5	21	67%	10%	24%
Lab: OC Radiation Protection Service Laboratory, Ontario, Canada							
SO	14	2	2	18	78	11	11
WA	12	0	3	15	80	0	20
AI	17	1	0	18	94	6	0
VE	7	5	0	12	58	42	0
Totals:	50	8	5	63	79%	13%	8%
Lab: OD ORNL, Radiobioassay Lab							
WA	14	3	0	17	82	18	0
AI	10	0	0	10	100	0	0
Totals:	24	3	0	27	89%	11%	0%
Lab: OK Southwest Laboratory of Oklahoma							
WA	1	2	0	3	33	67	0
SO	2	0	0	2	100	0	0
Totals:	3	2	0	5	60%	40%	0%
Lab: OL ORNL Environmental Sciences Div.							
AI	4	0	0	4	100	0	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	0	0	11	100%	0%	0%
Lab: OS Oregon Health Division Radiation Controls Section, Portland							
WA	2	4	0	6	33	67	0
AI	12	0	0	12	100	0	0
Totals:	14	4	0	18	78%	22%	0%
Lab: OT ORNL Radioactive Material Analysis Lab							
AI	6	2	2	10	60	20	20
WA	10	0	0	10	100	0	0
VE	6	1	0	7	86	14	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
SO	11	0	0	11	100	0	0
Totals:	33	3	2	38	87%	8%	5%
Lab: OU Outreach Laboratory, Broken Arrow, OK							
SO	1	1	6	8	13	13	75
WA	1	2	2	5	20	40	40
AI	1	0	1	2	50	0	50
Totals:	3	3	9	15	20%	20%	60%
Lab: PA Mason & Hanger-Silas Mason Co., Inc., Battelle Pantex, Amarillo, TX							
AI	6	0	0	6	100	0	0
Totals:	6	0	0	6	100%	0%	0%
Lab: PK Pakistan Institute of Nuclear Science & Technology							
VE	2	0	1	3	67	0	33
SO	2	0	0	2	100	0	0
AI	1	1	1	3	33	33	33
Totals:	5	1	2	8	63%	13%	25%
Lab: PO Institute of Oceanology PAN, Poland							
SO	5	1	0	6	83	17	0
VE	4	0	0	4	100	0	0
AI	2	1	0	3	67	33	0
Totals:	11	2	0	13	85%	15%	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							
VE	6	0	0	6	100	0	0
SO	10	1	0	11	91	9	0
AI	6	0	0	6	100	0	0
Totals:	22	1	0	23	96%	4%	0%
Lab: RC US NRC Region I Laboratory, PA							
SO	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AI	5	1	0	6	83	17	0
Totals:	10	1	0	11	91%	9%	0%
Lab: RE Bechtel Nevada, Mercury, NV							
VE	5	2	0	7	71	29	0
AI	7	4	1	12	58	33	8
SO	11	0	0	11	100	0	0
WA	9	2	0	11	82	18	0
Totals:	32	8	1	41	78%	20%	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							
VE	2	1	1	4	50	25	25
AI	7	0	0	7	100	0	0
SO	1	2	0	3	33	67	0
WA	4	0	3	7	57	0	43
Totals:	14	3	4	21	67%	14%	19%
Lab: RK Rock Island Arsenal, Illinois							
AI	0	2	0	2	0	100	0
Totals:	0	2	0	2	0%	100%	0%
Lab: RL Bechtel Hanford-Radiological Counting Facility							
SO	1	2	4	7	14	29	57
WA	4	0	0	4	100	0	0
AI	2	0	0	2	100	0	0
Totals:	7	2	4	13	54%	15%	31%
Lab: SA Sandia Labs Radioactive Sample Diag. Prog., NM							
SO	2	0	0	2	100	0	0
WA	3	0	0	3	100	0	0
AI	5	1	0	6	83	17	0
Totals:	10	1	0	11	91%	9%	0%

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Lab: SB SC Dept. of Health and Environment Control Radiological Lab							
AI	1	2	0	3	33	67	0
VE	0	0	3	3	0	0	100
WA	3	0	0	3	100	0	0
SO	0	3	0	3	0	100	0
Totals:	4	5	3	12	33%	42%	25%
Lab: SK Savannah River Plant							
VE	4	0	0	4	100	0	0
SO	7	1	0	8	88	13	0
WA	7	2	0	9	78	22	0
AI	4	1	0	5	80	20	0
Totals:	22	4	0	26	85%	15%	0%
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							
WA	4	0	0	4	100	0	0
AI	2	2	0	4	50	50	0
SO	3	0	0	3	100	0	0
VE	3	0	0	3	100	0	0
Totals:	12	2	0	14	86%	14%	0%
Lab: SR Savannah River Environmental Laboratory							
SO	7	3	0	10	70	30	0
WA	9	1	1	11	82	9	9
AI	10	1	0	11	91	9	0
VE	7	0	0	7	100	0	0
Totals:	33	5	1	39	85%	13%	3%
Lab: ST SC DHEC, Aiken, South Carolina							
WA	1	0	0	1	100	0	0
Totals:	1	0	0	1	100%	0%	0%
Lab: SW Southwest Research Institute, San Antonio, TX							
AI	7	0	3	10	70	0	30
WA	5	2	2	9	56	22	22
VE	3	2	2	7	43	29	29

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary				Evaluation Percentages		
	A	W	N	Total Analyses	%A	%W	%N
SO	5	4	2	11	45	36	18
Totals:	20	8	9	37	54%	22%	24%
Lab: TE Teledyne Isotopes Midwest Lab, Northbrook, IL							
VE	5	0	1	6	83	0	17
SO	11	1	0	12	92	8	0
WA	9	4	0	13	69	31	0
AI	9	3	0	12	75	25	0
Totals:	34	8	1	43	79%	19%	2%
Lab: TI Teledyne Brown Engineering Environmental Services, Westwood, NJ							
VE	5	0	2	7	71	0	29
SO	5	1	3	9	56	11	33
WA	11	0	1	12	92	0	8
AI	5	2	0	7	71	29	0
Totals:	26	3	6	35	74%	9%	17%
Lab: TM Thermo Nutech Albuquerque Lab, NM							
AI	7	2	2	11	64	18	18
VE	6	1	0	7	86	14	0
SO	30	3	0	33	91	9	0
WA	8	1	1	10	80	10	10
Totals:	51	7	3	61	84%	11%	5%
Lab: TN Thermo NuTech, Richmond, CA							
VE	6	1	0	7	86	14	0
SO	8	3	0	11	73	27	0
WA	14	0	0	14	100	0	0
AI	8	1	3	12	67	8	25
Totals:	36	5	3	44	82%	11%	7%
Lab: TO Thermo NUtech Oak Ridge Laboratory							
VE	2	4	1	7	29	57	14
SO	5	3	3	11	45	27	27
WA	13	1	0	14	93	7	0
AI	6	2	5	13	46	15	38
Totals:	26	10	9	45	58%	22%	20%
Lab: TP Taiwan Power Company, Taipei, Taiwan							
WA	5	1	0	6	83	17	0
AI	5	1	0	6	83	17	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
SO	3	0	0	3	100	0	0
VE	4	0	0	4	100	0	0
Totals:	17	2	0	19	89%	11%	0%
Lab: TQ Institute of Nuclear Energy Research, Taiwan							
SO	3	0	0	3	100	0	0
WA	4	2	0	6	67	33	0
VE	3	1	0	4	75	25	0
Totals:	10	3	0	13	77%	23%	0%
Lab: TR University of Istanbul, Turkey							
VE	1	0	2	3	33	0	67
SO	1	2	0	3	33	67	0
AI	0	3	2	5	0	60	40
Totals:	2	5	4	11	18%	45%	36%
Lab: TT Tracer Technologies International, Inc., Cleveland							
WA	3	0	0	3	100	0	0
Totals:	3	0	0	3	100%	0%	0%
Lab: TW Taiwan Radiation Monitoring Center							
VE	4	0	0	4	100	0	0
AI	5	1	0	6	83	17	0
SO	10	0	0	10	100	0	0
WA	8	3	0	11	73	27	0
Totals:	27	4	0	31	87%	13%	0%
Lab: TX Texas Dept. of Health/Laboratories, Austin							
VE	6	0	0	6	100	0	0
SO	12	0	0	12	100	0	0
WA	11	0	0	11	100	0	0
AI	10	1	0	11	91	9	0
Totals:	39	1	0	40	98%	3%	0%
Lab: UC Lockheed Martin, Paducah, KY							
VE	3	0	0	3	100	0	0
SO	2	0	0	2	100	0	0
WA	5	0	0	5	100	0	0
AI	3	1	0	4	75	25	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	13	1	0	14	93%	7%	0%
Lab: UP Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge							
SO	8	0	0	8	100	0	0
WA	7	3	0	10	70	30	0
AI	10	3	0	13	77	23	0
Totals:	25	6	0	31	81%	19%	0%
Lab: UY Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge							
SO	10	3	0	13	77	23	0
WA	11	1	0	12	92	8	0
VE	5	2	0	7	71	29	0
AI	13	0	0	13	100	0	0
Totals:	39	6	0	45	87%	13%	0%
Lab: WA Environmental Radiation Lab, Off. of Public Health Labs. Seattle							
VE	3	3	1	7	43	43	14
SO	12	1	0	13	92	8	0
WA	12	1	0	13	92	8	0
AI	11	2	0	13	85	15	0
Totals:	38	7	1	46	83%	15%	2%
Lab: WC Waste Management Federal Services of Hanford							
VE	4	3	0	7	57	43	0
SO	3	2	0	5	60	40	0
WA	7	1	3	11	64	9	27
AI	9	1	1	11	82	9	9
Totals:	23	7	4	34	68%	21%	12%
Lab: WE Westinghouse Electric Corp., Madison, PA							
VE	4	1	2	7	57	14	29
AI	3	2	2	7	43	29	29
SO	3	5	2	10	30	50	20
WA	2	2	2	6	33	33	33
Totals:	12	10	8	30	40%	33%	27%
Lab: WI WIPP Site, Westinghouse Electric Corp.							
WA	4	0	0	4	100	0	0

QAP 50 Summary of Matrix Evaluations by Laboratory

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
Totals:	4	0	0	4	100%	0%	0%
Lab: WN State Health Radiation Protection Section, Madison, WI							
VE	5	6	0	11	45	55	0
SO	18	2	0	20	90	10	0
WA	7	0	2	9	78	0	22
AI	14	1	0	15	93	7	0
Totals:	44	9	2	55	80%	16%	4%
Lab: WO Wisconsin State Lab of Hygiene							
VE	6	0	0	6	100	0	0
SO	14	2	0	16	88	13	0
WA	11	2	1	14	79	14	7
AI	4	6	4	14	29	43	29
Totals:	35	10	5	50	70%	20%	10%
Lab: WS Weldon Springs Site, St Charles, MO							
AI	1	0	0	1	100	0	0
SO	3	0	1	4	75	0	25
Totals:	4	0	1	5	80%	0%	20%
Lab: WV West Valley Nuclear Services Co, Inc, NY							
WA	5	1	0	6	83	17	0
AI	6	0	0	6	100	0	0
Totals:	11	1	0	12	92%	8%	0%
Lab: YA Duke Engineering & Sciences Environmental Lab, Westboro, MA							
VE	7	0	0	7	100	0	0
SO	7	1	0	8	88	13	0
WA	12	1	0	13	92	8	0
AI	9	2	1	12	75	17	8
Totals:	35	4	1	40	88%	10%	3%
Lab: YP US Army Proving Ground, Yuma, AZ							
SO	1	0	0	1	100	0	0
WA	1	0	0	1	100	0	0
AI	1	0	0	1	100	0	0
Totals:	3	0	0	3	100%	0%	0%

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AC	8	0	1	9	89	0	11
AF	5	5	1	11	45	45	9
AG	12	0	0	12	100	0	0
AM	3	4	5	12	25	33	42
AN	8	2	0	10	80	20	0
AR	10	2	0	12	83	17	0
AS	7	0	0	7	100	0	0
AT	2	0	0	2	100	0	0
AU	8	3	0	11	73	27	0
AW	3	0	1	4	75	0	25
BA	6	3	0	9	67	33	0
BC	9	0	0	9	100	0	0
BE	12	1	0	13	92	8	0
BL	10	10	0	20	50	50	0
BM	5	3	0	8	63	38	0
BN	4	4	10	18	22	22	56
BQ	3	2	1	6	50	33	17
BU	10	1	0	11	91	9	0
BX	10	1	1	12	83	8	8
CA	6	0	0	6	100	0	0
CB	14	1	0	15	93	7	0
CD	5	0	0	5	100	0	0
CH	11	3	0	14	79	21	0
CL	4	6	1	11	36	55	9
CN	1	4	0	5	20	80	0
CO	3	9	0	12	25	75	0
CR	0	1	2	3	0	33	67
CS	5	1	0	6	83	17	0
CW	9	0	0	9	100	0	0
DH	7	0	0	7	100	0	0
EG	10	0	0	10	100	0	0
EL	0	0	8	8	0	0	100
EP	6	0	0	6	100	0	0
FG	4	2	1	7	57	29	14
FL	6	1	0	7	86	14	0
FM	3	2	0	5	60	40	0
FN	3	1	0	4	75	25	0
GA	9	1	0	10	90	10	0
GC	8	1	0	9	89	11	0
GE	12	0	0	12	100	0	0
GP	12	0	1	13	92	0	8
GT	7	3	0	10	70	30	0
HC	1	1	0	2	50	50	0
HU	3	2	0	5	60	40	0
ID	9	0	0	9	100	0	0
IE	3	1	1	5	60	20	20
IL	5	0	1	6	83	0	17
IN	2	1	0	3	67	33	0
IS	16	5	10	31	52	16	32
IT	12	1	0	13	92	8	0
JL	7	1	0	8	88	13	0
KA	2	0	0	2	100	0	0
KO	13	0	0	13	100	0	0
LA	10	2	12	24	42	8	50

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
LB	6	0	1	7	86	0	14
LL	11	0	0	11	100	0	0
LN	2	3	0	5	40	60	0
LV	5	0	4	9	56	0	44
MA	2	1	0	3	67	33	0
ME	13	3	2	18	72	17	11
MH	4	2	0	6	67	33	0
ML	4	0	0	4	100	0	0
MS	5	1	0	6	83	17	0
NA	5	1	0	6	83	17	0
NF	1	1	1	3	33	33	33
NJ	14	0	0	14	100	0	0
NL	8	1	0	9	89	11	0
NM	4	1	0	5	80	20	0
NP	5	0	0	5	100	0	0
NQ	5	2	0	7	71	29	0
NR	4	0	0	4	100	0	0
NS	6	0	0	6	100	0	0
OB	5	0	0	5	100	0	0
OC	17	1	0	18	94	6	0
OD	10	0	0	10	100	0	0
OL	4	0	0	4	100	0	0
OS	12	0	0	12	100	0	0
OT	6	2	2	10	60	20	20
OU	1	0	1	2	50	0	50
PA	6	0	0	6	100	0	0
PK	1	1	1	3	33	33	33
PO	2	1	0	3	67	33	0
RA	6	0	0	6	100	0	0
RC	5	1	0	6	83	17	0
RE	7	4	1	12	58	33	8
RI	7	0	0	7	100	0	0
RK	0	2	0	2	0	100	0
RL	2	0	0	2	100	0	0
SA	5	1	0	6	83	17	0
SB	1	2	0	3	33	67	0
SK	4	1	0	5	80	20	0
SN	2	2	0	4	50	50	0
SR	10	1	0	11	91	9	0
SW	7	0	3	10	70	0	30
TE	9	3	0	12	75	25	0
TI	5	2	0	7	71	29	0
TM	7	2	2	11	64	18	18
TN	8	1	3	12	67	8	25
TO	6	2	5	13	46	15	38
TP	5	1	0	6	83	17	0
TR	0	3	2	5	0	60	40
TW	5	1	0	6	83	17	0
TX	10	1	0	11	91	9	0
UC	3	1	0	4	75	25	0
UP	10	3	0	13	77	23	0
UY	13	0	0	13	100	0	0
WA	11	2	0	13	85	15	0
WC	9	1	1	11	82	9	9

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
WE	3	2	2	7	43	29	29
WN	14	1	0	15	93	7	0
WO	4	6	4	14	29	43	29
WS	1	0	0	1	100	0	0
WV	6	0	0	6	100	0	0
YA	9	2	1	12	75	17	8
YP	1	0	0	1	100	0	0
<hr/>							
Totals							
115 Labs:	726	160	93	979	74%	16%	9%
<hr/>							

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AC	7	2	0	9	78	22	0
AF	4	4	4	12	33	33	33
AG	14	0	0	14	100	0	0
AM	9	3	1	13	69	23	8
AN	7	0	0	7	100	0	0
AR	12	1	0	13	92	8	0
AS	4	4	0	8	50	50	0
AT	3	0	0	3	100	0	0
AU	11	0	1	12	92	0	8
BA	1	0	0	1	100	0	0
BC	8	1	1	10	80	10	10
BE	11	2	0	13	85	15	0
BL	17	0	0	17	100	0	0
BM	5	1	0	6	83	17	0
BN	6	12	0	18	33	67	0
BQ	4	2	2	8	50	25	25
BU	8	2	0	10	80	20	0
BX	9	1	2	12	75	8	17
CD	6	0	0	6	100	0	0
CH	12	2	0	14	86	14	0
CL	7	4	2	13	54	31	15
CM	3	2	0	5	60	40	0
CN	6	0	0	6	100	0	0
CO	15	0	3	18	83	0	17
CR	4	2	0	6	67	33	0
CS	7	2	0	9	78	22	0
CW	12	0	0	12	100	0	0
DC	4	1	1	6	67	17	17
DH	3	0	0	3	100	0	0
EC	7	0	0	7	100	0	0
EG	8	0	0	8	100	0	0
EL	3	4	5	12	25	33	42
EP	2	0	0	2	100	0	0
FG	4	2	0	6	67	33	0
FL	4	0	0	4	100	0	0
FN	2	0	0	2	100	0	0
FS	5	1	0	6	83	17	0
GA	6	1	0	7	86	14	0
GC	15	3	0	18	83	17	0
GE	13	0	0	13	100	0	0
GP	7	0	1	8	88	0	13
GT	6	0	0	6	100	0	0
HT	4	0	2	6	67	0	33
HU	5	1	0	6	83	17	0
ID	11	1	1	13	85	8	8
IE	7	1	0	8	88	13	0
IL	6	0	0	6	100	0	0
IN	12	0	0	12	100	0	0
IS	17	5	5	27	63	19	19
IT	13	1	0	14	93	7	0
JE	6	0	0	6	100	0	0
KA	4	0	0	4	100	0	0
KO	8	1	0	9	89	11	0
LA	20	6	6	32	63	19	19

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
LB	2	0	0	2	100	0	0
LL	10	0	0	10	100	0	0
LV	4	4	0	8	50	50	0
LW	3	1	0	4	75	25	0
MA	5	1	1	7	71	14	14
ME	5	4	7	16	31	25	44
MH	7	0	1	8	88	0	13
ML	2	1	0	3	67	33	0
MS	6	1	0	7	86	14	0
NA	9	1	0	10	90	10	0
NF	0	1	0	1	0	100	0
NL	11	1	0	12	92	8	0
NM	9	1	0	10	90	10	0
NQ	10	1	0	11	91	9	0
NR	1	0	0	1	100	0	0
OB	3	2	2	7	43	29	29
OC	14	2	2	18	78	11	11
OK	2	0	0	2	100	0	0
OL	2	0	0	2	100	0	0
OT	11	0	0	11	100	0	0
OU	1	1	6	8	13	13	75
PK	2	0	0	2	100	0	0
PO	5	1	0	6	83	17	0
RA	10	1	0	11	91	9	0
RC	2	0	0	2	100	0	0
RE	11	0	0	11	100	0	0
RI	1	2	0	3	33	67	0
RL	1	2	4	7	14	29	57
SA	2	0	0	2	100	0	0
SB	0	3	0	3	0	100	0
SK	7	1	0	8	88	13	0
SN	3	0	0	3	100	0	0
SR	7	3	0	10	70	30	0
SW	5	4	2	11	45	36	18
TE	11	1	0	12	92	8	0
TI	5	1	3	9	56	11	33
TM	30	3	0	33	91	9	0
TN	8	3	0	11	73	27	0
TO	5	3	3	11	45	27	27
TP	3	0	0	3	100	0	0
TQ	3	0	0	3	100	0	0
TR	1	2	0	3	33	67	0
TW	10	0	0	10	100	0	0
TX	12	0	0	12	100	0	0
UC	2	0	0	2	100	0	0
UP	8	0	0	8	100	0	0
UY	10	3	0	13	77	23	0
WA	12	1	0	13	92	8	0
WC	3	2	0	5	60	40	0
WE	3	5	2	10	30	50	20
WN	18	2	0	20	90	10	0
WO	14	2	0	16	88	13	0
WS	3	0	1	4	75	0	25
YA	7	1	0	8	88	13	0

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
YP	1	0	0	1	100	0	0
Totals 109 Labs:	756	143	71	970	78%	15%	7%

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: VE Vegetation**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AF	4	2	0	6	67	33	0
AG	7	0	0	7	100	0	0
AM	4	1	1	6	67	17	17
AR	1	5	0	6	17	83	0
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	4	0	0	4	100	0	0
BE	7	0	0	7	100	0	0
BL	9	0	0	9	100	0	0
BM	4	1	0	5	80	20	0
BN	7	2	0	9	78	22	0
BQ	1	1	1	3	33	33	33
BU	4	3	0	7	57	43	0
BX	4	0	3	7	57	0	43
CD	3	0	0	3	100	0	0
CH	5	2	0	7	71	29	0
CL	1	3	3	7	14	43	43
CN	4	0	0	4	100	0	0
CO	8	1	0	9	89	11	0
CR	3	0	0	3	100	0	0
CS	3	0	1	4	75	0	25
CW	12	0	0	12	100	0	0
EG	7	1	0	8	88	13	0
EL	3	2	3	8	38	25	38
EP	3	0	0	3	100	0	0
FL	4	0	0	4	100	0	0
FN	3	0	0	3	100	0	0
GA	5	1	0	6	83	17	0
GC	9	0	0	9	100	0	0
GE	6	1	0	7	86	14	0
GP	7	0	0	7	100	0	0
GT	6	0	0	6	100	0	0
HU	3	0	0	3	100	0	0
ID	3	1	1	5	60	20	20
IE	1	0	3	4	25	0	75
IL	3	0	0	3	100	0	0
IN	3	0	0	3	100	0	0
IS	17	1	2	20	85	5	10
IT	6	1	0	7	86	14	0
KO	6	1	0	7	86	14	0
LA	2	3	4	9	22	33	44
LB	2	1	0	3	67	33	0
LL	5	0	0	5	100	0	0
LV	3	1	0	4	75	25	0
MA	0	2	2	4	0	50	50
ME	3	6	3	12	25	50	25
MH	2	2	0	4	50	50	0
ML	1	0	0	1	100	0	0
NA	4	1	0	5	80	20	0
NR	2	0	0	2	100	0	0
OB	3	0	0	3	100	0	0
OC	7	5	0	12	58	42	0
OL	3	0	0	3	100	0	0

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: VE Vegetation**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
OT	6	1	0	7	86	14	0
PK	2	0	1	3	67	0	33
PO	4	0	0	4	100	0	0
RA	6	0	0	6	100	0	0
RE	5	2	0	7	71	29	0
RI	2	1	1	4	50	25	25
SB	0	0	3	3	0	0	100
SK	4	0	0	4	100	0	0
SN	3	0	0	3	100	0	0
SR	7	0	0	7	100	0	0
SW	3	2	2	7	43	29	29
TE	5	0	1	6	83	0	17
TI	5	0	2	7	71	0	29
TM	6	1	0	7	86	14	0
TN	6	1	0	7	86	14	0
TO	2	4	1	7	29	57	14
TP	4	0	0	4	100	0	0
TQ	3	1	0	4	75	25	0
TR	1	0	2	3	33	0	67
TW	4	0	0	4	100	0	0
TX	6	0	0	6	100	0	0
UC	3	0	0	3	100	0	0
UY	5	2	0	7	71	29	0
WA	3	3	1	7	43	43	14
WC	4	3	0	7	57	43	0
WE	4	1	2	7	57	14	29
WN	5	6	0	11	45	55	0
WO	6	0	0	6	100	0	0
YA	7	0	0	7	100	0	0
<hr/>							
Totals							
83 Labs:	359	80	43	482	74%	17%	9%
<hr/>							

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: WAWater**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
AC	6	1	0	7	86	14	0
AF	8	1	2	11	73	9	18
AG	11	1	0	12	92	8	0
AM	8	1	3	12	67	8	25
AN	9	0	0	9	100	0	0
AR	5	4	4	13	38	31	31
AS	5	2	0	7	71	29	0
AT	5	0	0	5	100	0	0
AU	8	1	2	11	73	9	18
AW	2	0	0	2	100	0	0
BA	4	1	2	7	57	14	29
BC	4	2	1	7	57	29	14
BE	14	0	0	14	100	0	0
BL	15	3	1	19	79	16	5
BM	6	2	0	8	75	25	0
BN	12	3	3	18	67	17	17
BP	3	0	0	3	100	0	0
BQ	5	2	0	7	71	29	0
BU	12	0	0	12	100	0	0
BX	11	1	1	13	85	8	8
CA	2	2	3	7	29	29	43
CB	11	0	0	11	100	0	0
CD	4	0	0	4	100	0	0
CH	14	1	0	15	93	7	0
CL	10	1	1	12	83	8	8
CM	4	1	0	5	80	20	0
CS	2	0	1	3	67	0	33
CW	12	0	0	12	100	0	0
DC	2	2	1	5	40	40	20
DH	2	0	2	4	50	0	50
EC	2	0	0	2	100	0	0
EG	10	2	0	12	83	17	0
EL	0	0	6	6	0	0	100
EM	2	0	0	2	100	0	0
EP	8	0	1	9	89	0	11
FG	6	1	1	8	75	13	13
FL	6	1	1	8	75	13	13
FM	3	0	0	3	100	0	0
FN	3	0	0	3	100	0	0
GA	7	1	1	9	78	11	11
GC	11	2	0	13	85	15	0
GE	12	1	1	14	86	7	7
GP	12	0	1	13	92	0	8
GT	9	0	1	10	90	0	10
HC	3	0	0	3	100	0	0
HT	2	2	4	8	25	25	50
ID	8	0	0	8	100	0	0
IE	7	0	2	9	78	0	22
IL	3	0	1	4	75	0	25
IN	8	0	0	8	100	0	0
IS	23	3	0	26	88	12	0
IT	7	5	1	13	54	38	8
JE	4	0	0	4	100	0	0
JL	4	0	0	4	100	0	0

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: WAWater**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
KA	8	1	0	9	89	11	0
KO	9	3	0	12	75	25	0
LA	23	2	5	30	77	7	17
LB	5	1	3	9	56	11	33
LL	8	1	1	10	80	10	10
LN	0	1	1	2	0	50	50
LV	4	2	4	10	40	20	40
LW	3	0	0	3	100	0	0
ME	5	7	0	12	42	58	0
MH	7	2	0	9	78	22	0
ML	5	0	0	5	100	0	0
MS	5	0	0	5	100	0	0
NA	6	1	1	8	75	13	13
NF	1	1	2	4	25	25	50
NJ	25	0	0	25	100	0	0
NL	7	0	0	7	100	0	0
NM	4	1	0	5	80	20	0
NP	4	0	0	4	100	0	0
NQ	7	2	0	9	78	22	0
NR	2	0	0	2	100	0	0
NS	4	1	1	6	67	17	17
OB	3	0	3	6	50	0	50
OC	12	0	3	15	80	0	20
OD	14	3	0	17	82	18	0
OK	1	2	0	3	33	67	0
OL	2	0	0	2	100	0	0
OS	2	4	0	6	33	67	0
OT	10	0	0	10	100	0	0
OU	1	2	2	5	20	40	40
PR	1	0	0	1	100	0	0
RC	3	0	0	3	100	0	0
RE	9	2	0	11	82	18	0
RG	2	0	0	2	100	0	0
RI	4	0	3	7	57	0	43
RL	4	0	0	4	100	0	0
SA	3	0	0	3	100	0	0
SB	3	0	0	3	100	0	0
SK	7	2	0	9	78	22	0
SL	3	0	0	3	100	0	0
SN	4	0	0	4	100	0	0
SR	9	1	1	11	82	9	9
ST	1	0	0	1	100	0	0
SW	5	2	2	9	56	22	22
TE	9	4	0	13	69	31	0
TI	11	0	1	12	92	0	8
TM	8	1	1	10	80	10	10
TN	14	0	0	14	100	0	0
TO	13	1	0	14	93	7	0
TP	5	1	0	6	83	17	0
TQ	4	2	0	6	67	33	0
TT	3	0	0	3	100	0	0
TW	8	3	0	11	73	27	0
TX	11	0	0	11	100	0	0
UC	5	0	0	5	100	0	0

QAP 50 Summary of Laboratory Evaluations by Matrix**Matrix: WAWater**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
UP	7	3	0	10	70	30	0
UY	11	1	0	12	92	8	0
WA	12	1	0	13	92	8	0
WC	7	1	3	11	64	9	27
WE	2	2	2	6	33	33	33
WI	4	0	0	4	100	0	0
WN	7	0	2	9	78	0	22
WO	11	2	1	14	79	14	7
WV	5	1	0	6	83	17	0
YA	12	1	0	13	92	8	0
YP	1	0	0	1	100	0	0
Totals							
119 Labs:	791	118	90	999	79%	12%	9%

QAP 50 Summary of Matrix Evaluations by Radionuclide**Matrix:** Air Filter

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
CS137	99	21	9	129	77	16	7
GROSS BETA	62	14	2	78	79	18	3
CO57	70	8	5	83	84	10	6
SB125	77	29	15	121	64	24	12
SR90	29	10	8	47	62	21	17
PU238	38	10	8	56	68	18	14
PU239	36	13	8	57	63	23	14
AM241	53	12	15	80	66	15	19
U234	35	5	1	41	85	12	2
U238	35	5	2	42	83	12	5
Bq U	15	2	2	19	79	11	11
ug U	15	3	3	21	71	14	14
GROSS ALPHA	65	7	5	77	84	9	6
CO60	97	21	10	128	76	16	8
Totals:	726	160	93	979	74%	16%	9%

QAP 50 Summary of Matrix Evaluations by Radionuclide**Matrix:** Soil

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
ug U	26	1	0	27	96	4	0
SR90	44	5	5	54	81	9	9
U234	42	1	0	43	98	2	0
AM241	52	11	8	71	73	15	11
PU239	52	13	6	71	73	18	8
PU238	6	1	0	7	86	14	0
Bq U	17	1	2	20	85	5	10
TH234	41	9	5	55	75	16	9
AC228	65	15	9	89	73	17	10
PB212	53	19	8	80	66	24	10
U238	45	2	1	48	94	4	2
BI214	64	13	8	85	75	15	9
CS137	101	14	5	120	84	12	4
PB214	64	17	9	90	71	19	10
Totals:	672	122	66	860	78%	14%	8%

QAP 50 Summary of Matrix Evaluations by Radionuclide**Matrix:** Vegetation

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
CO60	70	15	12	97	72	15	12
AM241	42	11	6	59	71	19	10
PU239	40	8	4	52	77	15	8
PU238	4	1	1	6	67	17	17
SR90	41	6	0	47	87	13	0
CS137	74	14	9	97	76	14	9
CM244	24	6	4	34	71	18	12
Totals:	295	61	36	392	75%	16%	9%

QAP 50 Summary of Matrix Evaluations by Radionuclide**Matrix:** Water

Radio- Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		%A	%W	%N
PU238	49	10	8	67	73	15	12
CO60	114	10	6	130	88	8	5
SR90	36	26	16	78	46	33	21
PU239	55	6	7	68	81	9	10
AM241	62	8	8	78	79	10	10
U234	44	6	6	56	79	11	11
U238	42	8	9	59	71	14	15
Bq U	20	3	1	24	83	13	4
ug U	23	1	5	29	79	3	17
GROSS ALPHA	55	13	9	77	71	17	12
GROSS BETA	71	4	4	79	90	5	5
NI63	17	0	0	17	100	0	0
H3	67	17	4	88	76	19	5
FE55	17	0	1	18	94	0	6
CS137	119	6	6	131	91	5	5
Totals:	791	118	90	999	79%	12%	9%

QAP 50 EML Results**Environmental Measurements Laboratory, New York, NY**

Matrix	Radionuclide	EML Value	EML Error	
Air Filter	ug U	4.945	0.227	ug/filter
	241Am	0.134	0.001	Bq/filter
	Gross Alpha	1.610	0.160	Bq/filter
	238Pu	0.272	0.001	Bq/filter
	Bq U	0.123	0.004	Bq/filter
	238U	0.061	0.003	Bq/filter
	234U	0.060	0.002	Bq/filter
	137Cs	6.050	0.300	Bq/filter
	125Sb	3.590	0.310	Bq/filter
	60Co	4.960	0.280	Bq/filter
	57Co	3.010	0.140	Bq/filter
	Gross Beta	1.560	0.160	Bq/filter
	90Sr	0.644	0.014	Bq/filter
	239Pu	0.124	0.003	Bq/filter

pCi/g or mL = Bq x 0.027

QAP 50 EML Results**Environmental Measurements Laboratory, New York, NY**

Matrix	Radionuclide	EML Value	EML Error	
Soil	90Sr	32.400	0.529	Bq/kg
	239Pu	8.112	1.068	Bq/kg
	234Th	138.000	4.080	Bq/kg
	238Pu	0.364	0.085	Bq/kg
	ug U	11.800	0.300	ug/g
	Bq U	291.000	3.000	Bq/kg
	238U	145.000	1.732	Bq/kg
	137Cs	659.500	24.950	Bq/kg
	40K	362.750	20.156	Bq/kg
	228Ac	47.150	2.989	Bq/kg
	212Pb	47.925	2.572	Bq/kg
	214Pb	71.000	7.035	Bq/kg
	241Am	4.894	0.969	Bq/kg
	214Bi	69.900	5.660	Bq/kg
	234U	140.667	1.155	Bq/kg

pCi/g or mL = Bq x 0.027

QAP 50 EML Results

Environmental Measurements Laboratory, New York, NY

Matrix	Radionuclide	EML Value	EML Error	
Vegetation	90Sr	736.100	7.700	Bq/kg
	137Cs	467.000	20.000	Bq/kg
	238Pu	0.419	0.010	Bq/kg
	239Pu	5.204	0.428	Bq/kg
	241Am	3.522	0.590	Bq/kg
	244Cm	1.671	0.541	Bq/kg
	60Co	21.450	1.000	Bq/kg
	40K	656.500	20.000	Bq/kg

pCi/g or mL = Bq x 0.027

QAP 50 EML Results**Environmental Measurements Laboratory, New York, NY**

Matrix	Radionuclide	EML Value	EML Error	
Water	60Co	51.100	3.000	Bq/L
	63Ni	114.000	10.000	Bq/L
	241Am	1.146	0.051	Bq/L
	239Pu	1.009	0.058	Bq/L
	238Pu	0.772	0.037	Bq/L
	ug U	0.021	0.001	ug/mL
	Bq U	0.541	0.025	Bq/L
	238U	0.262	0.016	Bq/L
	234U	0.269	0.015	Bq/L
	90Sr	4.104	0.045	Bq/L
	55Fe	97.400	1.650	Bq/L
	3H	121.080	6.780	Bq/L
	Gross Beta	1100.000	40.000	Bq/L
	Gross Alpha	1090.000	20.000	Bq/L
	137Cs	39.375	2.405	Bq/L

pCi/g or mL = Bq x 0.027

QAP 50 Results by Laboratory**Lab:** AC Analytical Chemistry Laboratory, Argonne National 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	0.149	0.009	0.134	0.001	1.114	A	
1	CO57	2.900	0.150	3.010	0.140	0.963	A	
1	CO60	5.060	0.280	4.960	0.280	1.020	A	
1	CS137	6.170	0.460	6.050	0.300	1.020	A	
1	PU238	0.260	0.027	0.272	0.001	0.955	A	
1	PU239	0.113	0.013	0.124	0.003	0.909	A	
1	SB125	5.710	1.000	3.590	0.310	1.591	N	
1	U234	0.058	0.004	0.060	0.002	0.969	A	
1	U238	0.061	0.004	0.061	0.003	0.991	A	
Matrix: SO Soil Bq / kg								
1	AC228	50.000	3.300	47.150	2.989	1.060	A	
1	AM241	6.510	1.850	4.894	0.969	1.330	A	
1	BI214	84.700	4.400	69.900	5.660	1.212	W	
1	CS137	685.000	4.000	659.500	24.950	1.039	A	
1	K40	377.000	7.000	362.750	20.156	1.039	A	
1	PB212	55.100	4.100	47.925	2.572	1.150	A	
1	PB214	90.700	2.200	71.000	7.035	1.277	W	
1	PU239	7.290	0.880	8.112	1.068	0.899	A	
1	TH234	132.000	7.000	138.000	4.080	0.957	A	
Matrix: WA Water Bq / L								
1	AM241	1.250	0.120	1.146	0.051	1.091	A	
1	CO60	57.000	1.100	51.100	3.000	1.115	A	
1	CS137	38.100	1.100	39.375	2.405	0.968	A	
1	GROSS ALPHA	890.000	40.000	1090.000	20.000	0.817	W	
1	GROSS BETA	1120.000	40.000	1100.000	40.000	1.018	A	
1	PU238	0.723	0.074	0.772	0.037	0.937	A	
1	PU239	0.911	0.087	1.009	0.058	0.903	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 50 Results by Laboratory**Lab:** AF Air Force Analytical Lab, Brooks AFB

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	0.200	0.010	0.134	0.001	1.496	W	N
1	CO60	5.700	0.700	4.960	0.280	1.149	W	A
1	CS137	6.500	0.800	6.050	0.300	1.074	A	A
1	GROSS ALPHA	1.600	0.100	1.610	0.160	0.994	A	
1	GROSS BETA	1.900	0.100	1.560	0.160	1.218	A	
1	PU238	0.300	0.010	0.272	0.001	1.102	A	N
1	PU239	0.100	0.010	0.124	0.003	0.805	W	N
1	SB125	4.000	0.900	3.590	0.310	1.114	A	A
1	SR90	0.300	0.100	0.644	0.014	0.466	N	A
1	U234	0.100	0.010	0.060	0.002	1.668	W	
1	U238	0.100	0.010	0.061	0.003	1.633	W	
Matrix: SO Soil Bq / kg								
1	AC228	29.600	11.100	47.150	2.989	0.628	N	A
1	AM241	17.000	5.200	4.894	0.969	3.473	N	A
1	BI214	51.800	7.400	69.900	5.660	0.741	N	A
1	CS137	558.600	59.200	659.500	24.950	0.847	W	N
1	K40	325.600	48.100	362.750	20.156	0.898	W	N
1	PB212	40.700	7.400	47.925	2.572	0.849	W	A
1	PB214	55.500	11.100	71.000	7.035	0.782	W	A
1	PU239	5.200	2.200	8.112	1.068	0.641	N	W
1	SR90	51.800	40.700	32.400	0.529	1.599	A	A
1	TH234	118.400	29.600	138.000	4.080	0.858	A	A
1	U234	149.800	18.900	140.667	1.155	1.065	A	
1	U238	150.200	18.900	145.000	1.732	1.036	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	4.100	1.100	3.522	0.590	1.164	A	W
1	CO60	22.200	14.800	21.450	1.000	1.035	A	N
1	CS137	381.100	40.700	467.000	20.000	0.816	W	A
1	K40	728.800	210.900	656.500	20.000	1.110	A	N
1	PU239	4.400	0.070	5.204	0.428	0.845	W	A
1	SR90	584.500	29.600	736.100	7.700	0.794	A	A
Matrix: WA Water Bq / L								
1	AM241	1.200	0.200	1.146	0.051	1.047	A	W
1	CO60	55.500	3.700	51.100	3.000	1.086	A	N
1	CS137	40.700	3.700	39.375	2.405	1.034	A	N
1	GROSS ALPHA	1058.100	37.000	1090.000	20.000	0.971	A	A
1	GROSS BETA	987.800	29.600	1100.000	40.000	0.898	A	A
1	H3	344.100	3.700	121.080	6.780	2.842	N	N
1	PU238	0.700	0.100	0.772	0.037	0.907	A	W
1	PU239	1.000	0.100	1.009	0.058	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 50 Results by Laboratory**Lab:** AF Air Force Analytical Lab, Brooks AFB

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	SR90	3.100	0.400	4.104	0.045	0.755	W	A
1	U234	0.400	0.100	0.269	0.015	1.490	N	
1	U238	0.300	0.100	0.262	0.016	1.145	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 50 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	0.141	0.025	0.134	0.001	1.055	A	N
1	Bq U	0.146	0.023	0.123	0.004	1.186	A	A
1	CO57	2.700	0.470	3.010	0.140	0.897	A	
1	CO60	4.740	0.810	4.960	0.280	0.956	A	A
1	CS137	6.100	1.000	6.050	0.300	1.008	A	A
1	PU238	0.278	0.040	0.272	0.001	1.021	A	N
1	PU239	0.126	0.022	0.124	0.003	1.014	A	N
1	SB125	4.090	0.740	3.590	0.310	1.139	A	A
1	SR90	0.580	0.110	0.644	0.014	0.901	A	A
1	U234	0.070	0.015	0.060	0.002	1.167	A	A
1	U238	0.071	0.017	0.061	0.003	1.159	A	A
1	ug U	5.600	1.300	4.945	0.227	1.132	A	A

Matrix: SO Soil Bq / kg

1	AC228	53.000	10.000	47.150	2.989	1.124	A	A
1	AM241	5.400	1.000	4.894	0.969	1.103	A	A
1	BI214	64.000	12.000	69.900	5.660	0.916	A	A
1	Bq U	310.000	26.000	291.000	3.000	1.065	A	A
1	CS137	770.000	130.000	659.500	24.950	1.168	A	W
1	K40	392.000	70.000	362.750	20.156	1.081	A	W
1	PB212	51.100	9.000	47.925	2.572	1.066	A	A
1	PB214	74.000	13.000	71.000	7.035	1.042	A	A
1	PU239	8.300	1.500	8.112	1.068	1.023	A	A
1	SR90	30.700	6.300	32.400	0.529	0.948	A	A
1	TH234	128.000	31.000	138.000	4.080	0.928	A	A
1	U234	145.000	18.000	140.667	1.155	1.031	A	A
1	U238	155.000	19.000	145.000	1.732	1.069	A	A
1	ug U	11.800	2.800	11.800	0.300	1.000	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.400	0.500	3.522	0.590	0.965	A	A
1	CM244	2.220	0.260	1.671	0.541	1.329	A	A
1	CO60	23.100	4.100	21.450	1.000	1.077	A	A
1	CS137	556.000	92.000	467.000	20.000	1.191	A	A
1	K40	710.000	120.000	656.500	20.000	1.081	A	A
1	PU239	4.970	0.670	5.204	0.428	0.955	A	A
1	SR90	636.000	118.000	736.100	7.700	0.864	A	A

Matrix: WA Water Bq / L

1	AM241	1.210	0.170	1.146	0.051	1.056	A	A
1	Bq U	0.630	0.076	0.541	0.025	1.165	A	A
1	CO60	51.400	8.600	51.100	3.000	1.006	A	A
1	CS137	42.000	7.200	39.375	2.405	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 50 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	H3	124.000	19.000	121.080	6.780	1.024	A	A
1	NI63	106.000	14.000	114.000	10.000	0.930	A	
1	PU238	0.730	0.110	0.772	0.037	0.946	A	A
1	PU239	0.990	0.140	1.009	0.058	0.981	A	A
1	SR90	3.310	0.630	4.104	0.045	0.807	W	A
1	U234	0.310	0.059	0.269	0.015	1.155	A	A
1	U238	0.285	0.051	0.262	0.016	1.088	A	A
1	ug U	0.024	0.006	0.021	0.001	1.142	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 50 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	0.136	0.004	0.134	0.001	1.017	A	
1	Bq U	0.103	0.010	0.123	0.004	0.837	W	
1	CO60	5.300	0.076	4.960	0.280	1.069	A	
1	CS137	6.340	0.059	6.050	0.300	1.048	A	
1	PU238	0.266	0.008	0.272	0.001	0.977	A	
1	PU239	0.126	0.004	0.124	0.003	1.014	A	
1	SB125	3.530	0.218	3.590	0.310	0.983	A	
Matrix: SO Soil Bq / kg								
1	AC228	52.300	3.210	47.150	2.989	1.109	A	A
1	AM241	5.880	0.963	4.894	0.969	1.201	A	A
1	BI214	56.100	3.940	69.900	5.660	0.803	A	A
1	Bq U	255.000	13.100	291.000	3.000	0.876	A	
1	CS137	665.000	4.580	659.500	24.950	1.008	A	A
1	K40	393.000	32.500	362.750	20.156	1.083	A	A
1	PB212	18.300	1.810	47.925	2.572	0.382	A	A
1	PB214	83.200	2.570	71.000	7.035	1.172	A	A
1	PU239	7.730	0.949	8.112	1.068	0.953	A	W
1	TH234	214.000	23.800	138.000	4.080	1.551	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.470	0.371	3.522	0.590	0.985	A	W
1	CM244	3.840	5.430	1.671	0.541	2.298	N	W
1	CO60	2.450	1.490	21.450	1.000	0.114	N	A
1	CS137	553.000	5.760	467.000	20.000	1.184	A	A
1	K40	826.000	31.000	656.500	20.000	1.258	W	W
1	PU239	3.960	1.260	5.204	0.428	0.761	W	A
Matrix: WA Water Bq / L								
1	AM241	0.487	0.015	1.146	0.051	0.425	N	W
1	Bq U	0.479	0.024	0.541	0.025	0.885	W	W
1	CO60	54.500	0.443	51.100	3.000	1.067	A	A
1	CS137	135.000	1.400	39.375	2.405	3.429	N	A
1	GROSS ALPHA	1050.000	105.000	1090.000	20.000	0.963	A	A
1	GROSS BETA	855.000	128.000	1100.000	40.000	0.777	A	A
1	H3	***.***	8.080	121.080	6.780	1,412.289	N	N
1	PU238	0.319	0.013	0.772	0.037	0.413	N	W
1	PU239	0.455	0.016	1.009	0.058	0.451	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 a site specific evaluation.

QAP 50 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	0.060	0.030	0.134	0.001	0.449	N	A
1	Bq U	0.200	0.020	0.123	0.004	1.625	W	W
1	CO60	2.480	0.080	4.960	0.280	0.500	N	W
1	CS137	2.880	0.820	6.050	0.300	0.476	N	W
1	GROSS ALPHA	1.480	0.020	1.610	0.160	0.919	A	W
1	GROSS BETA	1.500	0.020	1.560	0.160	0.962	A	A
1	PU238	0.130	0.030	0.272	0.001	0.478	N	N
1	PU239	0.110	0.020	0.124	0.003	0.885	W	W
1	SB125	1.980	0.340	3.590	0.310	0.552	N	W
1	SR90	0.850	0.050	0.644	0.014	1.320	A	W
1	U234	0.110	0.010	0.060	0.002	1.835	W	W
1	U238	0.090	0.010	0.061	0.003	1.470	W	W

Matrix: SO Soil Bq / kg

1	AC228	54.380	5.380	47.150	2.989	1.153	A	A
1	AM241	6.240	0.280	4.894	0.969	1.275	A	A
1	BI214	58.080	3.330	69.900	5.660	0.831	A	A
1	Bq U	305.580	22.000	291.000	3.000	1.050	A	A
1	CS137	763.220	2.220	659.500	24.950	1.157	A	A
1	K40	431.000	8.140	362.750	20.156	1.188	A	A
1	PB212	59.380	1.110	47.925	2.572	1.239	W	A
1	PB214	21.090	1.360	71.000	7.035	0.297	N	A
1	PU239	14.060	0.730	8.112	1.068	1.733	W	A
1	SR90	39.440	5.550	32.400	0.529	1.217	A	A
1	TH234	179.800	10.730	138.000	4.080	1.303	A	A
1	U234	166.850	8.340	140.667	1.155	1.186	W	W
1	U238	138.730	13.800	145.000	1.732	0.957	A	W

Matrix: VE Vegetation Bq / kg

1	AM241	2.330	0.350	3.522	0.590	0.662	N	W
1	CO60	21.080	1.480	21.450	1.000	0.983	A	A
1	CS137	504.620	10.830	467.000	20.000	1.081	A	A
1	K40	597.290	27.030	656.500	20.000	0.910	A	A
1	PU239	4.110	0.280	5.204	0.428	0.790	W	N
1	SR90	713.650	12.940	736.100	7.700	0.970	A	W

Matrix: WA Water Bq / L

1	AM241	1.380	0.350	1.146	0.051	1.204	A	N
1	Bq U	0.630	0.020	0.541	0.025	1.165	A	A
1	CO60	54.130	0.470	51.100	3.000	1.059	A	A
1	CS137	43.210	0.620	39.375	2.405	1.097	A	A
1	GROSS ALPHA	755.410	19.430	1090.000	20.000	0.693	W	A
1	GROSS BETA	1104.010	12.430	1100.000	40.000	1.004	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 50 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	H3	344.430	0.420	121.080	6.780	2.845	N	N
1	PU238	0.780	0.090	0.772	0.037	1.011	A	N
1	PU239	1.030	0.120	1.009	0.058	1.021	A	N
1	SR90	6.980	0.140	4.104	0.045	1.701	N	W
1	U234	0.280	0.020	0.269	0.015	1.043	A	A
1	U238	0.350	0.030	0.262	0.016	1.336	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 50 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	0.140	0.010	0.134	0.001	1.047	A	A
1	CO57	3.250	0.290	3.010	0.140	1.080	A	
1	CO60	5.500	0.340	4.960	0.280	1.109	W	A
1	CS137	6.590	0.350	6.050	0.300	1.089	A	A
1	PU238	0.310	0.020	0.272	0.001	1.139	A	A
1	PU239	0.140	0.010	0.124	0.003	1.126	A	A
1	SB125	4.280	0.580	3.590	0.310	1.192	W	A
1	SR90	0.630	0.020	0.644	0.014	0.978	A	A
1	U234	0.066	0.004	0.060	0.002	1.101	A	A
1	U238	0.063	0.004	0.061	0.003	1.029	A	A

Matrix: SO Soil Bq / kg

1	AM241	5.030	0.280	4.894	0.969	1.028	A	A
1	CS137	746.000	5.000	659.500	24.950	1.131	A	A
1	K40	387.000	13.000	362.750	20.156	1.067	A	A
1	PU239	8.480	0.450	8.112	1.068	1.045	A	A
1	SR90	32.900	0.850	32.400	0.529	1.015	A	A
1	U234	123.000	2.500	140.667	1.155	0.874	A	N
1	U238	132.000	2.700	145.000	1.732	0.910	A	N

Matrix: WA Water Bq / L

1	AM241	1.230	0.090	1.146	0.051	1.073	A	A
1	CO60	54.800	2.900	51.100	3.000	1.072	A	A
1	CS137	39.500	1.100	39.375	2.405	1.003	A	A
1	H3	129.000	1.200	121.080	6.780	1.065	A	A
1	PU238	0.790	0.060	0.772	0.037	1.024	A	A
1	PU239	0.990	0.060	1.009	0.058	0.981	A	A
1	SR90	3.660	0.130	4.104	0.045	0.892	A	A
1	U234	0.260	0.020	0.269	0.015	0.968	A	A
1	U238	0.280	0.020	0.262	0.016	1.069	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 50 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	0.123	0.040	0.134	0.001	0.920	A	
1	CO60	5.000	1.000	4.960	0.280	1.008	A	
1	CS137	6.000	1.000	6.050	0.300	0.992	A	
1	GROSS ALPHA	2.160	0.240	1.610	0.160	1.342	W	
1	GROSS BETA	1.580	0.120	1.560	0.160	1.013	A	
1	PU238	0.273	0.064	0.272	0.001	1.003	A	
1	PU239	0.137	0.043	0.124	0.003	1.102	A	
1	SB125	4.000	1.000	3.590	0.310	1.114	A	
1	SR90	0.592	0.322	0.644	0.014	0.919	A	
1	U234	0.064	0.031	0.060	0.002	1.067	A	
1	U238	0.054	0.027	0.061	0.003	0.882	W	
1	ug U	4.800	0.200	4.945	0.227	0.971	A	
Matrix: SO Soil Bq / kg								
1	AC228	49.900	11.200	47.150	2.989	1.058	A	
1	AM241	4.880	3.330	4.894	0.969	0.997	A	
1	BI214	68.700	5.000	69.900	5.660	0.983	A	
1	CS137	722.000	47.000	659.500	24.950	1.095	A	
1	K40	389.000	36.000	362.750	20.156	1.072	A	
1	PB212	55.900	6.100	47.925	2.572	1.166	A	
1	PB214	76.500	5.700	71.000	7.035	1.077	A	
1	PU239	7.810	4.260	8.112	1.068	0.963	A	
1	SR90	24.800	31.200	32.400	0.529	0.765	W	
1	TH234	146.000	24.000	138.000	4.080	1.058	A	
1	U234	141.000	21.000	140.667	1.155	1.002	A	
1	U238	135.000	20.000	145.000	1.732	0.931	A	
1	ug U	10.000	1.000	11.800	0.300	0.847	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	2.520	1.300	3.522	0.590	0.716	W	
1	CO60	27.500	3.500	21.450	1.000	1.282	W	
1	CS137	629.000	36.000	467.000	20.000	1.347	W	
1	K40	885.000	69.000	656.500	20.000	1.348	W	
1	PU239	4.290	1.220	5.204	0.428	0.824	W	
1	SR90	696.000	74.000	736.100	7.700	0.946	A	
Matrix: WA Water Bq / L								
1	AM241	0.975	0.181	1.146	0.051	0.851	W	
1	CO60	82.800	6.000	51.100	3.000	1.620	N	
1	CS137	65.400	5.100	39.375	2.405	1.661	N	
1	GROSS ALPHA	1080.000	203.000	1090.000	20.000	0.991	A	
1	GROSS BETA	1038.000	182.000	1100.000	40.000	0.944	A	
1	H3	83.500	22.200	121.080	6.780	0.690	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 50 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: WA Water Bq/L								
1	NI63	112.000	62.000	114.000	10.000	0.982	A	
1	PU238	0.739	0.158	0.772	0.037	0.958	A	
1	PU239	0.870	0.177	1.009	0.058	0.862	W	
1	SR90	3.990	0.850	4.104	0.045	0.972	A	
1	U234	0.345	0.102	0.269	0.015	1.285	W	
1	U238	0.227	0.079	0.262	0.016	0.867	W	
1	ug U	11.600	1.200	0.021	0.001	547.170	N	

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 50 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	0.132	0.081	0.134	0.001	0.987	A	
1	CO57	2.882	0.101	3.010	0.140	0.957	A	
1	CO60	4.732	0.341	4.960	0.280	0.954	A	
1	CS137	5.772	0.280	6.050	0.300	0.954	A	
1	GROSS ALPHA	1.757	0.033	1.610	0.160	1.091	A	
1	GROSS BETA	1.714	0.031	1.560	0.160	1.099	A	
1	SB125	3.804	0.480	3.590	0.310	1.060	A	

Matrix: SO Soil Bq / kg

1	AC228	40.756	4.679	47.150	2.989	0.864	W	
1	AM241	5.174	1.605	4.894	0.969	1.057	A	
1	BI214	57.776	3.659	69.900	5.660	0.827	W	
1	CS137	616.790	5.456	659.500	24.950	0.935	A	
1	K40	349.354	23.563	362.750	20.156	0.963	A	
1	PB212	42.642	2.065	47.925	2.572	0.890	W	
1	PB214	61.901	3.874	71.000	7.035	0.872	W	
1	TH234	147.130	19.923	138.000	4.080	1.066	A	

Matrix: WA Water Bq / L

1	AM241	1.101	0.634	1.146	0.051	0.961	A	
1	CO60	58.460	2.092	51.100	3.000	1.144	W	
1	CS137	43.549	1.683	39.375	2.405	1.106	A	
1	GROSS ALPHA	1096.717	34.193	1090.000	20.000	1.006	A	
1	GROSS BETA	980.685	33.167	1100.000	40.000	0.892	A	
1	H3	120.608	6.532	121.080	6.780	0.996	A	
1	SR90	3.449	0.146	4.104	0.045	0.840	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 50 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	GROSS ALPHA	1.570	0.140	1.610	0.160	0.975	A	
1	GROSS BETA	1.730	0.130	1.560	0.160	1.109	A	
Matrix: SO Soil Bq / kg								
1	AM241	6.310	1.250	4.894	0.969	1.289	A	A
1	CS137	637.300	56.600	659.500	24.950	0.966	A	A
1	K40	335.600	36.900	362.750	20.156	0.925	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	2.960	0.880	3.522	0.590	0.840	W	A
1	CO60	23.020	2.830	21.450	1.000	1.073	A	A
1	CS137	482.100	42.800	467.000	20.000	1.032	A	A
1	K40	641.500	68.300	656.500	20.000	0.977	A	A
Matrix: WA Water Bq / L								
1	AM241	1.070	0.190	1.146	0.051	0.934	A	A
1	CO60	51.630	4.690	51.100	3.000	1.010	A	A
1	CS137	40.260	3.580	39.375	2.405	1.022	A	A
1	GROSS ALPHA	1225.000	119.000	1090.000	20.000	1.124	A	
1	GROSS BETA	1208.000	97.000	1100.000	40.000	1.098	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 50 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	0.141	0.010	0.134	0.001	1.055	A	W
1	CO57	3.790	0.160	3.010	0.140	1.259	W	
1	CO60	6.120	0.200	4.960	0.280	1.234	W	A
1	CS137	7.620	0.370	6.050	0.300	1.260	W	A
1	GROSS ALPHA	2.030	0.050	1.610	0.160	1.261	A	A
1	GROSS BETA	1.683	0.033	1.560	0.160	1.079	A	A
1	PU238	0.283	0.017	0.272	0.001	1.039	A	N
1	PU239	0.130	0.009	0.124	0.003	1.044	A	N
1	SB125	4.120	0.380	3.590	0.310	1.148	A	A
1	U234	0.061	0.008	0.060	0.002	1.024	A	N
1	U238	0.060	0.008	0.061	0.003	0.978	A	N
Matrix: SO Soil Bq / kg								
1	AC228	54.800	7.800	47.150	2.989	1.162	A	
1	AM241	4.450	0.640	4.894	0.969	0.909	A	A
1	BI214	78.400	7.400	69.900	5.660	1.122	A	
1	CS137	719.000	34.000	659.500	24.950	1.090	A	A
1	K40	388.000	30.000	362.750	20.156	1.070	A	A
1	PB212	53.300	6.000	47.925	2.572	1.112	A	
1	PB214	82.100	9.300	71.000	7.035	1.156	A	
1	PU239	5.060	0.630	8.112	1.068	0.624	N	A
1	SR90	34.000	4.000	32.400	0.529	1.049	A	A
1	TH234	185.000	23.000	138.000	4.080	1.341	A	
1	U234	140.000	16.000	140.667	1.155	0.995	A	A
1	U238	145.000	16.000	145.000	1.732	1.000	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.160	0.370	3.522	0.590	0.897	A	A
1	CO60	25.000	3.000	21.450	1.000	1.166	A	A
1	CS137	536.000	26.000	467.000	20.000	1.148	A	A
1	K40	677.000	41.000	656.500	20.000	1.031	A	A
1	PU239	5.080	0.470	5.204	0.428	0.976	A	A
1	SR90	740.000	23.000	736.100	7.700	1.005	A	A
Matrix: WA Water Bq / L								
1	AM241	1.160	0.130	1.146	0.051	1.012	A	A
1	CO60	54.300	1.500	51.100	3.000	1.063	A	A
1	CS137	42.000	2.000	39.375	2.405	1.067	A	A
1	GROSS ALPHA	1129.000	408.000	1090.000	20.000	1.036	A	A
1	GROSS BETA	1173.000	430.000	1100.000	40.000	1.066	A	A
1	H3	131.000	14.000	121.080	6.780	1.082	A	W
1	PU238	2.380	0.320	0.772	0.037	3.084	N	A
1	PU239	3.150	0.380	1.009	0.058	3.121	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 50 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: WA Water Bq/L								
1	SR90	3.580	0.240	4.104	0.045	0.872	W	A
1	U234	0.279	0.065	0.269	0.015	1.039	A	A
1	U238	0.254	0.061	0.262	0.016	0.970	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 50 Results by Laboratory**Lab:** AW Argonne West National Lab

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	3.200	0.200	3.010	0.140	1.063	A	
1	CO60	3.200	0.200	4.960	0.280	0.645	N	
1	CS137	6.400	0.300	6.050	0.300	1.058	A	
1	SB125	4.200	0.300	3.590	0.310	1.170	A	

Matrix: WA Water Bq / L

1	CO60	52.000	2.000	51.100	3.000	1.018	A	
1	CS137	40.000	2.000	39.375	2.405	1.016	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 50 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	2.930	0.130	3.010	0.140	0.973	A	
1	CO60	5.070	0.440	4.960	0.280	1.022	A	A
1	CS137	6.020	0.430	6.050	0.300	0.995	A	A
1	PU238	0.256	0.070	0.272	0.001	0.940	A	
1	PU239	0.100	0.037	0.124	0.003	0.805	W	
1	SB125	4.320	0.280	3.590	0.310	1.203	W	W
1	SR90	0.520	0.100	0.644	0.014	0.807	W	
1	U234	0.060	0.016	0.060	0.002	1.001	A	
1	U238	0.076	0.018	0.061	0.003	1.241	A	
Matrix: SO Soil Bq / kg								
1	CS137	672.000	42.000	659.500	24.950	1.019	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	24.000	8.000	21.450	1.000	1.119	A	A
1	CS137	499.000	35.000	467.000	20.000	1.069	A	A
Matrix: WA Water Bq / L								
1	CO60	54.000	2.900	51.100	3.000	1.057	A	A
1	CS137	41.500	7.000	39.375	2.405	1.054	A	A
1	PU238	0.541	0.110	0.772	0.037	0.701	N	W
1	PU239	0.646	0.130	1.009	0.058	0.640	N	W
1	SR90	3.480	0.480	4.104	0.045	0.848	W	A
1	U234	0.265	0.080	0.269	0.015	0.987	A	A
1	U238	0.285	0.090	0.262	0.016	1.088	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 50 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	2.720	0.070	3.010	0.140	0.904	A	
1	CO60	4.960	0.180	4.960	0.280	1.000	A	N
1	CS137	6.110	0.210	6.050	0.300	1.010	A	N
1	GROSS ALPHA	1.580	0.040	1.610	0.160	0.981	A	W
1	GROSS BETA	1.440	0.050	1.560	0.160	0.923	A	A
1	SB125	3.740	0.290	3.590	0.310	1.042	A	N
1	SR90	0.640	0.196	0.644	0.014	0.994	A	A
1	U234	0.064	0.014	0.060	0.002	1.067	A	A
1	U238	0.075	0.015	0.061	0.003	1.220	A	A

Matrix: SO Soil Bq / kg

1	AC228	53.300	4.630	47.150	2.989	1.130	A	
1	BI214	65.900	5.400	69.900	5.660	0.943	A	
1	CS137	777.000	53.700	659.500	24.950	1.178	A	A
1	K40	407.000	27.800	362.750	20.156	1.122	A	W
1	PB212	51.800	3.220	47.925	2.572	1.081	A	
1	PB214	72.500	4.770	71.000	7.035	1.021	A	
1	SR90	14.900	5.740	32.400	0.529	0.460	N	W
1	TH234	172.000	47.000	138.000	4.080	1.246	A	
1	U234	122.000	7.030	140.667	1.155	0.867	A	N
1	U238	161.000	8.290	145.000	1.732	1.110	W	A

Matrix: VE Vegetation Bq / kg

1	CO60	23.100	1.800	21.450	1.000	1.077	A	A
1	CS137	559.000	43.000	467.000	20.000	1.197	A	A
1	K40	707.000	40.000	656.500	20.000	1.077	A	A
1	SR90	562.000	42.000	736.100	7.700	0.763	A	W

Matrix: WA Water Bq / L

1	CO60	54.000	2.700	51.100	3.000	1.057	A	A
1	CS137	44.000	3.000	39.375	2.405	1.117	A	A
1	GROSS ALPHA	1180.000	30.000	1090.000	20.000	1.083	A	A
1	GROSS BETA	1010.000	20.000	1100.000	40.000	0.918	A	A
1	SR90	3.640	0.760	4.104	0.045	0.887	W	N
1	U234	0.335	0.048	0.269	0.015	1.248	W	W
1	U238	0.349	0.049	0.262	0.016	1.333	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 50 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	0.140	0.020	0.134	0.001	1.047	A	A
1	CO57	3.300	0.400	3.010	0.140	1.096	A	
1	CO60	5.400	0.500	4.960	0.280	1.089	A	A
1	CS137	6.300	0.700	6.050	0.300	1.041	A	A
1	GROSS ALPHA	1.500	0.100	1.610	0.160	0.932	A	A
1	GROSS BETA	1.380	0.070	1.560	0.160	0.885	W	W
1	PU238	0.280	0.030	0.272	0.001	1.029	A	A
1	PU239	0.130	0.020	0.124	0.003	1.046	A	A
1	SB125	3.700	0.300	3.590	0.310	1.031	A	A
1	SR90	0.688	0.062	0.644	0.014	1.068	A	A
1	U234	0.062	0.011	0.060	0.002	1.034	A	A
1	U238	0.065	0.011	0.061	0.003	1.061	A	A
1	ug U	5.400		4.945	0.227	1.092	A	A

Matrix: SO Soil Bq / kg

1	AC228	57.000	6.000	47.150	2.989	1.209	A	
1	AM241	4.650	0.700	4.894	0.969	0.950	A	A
1	BI214	90.000	8.000	69.900	5.660	1.288	W	
1	CS137	650.000	88.000	659.500	24.950	0.986	A	A
1	K40	433.000	70.000	362.750	20.156	1.194	A	A
1	PB212	57.000	6.000	47.925	2.572	1.189	A	
1	PB214	93.000	7.000	71.000	7.035	1.310	W	
1	PU239	8.470	1.050	8.112	1.068	1.044	A	A
1	SR90	30.500	4.200	32.400	0.529	0.941	A	A
1	TH234	146.000	16.000	138.000	4.080	1.058	A	
1	U234	127.800	8.200	140.667	1.155	0.909	A	A
1	U238	135.300	8.500	145.000	1.732	0.933	A	A
1	ug U	11.900		11.800	0.300	1.008	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.450	0.470	3.522	0.590	0.980	A	A
1	CM244	2.120	0.330	1.671	0.541	1.269	A	A
1	CO60	25.000	3.000	21.450	1.000	1.166	A	A
1	CS137	522.000	88.000	467.000	20.000	1.118	A	A
1	K40	697.000	104.000	656.500	20.000	1.062	A	W
1	PU239	4.830	0.570	5.204	0.428	0.928	A	A
1	SR90	782.700	35.500	736.100	7.700	1.063	A	A

Matrix: WA Water Bq / L

1	AM241	1.130	0.110	1.146	0.051	0.986	A	A
1	CO60	55.000	4.000	51.100	3.000	1.076	A	A
1	CS137	40.000	4.000	39.375	2.405	1.016	A	A
1	FE55	89.460	4.300	97.400	1.650	0.918	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 50 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 ALPHA	1135.000	84.000	1090.000	20.000	1.041	A	A
1	GROSS BETA	1025.000	55.000	1100.000	40.000	0.932	A	A
1	H3	142.400	12.400	121.080	6.780	1.176	A	A
1	NI63	96.600	10.600	114.000	10.000	0.847	A	A
1	PU238	0.800	0.090	0.772	0.037	1.037	A	A
1	PU239	1.050	0.110	1.009	0.058	1.040	A	A
1	SR90	3.920	0.320	4.104	0.045	0.955	A	A
1	U234	0.280	0.040	0.269	0.015	1.043	A	A
1	U238	0.280	0.040	0.262	0.016	1.069	A	A
1	ug U	0.023		0.021	0.001	1.085	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 50 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	AM241	0.197	0.050	0.134	0.001	1.473	W	A
2	AM241	0.133	0.036	0.134	0.001	0.995	A	A
1	Bq U	0.149	0.002	0.123	0.004	1.210	A	A
1	CO57	3.890	0.170	3.010	0.140	1.292	W	
1	CO60	5.660	0.230	4.960	0.280	1.141	W	A
1	CS137	7.400	0.290	6.050	0.300	1.223	W	W
2	GROSS ALPHA	1.710	0.040	1.610	0.160	1.062	A	A
1	GROSS ALPHA	1.670	0.030	1.610	0.160	1.037	A	A
2	GROSS BETA	1.360	0.040	1.560	0.160	0.872	W	W
1	GROSS BETA	1.260	0.030	1.560	0.160	0.808	W	W
1	PU238	0.289	0.020	0.272	0.001	1.062	A	A
2	PU238	0.293	0.022	0.272	0.001	1.076	A	A
1	PU239	0.170	0.017	0.124	0.003	1.368	W	A
2	PU239	0.130	0.016	0.124	0.003	1.046	A	A
1	SB125	4.330	0.250	3.590	0.310	1.206	W	A
1	SR90	0.453	0.335	0.644	0.014	0.703	W	A
2	SR90	0.472	0.328	0.644	0.014	0.733	W	A
1	U234	0.073	0.001	0.060	0.002	1.217	A	A
1	U238	0.073	0.001	0.061	0.003	1.192	A	A
1	ug U	5.970	0.090	4.945	0.227	1.207	A	A

Matrix: SO Soil Bq / kg

1	AC228	43.700	5.300	47.150	2.989	0.927	A	A
2	AM241	5.190	0.970	4.894	0.969	1.060	A	N
1	AM241	4.740	0.630	4.894	0.969	0.968	A	N
1	BI214	64.600	5.200	69.900	5.660	0.924	A	A
1	Bq U	300.000		291.000	3.000	1.031	A	A
1	CS137	659.000	46.000	659.500	24.950	0.999	A	A
1	K40	347.000	25.000	362.750	20.156	0.957	A	A
1	PB212	48.900	4.300	47.925	2.572	1.020	A	A
1	PB214	71.500	5.400	71.000	7.035	1.007	A	A
2	PU239	8.990	0.460	8.112	1.068	1.108	A	A
1	PU239	9.180	0.340	8.112	1.068	1.132	A	A
2	SR90	27.200	6.000	32.400	0.529	0.840	A	A
1	SR90	28.800	7.300	32.400	0.529	0.889	A	A
1	TH234	165.000	15.000	138.000	4.080	1.196	A	A
1	U234	147.000		140.667	1.155	1.045	A	A
1	U238	147.000		145.000	1.732	1.014	A	A
1	ug U	12.000		11.800	0.300	1.017	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.580	0.240	3.522	0.590	1.016	A	A
1	CM244	1.600	0.120	1.671	0.541	0.958	A	W
1	CO60	21.400	1.700	21.450	1.000	0.998	A	A
1	CS137	496.000	35.000	467.000	20.000	1.062	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 50 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: VE Vegetation Bq / kg								
1	K40	642.000	47.000	656.500	20.000	0.978	A	A
1	PU239	4.650	0.230	5.204	0.428	0.893	A	A
2	PU239	5.050	0.320	5.204	0.428	0.970	A	A
2	SR90	639.000	7.000	736.100	7.700	0.868	A	W
1	SR90	624.000	5.000	736.100	7.700	0.848	A	W
Matrix: WA Water Bq / L								
1	AM241	1.540	0.230	1.146	0.051	1.344	W	A
2	AM241	1.260	0.150	1.146	0.051	1.099	A	A
1	Bq U	0.500	0.075	0.541	0.025	0.924	A	
1	CO60	52.900	2.100	51.100	3.000	1.035	A	A
1	CS137	41.000	1.700	39.375	2.405	1.041	A	A
1	FE55	90.200	9.200	97.400	1.650	0.926	A	A
1	GROSS ALPHA	1137.000	16.000	1090.000	20.000	1.043	A	A
1	GROSS BETA	968.000	16.000	1100.000	40.000	0.880	A	A
1	H3	149.000	12.000	121.080	6.780	1.231	W	A
1	NI63	90.900	10.300	114.000	10.000	0.797	A	A
1	PU238	0.834	0.074	0.772	0.037	1.081	A	N
2	PU238	0.874	0.084	0.772	0.037	1.133	W	N
1	PU239	0.962	0.076	1.009	0.058	0.953	A	W
2	PU239	0.964	0.085	1.009	0.058	0.955	A	W
2	SR90	3.080	0.600	4.104	0.045	0.750	N	A
1	SR90	3.920	0.500	4.104	0.045	0.955	A	A
1	U234	0.245	0.037	0.269	0.015	0.912	A	A
1	U238	0.245	0.037	0.262	0.016	0.935	A	A
1	ug U	0.020	0.003	0.021	0.001	0.943	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 50 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	0.140	0.019	0.134	0.001	1.047	A	A
1	CO60	5.460	0.250	4.960	0.280	1.101	W	A
1	CS137	6.570	0.230	6.050	0.300	1.086	A	A
1	PU238	0.320	0.032	0.272	0.001	1.176	W	A
1	PU239	0.150	0.016	0.124	0.003	1.207	W	A
1	SR90	0.620	0.041	0.644	0.014	0.963	A	A
1	U234	0.062	0.009	0.060	0.002	1.034	A	A
1	U238	0.064	0.009	0.061	0.003	1.045	A	A
Matrix: SO Soil Bq / kg								
1	AM241	3.860	0.560	4.894	0.969	0.789	W	A
1	CS137	669.000	5.000	659.500	24.950	1.014	A	A
1	PU239	7.890	0.720	8.112	1.068	0.973	A	A
1	SR90	34.650	4.980	32.400	0.529	1.069	A	A
1	U234	132.000	19.000	140.667	1.155	0.938	A	A
1	U238	136.900	19.600	145.000	1.732	0.944	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	2.680	1.050	3.522	0.590	0.761	W	A
1	CO60	22.300	1.730	21.450	1.000	1.040	A	A
1	CS137	492.000	4.640	467.000	20.000	1.054	A	A
1	PU239	5.780	0.940	5.204	0.428	1.111	A	A
1	SR90	718.000	18.200	736.100	7.700	0.975	A	A
Matrix: WA Water Bq / L								
1	AM241	1.210	0.180	1.146	0.051	1.056	A	A
1	CO60	51.400	2.860	51.100	3.000	1.006	A	A
1	CS137	41.100	2.690	39.375	2.405	1.044	A	A
1	PU238	0.900	0.100	0.772	0.037	1.166	W	A
1	PU239	1.110	0.120	1.009	0.058	1.100	A	A
1	SR90	3.480	0.480	4.104	0.045	0.848	W	A
1	U234	0.280	0.058	0.269	0.015	1.043	A	A
1	U238	0.280	0.058	0.262	0.016	1.069	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 50 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								
1	CO57	5.220	0.360	3.010	0.140	1.734	N	
3	CO57	4.960	0.410	3.010	0.140	1.648	N	
2	CO57	4.480	0.340	3.010	0.140	1.488	N	
1	CO60	6.480	0.510	4.960	0.280	1.306	W	N
2	CO60	5.510	0.360	4.960	0.280	1.111	W	N
3	CO60	6.730	0.560	4.960	0.280	1.357	N	N
2	CS137	9.180	0.860	6.050	0.300	1.517	N	N
3	CS137	9.770	0.960	6.050	0.300	1.615	N	N
1	CS137	10.470	1.230	6.050	0.300	1.731	N	N
1	GROSS ALPHA	1.460	0.070	1.610	0.160	0.907	A	A
2	GROSS ALPHA	1.470	0.070	1.610	0.160	0.913	A	A
3	GROSS ALPHA	1.420	0.070	1.610	0.160	0.882	A	A
1	GROSS BETA	1.280	0.060	1.560	0.160	0.821	W	W
2	GROSS BETA	1.410	0.070	1.560	0.160	0.904	A	W
3	GROSS BETA	1.340	0.060	1.560	0.160	0.859	W	W
3	SB125	5.810	0.240	3.590	0.310	1.618	N	N
2	SB125	5.810	0.230	3.590	0.310	1.618	N	N
1	SB125	6.360	0.320	3.590	0.310	1.772	N	N

Matrix: SO Soil Bq / kg

3	AC228	40.330	1.990	47.150	2.989	0.855	W	A
2	AC228	40.330	1.900	47.150	2.989	0.855	W	A
1	AC228	37.370	1.890	47.150	2.989	0.793	W	A
1	BI214	55.500	2.130	69.900	5.660	0.794	W	A
2	BI214	59.570	2.190	69.900	5.660	0.852	A	A
3	BI214	62.530	2.370	69.900	5.660	0.895	A	A
3	CS137	629.000	52.270	659.500	24.950	0.954	A	A
2	CS137	621.600	51.970	659.500	24.950	0.943	A	A
1	CS137	621.600	52.650	659.500	24.950	0.943	A	A
3	K40	310.800	24.740	362.750	20.156	0.857	W	A
2	K40	297.850	23.680	362.750	20.156	0.821	W	A
1	K40	301.180	23.970	362.750	20.156	0.830	W	A
1	PB212	38.850	2.880	47.925	2.572	0.811	W	A
2	PB212	38.480	2.950	47.925	2.572	0.803	W	A
3	PB212	38.850	3.150	47.925	2.572	0.811	W	A
1	PB214	56.240	4.620	71.000	7.035	0.792	W	A
2	PB214	62.160	5.030	71.000	7.035	0.875	W	A
3	PB214	68.450	5.530	71.000	7.035	0.964	A	A

Matrix: VE Vegetation Bq / kg

3	CO60	19.760	1.260	21.450	1.000	0.921	A	A
2	CO60	18.610	1.180	21.450	1.000	0.868	A	A
1	CO60	19.350	1.580	21.450	1.000	0.902	A	A
1	CS137	518.000	58.020	467.000	20.000	1.109	A	A
2	CS137	499.500	43.060	467.000	20.000	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 50 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								
3	CS137	503.200	42.470	467.000	20.000	1.078	A	A
3	K40	603.100	47.710	656.500	20.000	0.919	A	A
1	K40	573.500	60.160	656.500	20.000	0.874	W	A
2	K40	573.500	45.590	656.500	20.000	0.874	W	A
Matrix: WA Water Bq / L								
2	CO60	54.390	2.050	51.100	3.000	1.064	A	A
1	CO60	54.760	2.110	51.100	3.000	1.072	A	A
3	CO60	54.020	2.160	51.100	3.000	1.057	A	A
1	CS137	40.700	2.190	39.375	2.405	1.034	A	W
2	CS137	40.700	2.120	39.375	2.405	1.034	A	W
3	CS137	42.550	2.400	39.375	2.405	1.081	A	W
3	GROSS ALPHA	1167.810	35.930	1090.000	20.000	1.071	A	N
2	GROSS ALPHA	1192.430	36.290	1090.000	20.000	1.094	A	N
1	GROSS ALPHA	1042.480	33.960	1090.000	20.000	0.956	A	N
3	GROSS BETA	1087.430	29.210	1100.000	40.000	0.989	A	N
2	GROSS BETA	953.550	27.530	1100.000	40.000	0.867	A	N
1	GROSS BETA	966.410	27.700	1100.000	40.000	0.879	A	N
3	H3	187.360	8.010	121.080	6.780	1.547	W	N
2	H3	167.710	8.070	121.080	6.780	1.385	W	N
1	H3	158.520	8.000	121.080	6.780	1.309	W	N
3	SR90	2.370	0.102	4.104	0.045	0.577	N	N
2	SR90	2.437	0.079	4.104	0.045	0.594	N	N
1	SR90	2.338	0.093	4.104	0.045	0.570	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 50 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
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Matrix: WA Water Bq/L

3	ug U	0.024	0.002	0.021	0.001	1.132	A	
2	ug U	0.024	0.002	0.021	0.001	1.132	A	
1	ug U	0.024	0.002	0.021	0.001	1.132	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 50 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	CO60	4.870	0.090	4.960	0.280	0.982	A	A
1	CS137	6.740	0.080	6.050	0.300	1.114	A	A
1	GROSS ALPHA	1.650	0.020	1.610	0.160	1.025	A	N
1	GROSS BETA	1.300	0.010	1.560	0.160	0.833	W	A
1	SB125	1.290	0.070	3.590	0.310	0.359	N	A
1	ug U	6.500	0.300	4.945	0.227	1.314	W	A

Matrix: SO Soil Bq / kg

1	AC228	82.000	14.000	47.150	2.989	1.739	W	A
1	BI214	110.000	9.000	69.900	5.660	1.574	N	
1	CS137	725.000	9.000	659.500	24.950	1.099	A	A
1	K40	410.000	94.000	362.750	20.156	1.130	A	N
1	PB212	50.000	4.000	47.925	2.572	1.043	A	A
1	PB214	108.000	11.000	71.000	7.035	1.521	N	
1	TH234	147.000	23.000	138.000	4.080	1.065	A	A
1	ug U	13.400	0.200	11.800	0.300	1.136	W	W

Matrix: VE Vegetation Bq / kg

1	CO60	73.000	11.000	21.450	1.000	3.403	N	N
1	CS137	537.000	11.000	467.000	20.000	1.150	A	A
1	K40	916.000	120.000	656.500	20.000	1.395	W	N

Matrix: WA Water Bq / L

1	CO60	59.000	1.000	51.100	3.000	1.155	W	A
1	CS137	41.000	6.000	39.375	2.405	1.041	A	A
1	GROSS ALPHA	1090.000	21.000	1090.000	20.000	1.000	A	A
1	GROSS BETA	939.000	12.000	1100.000	40.000	0.854	A	A
1	H3	135.000	56.000	121.080	6.780	1.115	A	
1	SR90	3.500	0.100	4.104	0.045	0.853	W	
1	ug U	0.022	0.007	0.021	0.001	1.038	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 50 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	0.138	0.007	0.134	0.001	1.032	A	A
1	Bq U	0.138	0.014	0.123	0.004	1.121	A	A
1	CO57	2.800	0.200	3.010	0.140	0.930	A	
1	CO60	4.800	0.400	4.960	0.280	0.968	A	A
1	CS137	5.900	0.500	6.050	0.300	0.975	A	A
1	GROSS ALPHA	1.600	0.080	1.610	0.160	0.994	A	A
1	GROSS BETA	1.500	0.100	1.560	0.160	0.962	A	W
1	PU238	0.236	0.024	0.272	0.001	0.867	W	A
1	PU239	0.128	0.007	0.124	0.003	1.030	A	A
1	U234	0.072	0.007	0.060	0.002	1.201	A	A
1	U238	0.061	0.006	0.061	0.003	0.996	A	A

Matrix: SO Soil Bq / kg

1	AC228	46.000	5.000	47.150	2.989	0.976	A	
1	BI214	60.000	8.000	69.900	5.660	0.858	A	
1	Bq U	279.700	14.000	291.000	3.000	0.961	A	A
1	CS137	570.000	50.000	659.500	24.950	0.864	W	A
1	K40	330.000	30.000	362.750	20.156	0.910	A	A
1	PB212	46.000	6.000	47.925	2.572	0.960	A	
1	PB214	61.000	8.000	71.000	7.035	0.859	W	
1	PU239	7.560	0.760	8.112	1.068	0.932	A	W
1	U234	128.400	6.400	140.667	1.155	0.913	A	A
1	U238	134.600	6.700	145.000	1.732	0.928	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.730	0.370	3.522	0.590	1.059	A	A
1	CM244	2.550	0.260	1.671	0.541	1.526	W	A
1	CO60	21.000	2.000	21.450	1.000	0.979	A	A
1	CS137	430.000	30.000	467.000	20.000	0.921	A	A
1	K40	600.000	50.000	656.500	20.000	0.914	A	A
1	PU239	4.420	0.440	5.204	0.428	0.849	W	A
1	SR90	859.010	40.000	736.100	7.700	1.167	W	A

Matrix: WA Water Bq / L

1	AM241	1.110	0.055	1.146	0.051	0.969	A	A
1	Bq U	0.610	0.060	0.541	0.025	1.128	A	A
1	CO60	56.000	6.000	51.100	3.000	1.096	A	W
1	CS137	41.000	5.000	39.375	2.405	1.041	A	A
1	FE55	93.600	4.700	97.400	1.650	0.961	A	
1	GROSS ALPHA	1160.000	50.000	1090.000	20.000	1.064	A	A
1	GROSS BETA	980.000	70.000	1100.000	40.000	0.891	A	A
1	H3	115.800	1.200	121.080	6.780	0.956	A	A
1	PU238	0.770	0.080	0.772	0.037	0.998	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 50 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: WA Water Bq/L								
1	PU239	1.000	0.070	1.009	0.058	0.991	A	A
1	U234	0.270	0.030	0.269	0.015	1.006	A	A
1	U238	0.280	0.030	0.262	0.016	1.069	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 50 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	0.141	0.024	0.134	0.001	1.055	A	A
1	CO57	2.650	0.140	3.010	0.140	0.880	A	
1	CO60	4.370	0.240	4.960	0.280	0.881	A	N
1	CS137	5.700	0.420	6.050	0.300	0.942	A	N
1	GROSS ALPHA	1.690	0.040	1.610	0.160	1.050	A	W
1	GROSS BETA	1.430	0.050	1.560	0.160	0.917	A	A
1	PU238	0.292	0.014	0.272	0.001	1.073	A	A
1	PU239	0.122	0.009	0.124	0.003	0.981	A	A
1	SB125	0.367	0.280	3.590	0.310	0.102	N	N
1	SR90	0.814	0.255	0.644	0.014	1.264	A	
1	U234	0.088	0.015	0.060	0.002	1.469	W	A
1	U238	0.073	0.014	0.061	0.003	1.190	A	A

Matrix: SO Soil Bq / kg

1	AC228	43.700	4.000	47.150	2.989	0.927	A	
1	AM241	3.580	0.840	4.894	0.969	0.731	W	A
1	BI214	67.700	5.500	69.900	5.660	0.969	A	
1	CS137	777.000	60.000	659.500	24.950	1.178	A	A
1	K40	381.000	24.000	362.750	20.156	1.050	A	W
1	PB212	57.700	3.400	47.925	2.572	1.204	A	
1	PB214	73.600	4.600	71.000	7.035	1.037	A	
1	PU239	4.960	0.630	8.112	1.068	0.611	N	A
1	SR90	10.800	4.500	32.400	0.529	0.333	N	W
1	TH234	140.000	28.000	138.000	4.080	1.014	A	
1	U234	137.000	7.000	140.667	1.155	0.974	A	W
1	U238	142.000	7.000	145.000	1.732	0.979	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.310	0.900	3.522	0.590	0.656	N	A
1	CM244	4.220	0.880	1.671	0.541	2.526	N	A
1	CO60	24.300	2.000	21.450	1.000	1.133	A	A
1	CS137	581.000	38.000	467.000	20.000	1.244	A	A
1	K40	733.000	42.000	656.500	20.000	1.117	A	W
1	PU239	2.860	0.430	5.204	0.428	0.550	N	N
1	SR90	577.000	49.000	736.100	7.700	0.784	A	W

Matrix: WA Water Bq / L

1	AM241	1.210	0.120	1.146	0.051	1.056	A	A
1	CO60	55.100	1.800	51.100	3.000	1.078	A	A
1	CS137	42.900	1.400	39.375	2.405	1.090	A	A
1	FE55	91.400	7.700	97.400	1.650	0.938	A	A
1	GROSS ALPHA	1170.000	30.000	1090.000	20.000	1.073	A	A
1	GROSS BETA	1030.000	20.000	1100.000	40.000	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 50 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	H3	146.000	15.000	121.080	6.780	1.206	A	W
1	NI63	88.400	7.400	114.000	10.000	0.775	A	A
1	PU238	0.814	0.040	0.772	0.037	1.055	A	W
1	PU239	1.010	0.040	1.009	0.058	1.001	A	A
1	SR90	5.180	1.100	4.104	0.045	1.262	W	A
1	U234	0.325	0.048	0.269	0.015	1.210	A	W
1	U238	0.334	0.048	0.262	0.016	1.275	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 50 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	2.880	0.028	3.010	0.140	0.957	A	
1	CO60	5.080	0.090	4.960	0.280	1.024	A	A
1	CS137	6.390	0.190	6.050	0.300	1.056	A	A
1	GROSS ALPHA	1.620	0.020	1.610	0.160	1.006	A	A
1	GROSS BETA	1.550	0.100	1.560	0.160	0.994	A	W
1	SB125	3.620	0.250	3.590	0.310	1.008	A	A

Matrix: WA Water Bq / L

1	AM241	2.100	0.400	1.146	0.051	1.832	N	
1	CO60	54.400	0.600	51.100	3.000	1.065	A	A
1	CS137	41.800	0.800	39.375	2.405	1.062	A	A
1	GROSS ALPHA	650.000	60.000	1090.000	20.000	0.596	N	N
1	GROSS BETA	470.000	50.000	1100.000	40.000	0.427	N	W
1	H3	149.000	20.000	121.080	6.780	1.231	W	
1	ug U	0.026	0.003	0.021	0.001	1.250	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 50 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	0.140	0.048	0.134	0.001	1.047	A	A
3	AM241	0.169	0.017	0.134	0.001	1.264	A	A
1	AM241	0.171	0.040	0.134	0.001	1.279	A	A
3	CO57	3.132	0.110	3.010	0.140	1.041	A	
2	CO57	3.431	0.072	3.010	0.140	1.140	W	
1	CO57	3.182	0.130	3.010	0.140	1.057	A	
3	CO60	5.190	0.142	4.960	0.280	1.046	A	A
1	CO60	5.142	0.140	4.960	0.280	1.037	A	A
2	CO60	4.589	0.080	4.960	0.280	0.925	A	A
1	CS137	6.199	0.220	6.050	0.300	1.025	A	A
2	CS137	6.489	0.197	6.050	0.300	1.073	A	A
3	CS137	6.181	0.223	6.050	0.300	1.022	A	A
2	SB125	3.971	0.097	3.590	0.310	1.106	A	A
1	SB125	3.855	0.100	3.590	0.310	1.074	A	A
3	SB125	3.646	0.096	3.590	0.310	1.016	A	A

Matrix: WA Water Bq / L

2	AM241	1.210	0.160	1.146	0.051	1.056	A	
1	AM241	1.230	0.160	1.146	0.051	1.073	A	
3	AM241	1.220	0.160	1.146	0.051	1.065	A	
2	CO60	54.520	2.130	51.100	3.000	1.067	A	
1	CO60	50.590	1.960	51.100	3.000	0.990	A	
3	CO60	55.660	2.280	51.100	3.000	1.089	A	
1	CS137	40.590	2.140	39.375	2.405	1.031	A	
2	CS137	42.290	2.260	39.375	2.405	1.074	A	
3	CS137	40.490	2.550	39.375	2.405	1.028	A	
1	SR90	4.820	0.300	4.104	0.045	1.174	A	A
2	SR90	4.130	0.300	4.104	0.045	1.006	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 50 Results by Laboratory**Lab:** CD Gentilly-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	3.200	0.300	3.010	0.140	1.063	A	
1	CO60	5.400	0.500	4.960	0.280	1.089	A	A
1	CS137	6.100	0.600	6.050	0.300	1.008	A	A
1	GROSS BETA	2.100	0.300	1.560	0.160	1.346	A	A
1	SB125	3.900	0.400	3.590	0.310	1.086	A	A
Matrix: SO Soil Bq / kg								
1	AC228	54.000	5.000	47.150	2.989	1.145	A	A
1	BI214	68.000	7.000	69.900	5.660	0.973	A	A
1	CS137	720.000	70.000	659.500	24.950	1.092	A	A
1	K40	370.000	40.000	362.750	20.156	1.020	A	A
1	PB212	55.000	6.000	47.925	2.572	1.148	A	A
1	PB214	78.000	8.000	71.000	7.035	1.099	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	24.000	2.000	21.450	1.000	1.119	A	A
1	CS137	480.000	50.000	467.000	20.000	1.028	A	A
1	K40	660.000	70.000	656.500	20.000	1.005	A	A
Matrix: WA Water Bq / L								
1	CO60	48.000	5.000	51.100	3.000	0.939	A	A
1	CS137	37.000	4.000	39.375	2.405	0.940	A	A
1	GROSS BETA	1200.000	200.000	1100.000	40.000	1.091	A	A
1	H3	110.000	10.000	121.080	6.780	0.908	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 50 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	0.142	0.008	0.134	0.001	1.062	A	A
1	Bq U	0.125	0.011	0.123	0.004	1.015	A	A
1	CO57	3.480	0.027	3.010	0.140	1.156	W	
1	CO60	5.890	0.080	4.960	0.280	1.188	W	A
1	CS137	7.310	0.069	6.050	0.300	1.208	W	A
1	GROSS ALPHA	1.700	0.063	1.610	0.160	1.056	A	A
1	GROSS BETA	1.510	0.025	1.560	0.160	0.968	A	A
1	PU238	0.264	0.011	0.272	0.001	0.970	A	A
1	PU239	0.126	0.006	0.124	0.003	1.014	A	A
1	SB125	4.250	0.106	3.590	0.310	1.184	A	A
1	SR90	0.662	0.049	0.644	0.014	1.028	A	A
1	U234	0.061	0.005	0.060	0.002	1.017	A	A
1	U238	0.064	0.006	0.061	0.003	1.045	A	A
1	ug U	5.210	0.044	4.945	0.227	1.054	A	A

Matrix: SO Soil Bq / kg

1	AC228	54.200	5.200	47.150	2.989	1.150	A	A
1	AM241	5.300	0.640	4.894	0.969	1.083	A	A
1	BI214	67.200	1.800	69.900	5.660	0.961	A	A
1	Bq U	260.000	11.800	291.000	3.000	0.893	A	A
1	CS137	803.000	2.800	659.500	24.950	1.218	W	A
1	K40	420.000	11.000	362.750	20.156	1.158	A	A
1	PB212	51.300	2.500	47.925	2.572	1.070	A	A
1	PB214	75.000	4.200	71.000	7.035	1.056	A	A
1	PU239	8.300	0.530	8.112	1.068	1.023	A	A
1	SR90	31.000	2.600	32.400	0.529	0.957	A	A
1	TH234	223.000	64.000	138.000	4.080	1.616	W	
1	U234	123.000	5.400	140.667	1.155	0.874	A	A
1	U238	130.000	5.600	145.000	1.732	0.897	A	A
1	ug U	11.000	0.440	11.800	0.300	0.932	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.890	0.190	3.522	0.590	0.821	W	A
1	CM244	1.860	0.140	1.671	0.541	1.113	A	A
1	CO60	26.200	1.300	21.450	1.000	1.221	A	A
1	CS137	580.000	3.800	467.000	20.000	1.242	A	A
1	K40	817.000	22.000	656.500	20.000	1.244	W	W
1	PU239	4.630	0.220	5.204	0.428	0.890	A	A
1	SR90	675.000	8.800	736.100	7.700	0.917	A	A

Matrix: WA Water Bq / L

1	AM241	1.052	0.053	1.146	0.051	0.918	A	A
1	Bq U	0.595	0.037	0.541	0.025	1.100	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 50 Results by Laboratory**Lab:** CH California State Dept. Health Serv., Sanitation & Radiation Laboratory

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	0.540	51.100	3.000	1.096	A	A
1	CS137	42.500	0.410	39.375	2.405	1.079	A	A
1	FE55	83.300	1.600	97.400	1.650	0.855	A	A
1	GROSS ALPHA	1030.000	17.000	1090.000	20.000	0.945	A	W
1	GROSS BETA	1030.000	23.000	1100.000	40.000	0.936	A	A
1	H3	125.000	4.900	121.080	6.780	1.032	A	A
1	NI63	116.000	1.900	114.000	10.000	1.018	A	A
1	PU238	0.802	0.042	0.772	0.037	1.039	A	A
1	PU239	1.038	0.050	1.009	0.058	1.028	A	A
1	SR90	3.640	0.230	4.104	0.045	0.887	W	W
1	U234	0.284	0.017	0.269	0.015	1.058	A	A
1	U238	0.298	0.017	0.262	0.016	1.138	A	A
1	ug U	0.022		0.021	0.001	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 50 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	0.254	0.070	0.134	0.001	1.900	W	A
1	Bq U	0.200	0.020	0.123	0.004	1.625	W	A
1	CO57	2.840	0.114	3.010	0.140	0.944	A	
1	CO60	5.320	0.270	4.960	0.280	1.073	A	A
1	CS137	6.430	0.320	6.050	0.300	1.063	A	A
1	PU238	0.250	0.070	0.272	0.001	0.918	A	N
1	PU239	0.150	0.040	0.124	0.003	1.207	W	A
1	SB125	1.670	0.380	3.590	0.310	0.465	N	A
1	SR90	1.120	0.220	0.644	0.014	1.739	W	A
1	U234	0.087	0.010	0.060	0.002	1.451	W	A
1	U238	0.088	0.010	0.061	0.003	1.437	W	A

Matrix: SO Soil Bq / kg

1	AC228	71.000	13.500	47.150	2.989	1.506	W	A
1	AM241	5.650	1.700	4.894	0.969	1.154	A	W
1	BI214	115.000	10.400	69.900	5.660	1.645	N	A
1	Bq U	245.000	49.000	291.000	3.000	0.842	A	A
1	CS137	672.000	16.100	659.500	24.950	1.019	A	A
1	K40	532.000	76.600	362.750	20.156	1.467	W	W
1	PB212	57.000	2.850	47.925	2.572	1.189	A	A
1	PB214	122.000	13.400	71.000	7.035	1.718	N	A
1	PU239	9.200	3.800	8.112	1.068	1.134	A	A
1	SR90	24.300	13.600	32.400	0.529	0.750	W	W
1	TH234	253.000	22.800	138.000	4.080	1.833	W	
1	U234	124.000	29.700	140.667	1.155	0.882	A	A
1	U238	125.000	29.900	145.000	1.732	0.862	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.610	1.200	3.522	0.590	0.741	W	W
1	CM244	2.440	1.280	1.671	0.541	1.460	W	W
1	CO60	37.000	6.400	21.450	1.000	1.725	N	A
1	CS137	545.000	14.600	467.000	20.000	1.167	A	A
1	K40	98.300	8.260	656.500	20.000	0.150	N	A
1	PU239	2.960	1.400	5.204	0.428	0.569	N	A
1	SR90	534.000	29.900	736.100	7.700	0.725	W	A

Matrix: WA Water Bq / L

1	AM241	1.670	0.330	1.146	0.051	1.457	W	A
1	Bq U	0.529	0.110	0.541	0.025	0.978	A	A
1	CO60	53.300	1.920	51.100	3.000	1.043	A	A
1	CS137	42.600	1.830	39.375	2.405	1.082	A	A
1	FE55	119.000	7.600	97.400	1.650	1.222	A	A
1	H3	277.000	13.400	121.080	6.780	2.288	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 a site specific evaluation.

QAP 50 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	NI63	94.700	2.000	114.000	10.000	0.831	A	A
1	PU238	0.740	0.170	0.772	0.037	0.959	A	N
1	PU239	0.960	0.160	1.009	0.058	0.951	A	A
1	SR90	4.260	0.330	4.104	0.045	1.038	A	W
1	U234	0.262	0.080	0.269	0.015	0.976	A	A
1	U238	0.265	0.070	0.262	0.016	1.012	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 50 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	BI214	75.200	2.300	69.900	5.660	1.076	A	
1	CS137	717.000	57.400	659.500	24.950	1.087	A	A
1	K40	402.000	16.500	362.750	20.156	1.108	A	A
1	PB212	60.100	5.900	47.925	2.572	1.254	W	
1	PB214	90.600	5.300	71.000	7.035	1.276	W	
Matrix: WA Water Bq/L								
1	CO60	48.300	3.200	51.100	3.000	0.945	A	A
1	CS137	38.100	3.800	39.375	2.405	0.968	A	A
1	GROSS ALPHA	848.000	22.000	1090.000	20.000	0.778	W	A
1	GROSS BETA	906.000	21.000	1100.000	40.000	0.824	A	A
1	H3	117.800	1.900	121.080	6.780	0.973	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 50 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	0.230	0.020	0.134	0.001	1.720	W	W
1	CO57	3.690	0.230	3.010	0.140	1.226	W	
1	CO60	5.760	0.340	4.960	0.280	1.161	W	A
1	CS137	7.120	0.420	6.050	0.300	1.177	W	A
1	SB125	4.130	2.600	3.590	0.310	1.150	A	A
Matrix: SO Soil Bq / kg								
1	AC228	44.580	3.030	47.150	2.989	0.945	A	
1	BI214	68.230	5.020	69.900	5.660	0.976	A	
1	CS137	707.900	41.700	659.500	24.950	1.073	A	A
1	K40	362.400	22.100	362.750	20.156	0.999	A	A
1	PB214	68.550	4.350	71.000	7.035	0.965	A	
1	TH234	135.800	9.400	138.000	4.080	0.984	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	4.570	0.580	3.522	0.590	1.298	A	A
1	CO60	21.010	1.520	21.450	1.000	0.979	A	A
1	CS137	577.200	33.800	467.000	20.000	1.236	A	A
1	K40	703.200	43.400	656.500	20.000	1.071	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 50 Results by Laboratory**Lab:** CO Bedford Institute of Oceanography, Dartmouth. Nova Scotia, 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	AM241	0.140	0.050	0.134	0.001	1.047	A	
3	AM241	0.140	0.040	0.134	0.001	1.047	A	
2	AM241	0.130	0.040	0.134	0.001	0.972	A	
1	CO60	6.000	0.100	4.960	0.280	1.210	W	A
2	CO60	6.000	0.100	4.960	0.280	1.210	W	A
3	CO60	6.100	0.100	4.960	0.280	1.230	W	A
1	CS137	7.300	0.100	6.050	0.300	1.207	W	A
3	CS137	7.400	0.100	6.050	0.300	1.223	W	A
2	CS137	7.200	0.100	6.050	0.300	1.190	W	A
3	SB125	5.100	0.200	3.590	0.310	1.421	W	A
2	SB125	5.000	0.300	3.590	0.310	1.393	W	A
1	SB125	4.800	0.300	3.590	0.310	1.337	W	A

Matrix: SO Soil Bq / kg

2	AC228	50.000	9.000	47.150	2.989	1.060	A	
1	AC228	52.000	9.000	47.150	2.989	1.103	A	
3	AC228	50.000	7.000	47.150	2.989	1.060	A	
1	AM241	35.000	14.000	4.894	0.969	7.151	N	
3	AM241	31.000	10.000	4.894	0.969	6.334	N	
2	AM241	30.000	14.000	4.894	0.969	6.130	N	
2	BI214	70.000	7.000	69.900	5.660	1.001	A	
3	BI214	72.000	6.000	69.900	5.660	1.030	A	
1	BI214	72.000	7.000	69.900	5.660	1.030	A	
3	CS137	763.000	28.000	659.500	24.950	1.157	A	A
2	CS137	766.000	29.000	659.500	24.950	1.161	A	A
1	CS137	760.000	28.000	659.500	24.950	1.152	A	A
1	PB214	87.000	7.000	71.000	7.035	1.225	A	
2	PB214	86.000	9.000	71.000	7.035	1.211	A	
3	PB214	89.000	6.000	71.000	7.035	1.254	A	
3	PU239	8.100	0.500	8.112	1.068	0.999	A	
1	PU239	7.600	0.500	8.112	1.068	0.937	A	
2	PU239	7.900	0.500	8.112	1.068	0.974	A	

Matrix: VE Vegetation Bq / kg

3	CO60	22.000	3.000	21.450	1.000	1.026	A	A
1	CO60	24.000	3.000	21.450	1.000	1.119	A	A
2	CO60	24.000	2.000	21.450	1.000	1.119	A	A
3	CS137	557.000	21.000	467.000	20.000	1.193	A	A
2	CS137	556.000	20.000	467.000	20.000	1.191	A	A
1	CS137	556.000	21.000	467.000	20.000	1.191	A	A
2	PU239	4.300	0.400	5.204	0.428	0.826	W	
3	PU239	4.500	0.400	5.204	0.428	0.865	A	
1	PU239	4.700	0.400	5.204	0.428	0.903	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 50 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	CO60	6.900	0.400	4.960	0.280	1.391	N	N
1	CS137	8.100	0.500	6.050	0.300	1.339	W	N
1	SB125	5.900	0.200	3.590	0.310	1.643	N	N
Matrix: SO Soil Bq / kg								
1	AC228	58.700	3.900	47.150	2.989	1.245	A	A
1	BI214	73.200	5.700	69.900	5.660	1.047	A	A
1	CS137	735.700	54.700	659.500	24.950	1.116	A	W
1	K40	475.000	121.000	362.750	20.156	1.309	W	A
1	PB212	61.800	5.300	47.925	2.572	1.290	W	A
1	PB214	78.200	4.800	71.000	7.035	1.101	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	26.600	1.500	21.450	1.000	1.240	A	W
1	CS137	536.900	38.500	467.000	20.000	1.150	A	A
1	K40	743.000	163.000	656.500	20.000	1.132	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 50 Results by Laboratory**Lab:** CS Boeing North American, 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	AM241	0.185	0.030	0.134	0.001	1.387	A	A
1	CO60	4.554	0.228	4.960	0.280	0.918	A	A
1	CS137	5.442	0.289	6.050	0.300	0.900	A	A
1	GROSS ALPHA	1.700	0.080	1.610	0.160	1.056	A	A
1	GROSS BETA	2.230	0.170	1.560	0.160	1.429	W	A
1	SB125	3.014	0.247	3.590	0.310	0.840	A	A
Matrix: SO Soil Bq / kg								
1	AC228	45.900	1.420	47.150	2.989	0.973	A	A
1	AM241	3.753	0.564	4.894	0.969	0.767	W	A
1	BI214	67.440	2.200	69.900	5.660	0.965	A	A
1	CS137	715.550	21.900	659.500	24.950	1.085	A	A
1	K40	411.530	19.100	362.750	20.156	1.134	A	A
1	PB212	48.940	2.310	47.925	2.572	1.021	A	A
1	PB214	65.610	2.540	71.000	7.035	0.924	A	A
1	TH234	169.300	17.900	138.000	4.080	1.227	A	A
1	U238	201.700	5.540	145.000	1.732	1.391	W	A
Matrix: VE Vegetation Bq / kg								
1	AM241	2.085	0.645	3.522	0.590	0.592	N	A
1	CO60	24.060	1.259	21.450	1.000	1.122	A	A
1	CS137	507.400	16.820	467.000	20.000	1.087	A	A
1	K40	716.100	30.740	656.500	20.000	1.091	A	A
Matrix: WA Water Bq / L								
1	AM241	0.757	0.198	1.146	0.051	0.660	N	A
1	CO60	54.230	1.475	51.100	3.000	1.061	A	A
1	CS137	42.780	1.462	39.375	2.405	1.086	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 50 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	0.144	0.004	0.134	0.001	1.077	A	
1	CO57	2.830	0.160	3.010	0.140	0.940	A	
1	CO60	4.920	0.110	4.960	0.280	0.992	A	
1	CS137	5.720	0.170	6.050	0.300	0.945	A	
1	PU238	0.266	0.006	0.272	0.001	0.977	A	
1	PU239	0.124	0.004	0.124	0.003	0.998	A	
1	SB125	4.240	0.220	3.590	0.310	1.181	A	
1	U234	0.065	0.002	0.060	0.002	1.091	A	
1	U238	0.063	0.002	0.061	0.003	1.035	A	

Matrix: SO Soil Bq / kg

1	PU238	0.352	0.028	0.364	0.085	0.968	A	
3	PU238	0.349	0.058	0.364	0.085	0.960	A	
2	PU238	0.359	0.027	0.364	0.085	0.987	A	
1	PU239	8.410	0.180	8.112	1.068	1.037	A	
2	PU239	7.980	0.160	8.112	1.068	0.984	A	
3	PU239	7.980	0.340	8.112	1.068	0.984	A	
2	U234	143.900	3.700	140.667	1.155	1.023	A	
1	U234	146.200	2.900	140.667	1.155	1.039	A	
3	U234	143.000	2.800	140.667	1.155	1.017	A	
1	U238	153.600	3.100	145.000	1.732	1.059	A	
3	U238	149.800	3.000	145.000	1.732	1.033	A	
2	U238	149.800	3.900	145.000	1.732	1.033	A	

Matrix: VE Vegetation Bq / kg

2	AM241	3.390	0.090	3.522	0.590	0.963	A	
1	AM241	3.190	0.080	3.522	0.590	0.906	A	
3	AM241	3.140	0.080	3.522	0.590	0.892	A	
1	CM244	2.150	0.080	1.671	0.541	1.287	A	
2	CM244	2.030	0.070	1.671	0.541	1.215	A	
3	CM244	1.880	0.070	1.671	0.541	1.125	A	
3	PU238	0.412	0.030	0.419	0.010	0.984	A	
2	PU238	0.366	0.028	0.419	0.010	0.875	A	
1	PU238	0.398	0.035	0.419	0.010	0.951	A	
3	PU239	5.240	0.140	5.204	0.428	1.007	A	
1	PU239	5.420	0.160	5.204	0.428	1.041	A	
2	PU239	5.600	0.150	5.204	0.428	1.076	A	

Matrix: WA Water Bq / L

1	AM241	1.220	0.025	1.146	0.051	1.065	A	
2	AM241	1.219	0.027	1.146	0.051	1.064	A	
1	CO60	52.230	0.970	51.100	3.000	1.022	A	
1	CS137	40.220	1.080	39.375	2.405	1.021	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 50 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: WA Water Bq/L								
1	PU238	0.788	0.023	0.772	0.037	1.021	A	
2	PU238	0.836	0.021	0.772	0.037	1.083	A	
2	PU239	1.110	0.030	1.009	0.058	1.100	A	
1	PU239	1.030	0.030	1.009	0.058	1.021	A	
1	U234	0.301	0.008	0.269	0.015	1.121	A	
2	U234	0.291	0.007	0.269	0.015	1.084	A	
2	U238	0.290	0.008	0.262	0.016	1.107	A	
1	U238	0.295	0.007	0.262	0.016	1.126	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 50 Results by Laboratory**Lab:** DC Datachem Laboratories, Salt Lake City

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq/kg								
1	AC228	58.500	18.800	47.150	2.989	1.241	A	
1	BI214	75.000	18.500	69.900	5.660	1.073	A	
1	CS137	825.600	281.000	659.500	24.950	1.252	W	
1	K40	372.600	181.000	362.750	20.156	1.027	A	
1	PB212	74.000	17.000	47.925	2.572	1.544	N	
1	PB214	69.600	15.600	71.000	7.035	0.980	A	

Matrix: WA Water Bq/L

1	CO60	66.300	15.000	51.100	3.000	1.297	N	
1	CS137	46.500	10.900	39.375	2.405	1.181	W	
1	GROSS ALPHA	1130.000	222.000	1090.000	20.000	1.037	A	
1	GROSS BETA	941.000	184.000	1100.000	40.000	0.855	A	
1	H3	203.000	30.800	121.080	6.780	1.677	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 50 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	AM241	0.179	0.050	0.134	0.001	1.339	A	
1	CO57	2.760	0.100	3.010	0.140	0.917	A	
1	CO60	4.840	0.100	4.960	0.280	0.976	A	
1	CS137	5.710	0.100	6.050	0.300	0.944	A	
1	GROSS ALPHA	1.660	0.300	1.610	0.160	1.031	A	A
1	GROSS BETA	1.550	0.240	1.560	0.160	0.994	A	W
1	SB125	3.800	0.100	3.590	0.310	1.058	A	
Matrix: SO Soil Bq / kg								
1	AM241	5.450	2.000	4.894	0.969	1.114	A	W
1	CS137	650.000	4.000	659.500	24.950	0.986	A	A
1	K40	352.000	17.000	362.750	20.156	0.970	A	A
Matrix: WA Water Bq / L								
1	CO60	58.200	0.700	51.100	3.000	1.139	A	A
1	CS137	44.200	0.300	39.375	2.405	1.123	A	A
1	GROSS ALPHA	2474.000	492.000	1090.000	20.000	2.270	N	W
1	GROSS BETA	2684.000	460.000	1100.000	40.000	2.440	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 50 Results by Laboratory**Lab:** EC Envirocare of Utah

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	44.700	2.700	47.150	2.989	0.948	A	
1	BI214	67.900	3.700	69.900	5.660	0.971	A	
1	CS137	734.500	31.600	659.500	24.950	1.114	A	
1	K40	436.200	49.500	362.750	20.156	1.202	A	
1	PB212	56.200	9.300	47.925	2.572	1.173	A	
1	PB214	71.200	8.600	71.000	7.035	1.003	A	
1	TH234	174.300	15.800	138.000	4.080	1.263	A	

Matrix: WA Water Bq / L

1	CO60	56.700	1.500	51.100	3.000	1.110	A	
1	CS137	43.200	1.400	39.375	2.405	1.097	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 50 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	0.151	0.012	0.134	0.001	1.129	A	A
1	CO57	3.200	0.200	3.010	0.140	1.063	A	
1	CO60	5.200	0.400	4.960	0.280	1.048	A	A
1	CS137	6.300	0.500	6.050	0.300	1.041	A	A
1	PU238	0.266	0.023	0.272	0.001	0.977	A	A
1	PU239	0.140	0.013	0.124	0.003	1.126	A	A
1	SB125	4.100	0.300	3.590	0.310	1.142	A	A
1	SR90	0.640	0.050	0.644	0.014	0.994	A	A
1	U234	0.070	0.009	0.060	0.002	1.167	A	A
1	U238	0.066	0.010	0.061	0.003	1.078	A	A
Matrix: SO Soil Bq / kg								
1	AM241	4.630	0.450	4.894	0.969	0.946	A	A
1	CS137	750.000	60.000	659.500	24.950	1.137	A	A
1	K40	420.000	70.000	362.750	20.156	1.158	A	A
1	PU238	0.320	0.060	0.364	0.085	0.880	A	A
1	PU239	7.670	0.680	8.112	1.068	0.946	A	A
1	SR90	34.900	1.800	32.400	0.529	1.077	A	A
1	U234	147.000	15.000	140.667	1.155	1.045	A	A
1	U238	144.000	17.000	145.000	1.732	0.993	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.220	0.230	3.522	0.590	0.914	A	A
1	CM244	1.800	0.190	1.671	0.541	1.077	A	A
1	CO60	23.000	3.000	21.450	1.000	1.072	A	A
1	CS137	480.000	40.000	467.000	20.000	1.028	A	A
1	K40	720.000	90.000	656.500	20.000	1.097	A	A
1	PU238	0.330	0.070	0.419	0.010	0.789	W	A
1	PU239	5.020	0.490	5.204	0.428	0.965	A	A
1	SR90	816.000	24.000	736.100	7.700	1.109	A	W
Matrix: WA Water Bq / L								
1	AM241	1.150	0.080	1.146	0.051	1.003	A	A
1	CO60	52.000	4.000	51.100	3.000	1.018	A	A
1	CS137	40.000	3.000	39.375	2.405	1.016	A	A
1	FE55	73.000	23.000	97.400	1.650	0.749	A	A
1	GROSS ALPHA	880.000	50.000	1090.000	20.000	0.807	W	A
1	GROSS BETA	1240.000	30.000	1100.000	40.000	1.127	A	A
1	NI63	93.000	6.000	114.000	10.000	0.816	A	A
1	PU238	0.816	0.079	0.772	0.037	1.058	A	A
1	PU239	1.010	0.091	1.009	0.058	1.001	A	A
1	SR90	4.200	0.300	4.104	0.045	1.023	A	A
1	U234	0.291	0.050	0.269	0.015	1.084	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 50 Results by Laboratory**Lab:** EG LMITCO/INEL, Scoville

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	U238	0.311	0.060	0.262	0.016	1.187	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 50 Results by Laboratory**Lab:** EL Energy Laboratories, Inc., 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	0.800		0.134	0.001	5.984	N	
2	AM241	1.000		0.134	0.001	7.479	N	
3	CO60	10.900		4.960	0.280	2.198	N	
2	CO60	12.200		4.960	0.280	2.460	N	
1	CS137	12.700		6.050	0.300	2.099	N	
2	CS137	15.100		6.050	0.300	2.496	N	
1	SB125	7.200		3.590	0.310	2.006	N	
2	SB125	8.800		3.590	0.310	2.451	N	

Matrix: SO Soil Bq / kg

2	AC228	83.000		47.150	2.989	1.760	N	
1	AC228	71.000		47.150	2.989	1.506	W	
2	BI214	93.000		69.900	5.660	1.330	W	
1	BI214	63.000		69.900	5.660	0.901	A	
2	CS137	864.000		659.500	24.950	1.310	W	
1	CS137	635.000		659.500	24.950	0.963	A	
2	K40	560.000		362.750	20.156	1.544	N	
1	K40	488.000		362.750	20.156	1.345	W	
2	PB212	74.000		47.925	2.572	1.544	N	
1	PB212	74.000		47.925	2.572	1.544	N	
2	PB214	103.000		71.000	7.035	1.451	N	
1	PB214	72.000		71.000	7.035	1.014	A	

Matrix: VE Vegetation Bq / kg

1	AM241	5.300		3.522	0.590	1.505	A	
2	AM241	6.200		3.522	0.590	1.760	W	
2	CO60	41.000		21.450	1.000	1.911	N	
1	CO60	32.000		21.450	1.000	1.492	N	
1	CS137	475.000		467.000	20.000	1.017	A	
2	CS137	559.000		467.000	20.000	1.197	A	
2	K40	954.000		656.500	20.000	1.453	N	
1	K40	893.000		656.500	20.000	1.360	W	

Matrix: WA Water Bq / L

2	AM241	2.300		1.146	0.051	2.007	N	
1	AM241	2.200		1.146	0.051	1.920	N	
2	CO60	76.000		51.100	3.000	1.487	N	
1	CO60	67.000		51.100	3.000	1.311	N	
2	CS137	52.000		39.375	2.405	1.321	N	
1	CS137	59.000		39.375	2.405	1.498	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 50 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
Matrix: WA Water Bq/L								
1	CS137	40.630	3.050	39.375	2.405	1.032	A	
1	SR90	3.900		4.104	0.045	0.950	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 50 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	2.920	0.180	3.010	0.140	0.970	A	
1	CO60	5.100	0.300	4.960	0.280	1.028	A	A
1	CS137	5.980	0.340	6.050	0.300	0.988	A	A
1	PU238	0.254	0.019	0.272	0.001	0.933	A	A
1	PU239	0.127	0.010	0.124	0.003	1.022	A	A
1	SB125	4.000	0.340	3.590	0.310	1.114	A	A
Matrix: SO Soil Bq / kg								
1	AM241	5.000	0.488	4.894	0.969	1.022	A	A
1	PU239	7.990	0.624	8.112	1.068	0.985	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.290	0.295	3.522	0.590	0.934	A	A
1	CM244	2.040	0.153	1.671	0.541	1.221	A	A
1	PU239	5.110	0.422	5.204	0.428	0.982	A	A
Matrix: WA Water Bq / L								
1	AM241	1.180	0.099	1.146	0.051	1.030	A	A
1	CO60	54.330	3.530	51.100	3.000	1.063	A	A
1	CS137	41.030	2.720	39.375	2.405	1.042	A	A
1	H3	139.358	7.227	121.080	6.780	1.151	A	A
1	PU238	0.766	0.072	0.772	0.037	0.993	A	A
1	PU239	1.020	0.092	1.009	0.058	1.011	A	A
1	SR90	4.152	0.261	4.104	0.045	1.012	A	A
1	U234	0.310	0.034	0.269	0.015	1.155	A	
1	U238	0.340	0.037	0.262	0.016	1.298	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 50 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	0.158	0.049	0.134	0.001	1.181	A	
1	CO57	8.865	0.539	3.010	0.140	2.945	N	
1	CO60	5.286	0.347	4.960	0.280	1.066	A	A
1	CS137	6.636	0.301	6.050	0.300	1.097	A	A
1	GROSS ALPHA	1.935	0.133	1.610	0.160	1.202	A	A
1	GROSS BETA	1.162	0.111	1.560	0.160	0.745	W	W
1	SB125	4.917	0.784	3.590	0.310	1.370	W	W

Matrix: SO Soil Bq / kg

1	AC228	56.900	20.000	47.150	2.989	1.207	A	A
1	BI214	57.500	11.000	69.900	5.660	0.823	W	A
1	CS137	659.900	113.000	659.500	24.950	1.001	A	A
1	K40	341.700	75.000	362.750	20.156	0.942	A	A
1	PB212	55.700	8.000	47.925	2.572	1.162	A	A
1	PB214	55.800	10.000	71.000	7.035	0.786	W	A

Matrix: WA Water Bq / L

1	Bq U	0.544	0.100	0.541	0.025	1.006	A	A
1	CO60	54.000	2.518	51.100	3.000	1.057	A	A
1	CS137	36.400	1.600	39.375	2.405	0.924	A	A
1	GROSS ALPHA	1154.400	52.000	1090.000	20.000	1.059	A	A
1	GROSS BETA	1103.300	59.000	1100.000	40.000	1.003	A	A
1	H3	205.000	14.000	121.080	6.780	1.693	W	N
1	U234	0.213	0.010	0.269	0.015	0.793	N	N
1	U238	0.270	0.010	0.262	0.016	1.031	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 50 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	0.140	0.020	0.134	0.001	1.047	A	
1	CO57	3.030	0.030	3.010	0.140	1.007	A	
1	CO60	5.400	0.070	4.960	0.280	1.089	A	A
1	CS137	7.260	0.100	6.050	0.300	1.200	W	A
1	GROSS ALPHA	1.350	0.060	1.610	0.160	0.839	A	A
1	GROSS BETA	1.650	0.060	1.560	0.160	1.058	A	A
1	SB125	3.700	0.100	3.590	0.310	1.031	A	W
Matrix: SO Soil Bq / kg								
1	AM241	4.300	0.600	4.894	0.969	0.879	A	A
1	CS137	616.000	2.000	659.500	24.950	0.934	A	A
1	K40	343.000	7.000	362.750	20.156	0.946	A	A
1	U238	100.000	5.000	145.000	1.732	0.690	A	W
Matrix: VE Vegetation Bq / kg								
1	AM241	4.000	0.700	3.522	0.590	1.136	A	A
1	CO60	21.600	0.500	21.450	1.000	1.007	A	A
1	CS137	472.000	2.000	467.000	20.000	1.011	A	A
1	K40	657.000	10.000	656.500	20.000	1.001	A	A
Matrix: WA Water Bq / L								
1	AM241	1.600	0.400	1.146	0.051	1.396	W	W
1	CO60	53.300	0.500	51.100	3.000	1.043	A	A
1	CS137	42.300	0.600	39.375	2.405	1.074	A	A
1	GROSS ALPHA	1253.200	9.400	1090.000	20.000	1.150	A	A
1	GROSS BETA	1233.500	7.500	1100.000	40.000	1.121	A	A
1	H3	134.500	3.730	121.080	6.780	1.111	A	A
1	NI63	91.720	1.040	114.000	10.000	0.805	A	A
1	SR90	0.422	0.005	4.104	0.045	0.103	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 50 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	0.160	0.020	0.134	0.001	1.197	A	A
1	CO57	3.200	0.060	3.010	0.140	1.063	A	
1	CO60	5.300	0.070	4.960	0.280	1.069	A	A
1	CS137	7.000	0.100	6.050	0.300	1.157	W	A
1	SB125	4.300	0.090	3.590	0.310	1.198	W	A

Matrix: WA Water Bq / L

1	AM241	1.200	0.100	1.146	0.051	1.047	A	A
1	CO60	51.800	0.300	51.100	3.000	1.014	A	A
1	CS137	40.600	0.300	39.375	2.405	1.031	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 50 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	3.350	0.220	3.010	0.140	1.113	A	
1	CO60	5.020	0.400	4.960	0.280	1.012	A	A
1	CS137	6.050	0.510	6.050	0.300	1.000	A	A
1	SB125	4.400	0.450	3.590	0.310	1.226	W	A
Matrix: SO Soil Bq / kg								
1	CS137	645.000	65.000	659.500	24.950	0.978	A	A
1	K40	410.000	42.000	362.750	20.156	1.130	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	22.800	1.800	21.450	1.000	1.063	A	A
1	CS137	464.000	46.000	467.000	20.000	0.994	A	A
1	K40	644.000	66.000	656.500	20.000	0.981	A	A
Matrix: WA Water Bq / L								
1	CO60	52.600	3.800	51.100	3.000	1.029	A	A
1	CS137	39.300	4.000	39.375	2.405	0.998	A	A
1	H3	131.000	7.000	121.080	6.780	1.082	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 50 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	40.700	1.900	47.150	2.989	0.863	W	A
1	BI214	66.300	3.700	69.900	5.660	0.948	A	A
1	CS137	620.000	24.000	659.500	24.950	0.940	A	A
1	K40	336.000	20.000	362.750	20.156	0.926	A	A
1	PB214	63.200	3.600	71.000	7.035	0.890	A	A
1	TH234	121.000	12.000	138.000	4.080	0.877	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 50 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	0.150	0.005	0.134	0.001	1.122	A	A
1	CO60	4.800	0.050	4.960	0.280	0.968	A	A
1	CS137	6.000	0.200	6.050	0.300	0.992	A	A
1	PU238	0.210	0.017	0.272	0.001	0.771	W	W
1	PU239	0.130	0.013	0.124	0.003	1.046	A	A
1	SB125	4.100	0.770	3.590	0.310	1.142	A	A
1	SR90	0.830	0.070	0.644	0.014	1.289	A	W
1	U234	0.071	0.007	0.060	0.002	1.184	A	A
1	U238	0.066	0.004	0.061	0.003	1.078	A	A
1	ug U	5.300	0.270	4.945	0.227	1.072	A	A
Matrix: SO Soil Bq / kg								
1	AC228	52.000	5.700	47.150	2.989	1.103	A	
1	AM241	4.800	0.420	4.894	0.969	0.981	A	A
1	CS137	716.000	29.000	659.500	24.950	1.086	A	A
1	PU239	7.000	1.100	8.112	1.068	0.863	W	W
1	U234	154.000	13.000	140.667	1.155	1.095	A	A
1	U238	153.000	4.600	145.000	1.732	1.055	A	A
1	ug U	12.100		11.800	0.300	1.025	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.800	0.250	3.522	0.590	1.079	A	A
1	CM244	2.100	0.240	1.671	0.541	1.257	A	A
1	CO60	25.000	9.200	21.450	1.000	1.166	A	W
1	CS137	554.000	158.000	467.000	20.000	1.186	A	A
1	K40	581.000	39.000	656.500	20.000	0.885	W	W
1	PU239	5.000	1.200	5.204	0.428	0.961	A	A
Matrix: WA Water Bq / L								
1	AM241	1.200	0.160	1.146	0.051	1.047	A	A
1	CO60	58.000	5.200	51.100	3.000	1.135	A	A
1	CS137	42.000	5.300	39.375	2.405	1.067	A	A
1	PU238	0.770	0.026	0.772	0.037	0.998	A	A
1	PU239	1.000	0.087	1.009	0.058	0.991	A	A
1	SR90	2.400	0.120	4.104	0.045	0.585	N	W
1	U234	0.310	0.012	0.269	0.015	1.155	A	N
1	U238	0.310	0.004	0.262	0.016	1.184	W	N
1	ug U	0.025	0.001	0.021	0.001	1.179	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 50 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	CO60	5.340	0.370	4.960	0.280	1.077	A	
3	CO60	4.410	0.350	4.960	0.280	0.889	A	
2	CO60	4.650	0.380	4.960	0.280	0.938	A	
3	CS137	5.990	0.470	6.050	0.300	0.990	A	
1	CS137	6.240	0.430	6.050	0.300	1.031	A	
2	CS137	6.050	0.520	6.050	0.300	1.000	A	
1	SB125	4.300	0.540	3.590	0.310	1.198	W	
3	SB125	3.910	0.470	3.590	0.310	1.089	A	
2	SB125	4.220	0.560	3.590	0.310	1.175	A	

Matrix: SO Soil Bq / kg

2	AC228	38.700	4.820	47.150	2.989	0.821	W	A
1	AC228	50.990	5.400	47.150	2.989	1.081	A	A
3	AC228	42.400	3.800	47.150	2.989	0.899	A	A
3	BI214	62.100	4.420	69.900	5.660	0.888	A	A
2	BI214	59.800	5.150	69.900	5.660	0.856	A	A
1	BI214	61.900	4.120	69.900	5.660	0.886	A	A
3	CS137	654.500	39.410	659.500	24.950	0.992	A	A
2	CS137	592.340	35.030	659.500	24.950	0.898	W	A
1	CS137	594.900	22.800	659.500	24.950	0.902	A	A
3	K40	381.900	27.470	362.750	20.156	1.053	A	A
2	K40	337.500	29.690	362.750	20.156	0.930	A	A
1	K40	350.600	24.700	362.750	20.156	0.967	A	A
1	PB212	45.420	2.670	47.925	2.572	0.948	A	A
2	PB212	40.720	3.450	47.925	2.572	0.850	W	A
3	PB212	44.230	3.190	47.925	2.572	0.923	A	A
2	PB214	67.500	6.290	71.000	7.035	0.951	A	
3	PB214	70.300	5.150	71.000	7.035	0.990	A	
1	PB214	67.700	4.860	71.000	7.035	0.954	A	

Matrix: VE Vegetation Bq / kg

1	CO60	23.300	2.260	21.450	1.000	1.086	A	A
2	CO60	21.700	2.700	21.450	1.000	1.012	A	A
3	CO60	20.710	1.750	21.450	1.000	0.966	A	A
1	CS137	451.300	18.200	467.000	20.000	0.966	A	A
2	CS137	446.400	27.000	467.000	20.000	0.956	A	A
3	CS137	459.500	27.970	467.000	20.000	0.984	A	A
1	K40	684.300	47.300	656.500	20.000	1.042	A	A
2	K40	663.960	55.950	656.500	20.000	1.011	A	A
3	K40	713.500	50.690	656.500	20.000	1.087	A	A

Matrix: WA Water Bq / L

3	CO60	57.640	1.430	51.100	3.000	1.128	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 50 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: WA Water Bq/L								
2	CO60	54.030	3.500	51.100	3.000	1.057	A	A
1	CO60	53.880	1.920	51.100	3.000	1.054	A	A
3	CS137	36.930	0.900	39.375	2.405	0.938	A	A
2	CS137	42.100	3.020	39.375	2.405	1.069	A	A
1	CS137	40.500	1.870	39.375	2.405	1.029	A	A
2	FE55	79.920	1.350	97.400	1.650	0.821	A	A
1	FE55	81.770	1.390	97.400	1.650	0.840	A	A
1	H3	118.400	8.580	121.080	6.780	0.978	A	A
3	H3	117.200	8.550	121.080	6.780	0.968	A	A
2	H3	119.100	8.620	121.080	6.780	0.984	A	A
2	SR90	3.390	0.040	4.104	0.045	0.826	W	W
1	SR90	3.520	0.040	4.104	0.045	0.858	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 50 Results by Laboratory**Lab:** GE Environmental Physics, Inc., 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	0.177	0.050	0.134	0.001	1.321	A	A
1	CO60	4.949	0.948	4.960	0.280	0.998	A	A
1	CS137	6.059	0.990	6.050	0.300	1.001	A	A
1	GROSS ALPHA	1.679	0.005	1.610	0.160	1.043	A	A
1	GROSS BETA	1.400	0.003	1.560	0.160	0.897	A	W
1	PU238	0.290	0.084	0.272	0.001	1.065	A	A
1	PU239	0.137	0.049	0.124	0.003	1.100	A	A
1	SB125	3.652	0.989	3.590	0.310	1.017	A	N
1	SR90	0.553	0.087	0.644	0.014	0.858	A	A
1	U234	0.070	0.029	0.060	0.002	1.166	A	A
1	U238	0.068	0.028	0.061	0.003	1.103	A	A
1	ug U	5.490	0.098	4.945	0.227	1.110	A	W

Matrix: SO Soil Bq / kg

1	AC228	49.876	11.493	47.150	2.989	1.058	A	A
1	AM241	4.496	0.875	4.894	0.969	0.919	A	A
1	BI214	74.148	14.497	69.900	5.660	1.061	A	A
1	CS137	655.825	111.327	659.500	24.950	0.994	A	A
1	K40	357.901	53.847	362.750	20.156	0.987	A	A
1	PB212	49.536	10.367	47.925	2.572	1.034	A	A
1	PB214	82.029	16.018	71.000	7.035	1.155	A	A
1	PU239	7.622	1.522	8.112	1.068	0.940	A	A
1	SR90	37.788	4.446	32.400	0.529	1.166	A	A
1	TH234	132.053	44.757	138.000	4.080	0.957	A	A
1	U234	135.790	18.447	140.667	1.155	0.965	A	A
1	U238	138.750	18.841	145.000	1.732	0.957	A	A
1	ug U	9.765	0.184	11.800	0.300	0.828	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.676	1.149	3.522	0.590	1.044	A	A
1	CM244	2.355	0.857	1.671	0.541	1.410	W	A
1	CO60	20.907	3.910	21.450	1.000	0.975	A	A
1	CS137	462.685	76.197	467.000	20.000	0.991	A	A
1	K40	687.645	109.231	656.500	20.000	1.047	A	A
1	PU239	5.402	0.784	5.204	0.428	1.038	A	W
1	SR90	576.412	16.982	736.100	7.700	0.783	A	A

Matrix: WA Water Bq / L

1	AM241	1.178	0.182	1.146	0.051	1.028	A	A
1	CO60	56.296	8.550	51.100	3.000	1.102	A	A
1	CS137	41.273	5.793	39.375	2.405	1.048	A	A
1	FE55	89.340	82.512	97.400	1.650	0.917	A	A
1	GROSS ALPHA	1198.520	23.625	1090.000	20.000	1.100	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**

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QAP 50 Results by Laboratory**Lab:** GE Environmental Physics, Inc., 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	GROSS BETA	1048.570	18.158	1100.000	40.000	0.953	A	A
1	H3	116.387	12.225	121.080	6.780	0.961	A	A
1	NI63	118.787	4.058	114.000	10.000	1.042	A	A
1	PU238	0.752	0.147	0.772	0.037	0.975	A	A
1	PU239	0.974	0.188	1.009	0.058	0.965	A	A
1	SR90	3.448	0.280	4.104	0.045	0.840	W	N
1	U234	0.315	0.051	0.269	0.015	1.174	A	A
1	U238	0.306	0.049	0.262	0.016	1.167	A	A
1	ug U	23.290	0.267	0.021	0.001	1,098.585	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 50 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	0.130	0.010	0.134	0.001	0.972	A	A
1	Bq U	0.130		0.123	0.004	1.056	A	N
1	CO57	3.100	0.400	3.010	0.140	1.030	A	
1	CO60	5.000	0.800	4.960	0.280	1.008	A	A
1	CS137	6.300	0.800	6.050	0.300	1.041	A	A
1	GROSS ALPHA	1.700	0.200	1.610	0.160	1.056	A	A
1	GROSS BETA	1.500	0.100	1.560	0.160	0.962	A	A
1	PU238	0.260	0.030	0.272	0.001	0.955	A	A
1	PU239	0.120	0.010	0.124	0.003	0.965	A	A
1	SB125	3.700	1.000	3.590	0.310	1.031	A	N
1	SR90	0.310	0.100	0.644	0.014	0.481	N	A
1	U234	0.064	0.007	0.060	0.002	1.067	A	N
1	U238	0.063	0.007	0.061	0.003	1.029	A	N

Matrix: SO Soil Bq / kg

1	AM241	7.200	2.100	4.894	0.969	1.471	A	
1	Bq U	285.000		291.000	3.000	0.979	A	
1	CS137	665.000	65.000	659.500	24.950	1.008	A	A
1	K40	370.000	35.000	362.750	20.156	1.020	A	A
1	PU239	7.800	3.100	8.112	1.068	0.962	A	
1	SR90	17.000	5.000	32.400	0.529	0.525	N	N
1	U234	140.000	28.000	140.667	1.155	0.995	A	
1	U238	145.000	28.000	145.000	1.732	1.000	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.500	1.000	3.522	0.590	0.994	A	A
1	CM244	1.900	0.600	1.671	0.541	1.137	A	A
1	CO60	24.000	3.000	21.450	1.000	1.119	A	A
1	CS137	505.000	50.000	467.000	20.000	1.081	A	A
1	K40	730.000	70.000	656.500	20.000	1.112	A	A
1	PU239	5.100	1.100	5.204	0.428	0.980	A	A
1	SR90	700.000	70.000	736.100	7.700	0.951	A	A

Matrix: WA Water Bq / L

1	AM241	1.200	0.200	1.146	0.051	1.047	A	A
1	Bq U	0.570		0.541	0.025	1.054	A	A
1	CO60	55.000	5.000	51.100	3.000	1.076	A	A
1	CS137	42.000	4.000	39.375	2.405	1.067	A	A
1	FE55	96.000	10.000	97.400	1.650	0.986	A	A
1	GROSS ALPHA	1100.000	100.000	1090.000	20.000	1.009	A	A
1	GROSS BETA	1400.000	100.000	1100.000	40.000	1.273	A	A
1	H3	130.000	30.000	121.080	6.780	1.074	A	
1	PU238	0.780	0.140	0.772	0.037	1.011	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 50 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	PU239	1.000	0.200	1.009	0.058	0.991	A	A
1	SR90	2.600	0.600	4.104	0.045	0.634	N	N
1	U234	0.290	0.070	0.269	0.015	1.080	A	A
1	U238	0.270	0.060	0.262	0.016	1.031	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 50 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	0.150	0.020	0.134	0.001	1.122	A	A
1	CO60	5.100	0.600	4.960	0.280	1.028	A	A
1	CS137	6.400	1.000	6.050	0.300	1.058	A	A
1	GROSS ALPHA	1.600	0.100	1.610	0.160	0.994	A	A
1	GROSS BETA	1.500	0.100	1.560	0.160	0.962	A	A
1	PU238	0.310	0.060	0.272	0.001	1.139	A	A
1	PU239	0.150	0.030	0.124	0.003	1.207	W	A
1	SB125	4.400	0.400	3.590	0.310	1.226	W	A
1	SR90	0.500	0.100	0.644	0.014	0.776	W	A
1	U238	0.060	0.010	0.061	0.003	0.980	A	A
Matrix: SO Soil Bq / kg								
1	AM241	4.600	1.300	4.894	0.969	0.940	A	A
1	CS137	770.000	78.000	659.500	24.950	1.168	A	W
1	K40	420.000	52.000	362.750	20.156	1.158	A	W
1	PU239	8.800	1.900	8.112	1.068	1.085	A	A
1	SR90	29.000	9.000	32.400	0.529	0.895	A	A
1	U238	141.000	37.000	145.000	1.732	0.972	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.300	0.700	3.522	0.590	0.937	A	W
1	CO60	25.000	2.000	21.450	1.000	1.166	A	W
1	CS137	560.000	50.000	467.000	20.000	1.199	A	W
1	K40	760.000	74.000	656.500	20.000	1.158	A	W
1	PU239	5.200	1.000	5.204	0.428	0.999	A	A
1	SR90	590.000	2.000	736.100	7.700	0.802	A	W
Matrix: WA Water Bq / L								
1	AM241	1.250	0.300	1.146	0.051	1.091	A	A
1	CO60	53.000	0.600	51.100	3.000	1.037	A	A
1	CS137	41.000	0.600	39.375	2.405	1.041	A	A
1	GROSS ALPHA	1100.000	74.000	1090.000	20.000	1.009	A	A
1	GROSS BETA	1100.000	74.000	1100.000	40.000	1.000	A	A
1	H3	120.000	7.000	121.080	6.780	0.991	A	A
1	PU238	0.800	0.200	0.772	0.037	1.037	A	W
1	PU239	1.000	0.200	1.009	0.058	0.991	A	W
1	SR90	3.000	0.300	4.104	0.045	0.731	N	A
1	U238	0.300	0.100	0.262	0.016	1.145	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 50 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	1.375	0.060	1.610	0.160	0.854	A	A
1	GROSS BETA	1.202	0.050	1.560	0.160	0.771	W	W

Matrix: WA Water Bq / L

1	GROSS ALPHA	1095.000	43.800	1090.000	20.000	1.005	A	A
1	GROSS BETA	1188.000	35.600	1100.000	40.000	1.080	A	A
1	H3	111.000	7.800	121.080	6.780	0.917	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 50 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	14.900	1.500	4.894	0.969	3.044	N	N
1	Bq U	293.200	21.000	291.000	3.000	1.008	A	N
1	PU239	68.000	6.000	8.112	1.068	8.383	N	N
1	U234	145.000	10.000	140.667	1.155	1.031	A	N
1	U238	148.000	10.000	145.000	1.732	1.021	A	N
1	ug U	12.000	1.000	11.800	0.300	1.017	A	N

Matrix: WA Water Bq/L

1	AM241	0.180	0.020	1.146	0.051	0.157	N	N
1	Bq U	0.470	0.050	0.541	0.025	0.869	W	N
1	FE55	32.500	3.000	97.400	1.650	0.334	N	N
1	PU238	0.200	0.020	0.772	0.037	0.259	N	W
1	PU239	0.206	0.020	1.009	0.058	0.204	N	N
1	U234	0.225	0.020	0.269	0.015	0.838	W	N
1	U238	0.236	0.020	0.262	0.016	0.901	A	N
1	ug U	0.019	0.002	0.021	0.001	0.901	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 50 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	AM241	0.150	0.030	0.134	0.001	1.122	A	N
1	CO57	3.210	0.140	3.010	0.140	1.066	A	
1	CO60	5.670	0.050	4.960	0.280	1.143	W	A
1	CS137	6.860	0.070	6.050	0.300	1.134	A	W
1	SB125	4.330	0.050	3.590	0.310	1.206	W	A
Matrix: SO Soil Bq / kg								
1	AC228	52.500	1.300	47.150	2.989	1.113	A	A
1	BI214	66.000	1.600	69.900	5.660	0.944	A	A
1	CS137	765.600	20.200	659.500	24.950	1.161	A	A
1	K40	453.800	31.600	362.750	20.156	1.251	W	A
1	PB212	49.400	1.700	47.925	2.572	1.031	A	A
1	PB214	78.100	1.700	71.000	7.035	1.100	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	21.900	0.600	21.450	1.000	1.021	A	A
1	CS137	492.700	13.100	467.000	20.000	1.055	A	A
1	K40	748.400	51.300	656.500	20.000	1.140	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 50 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	Bq U	0.131	0.007	0.123	0.004	1.064	A	
1	CO57	3.020	0.153	3.010	0.140	1.003	A	
1	CO60	5.007	0.259	4.960	0.280	1.009	A	A
1	CS137	6.337	0.323	6.050	0.300	1.047	A	A
1	GROSS ALPHA	1.470	0.096	1.610	0.160	0.913	A	A
1	GROSS BETA	1.740	0.087	1.560	0.160	1.115	A	A
1	PU238	0.263	0.014	0.272	0.001	0.966	A	A
1	PU239	0.113	0.008	0.124	0.003	0.909	A	A
1	SB125	3.893	0.241	3.590	0.310	1.084	A	A

Matrix: SO Soil Bq / kg

1	AC228	60.417	4.467	47.150	2.989	1.281	A	A
1	BI214	61.853	4.038	69.900	5.660	0.885	A	A
1	Bq U	262.667	14.029	291.000	3.000	0.903	A	A
1	CS137	741.700	37.091	659.500	24.950	1.125	A	A
1	K40	455.600	75.405	362.750	20.156	1.256	W	A
1	PB212	54.147	2.864	47.925	2.572	1.130	A	A
1	PB214	71.473	3.962	71.000	7.035	1.007	A	A
1	PU239	7.357	0.444	8.112	1.068	0.907	A	A
1	SR90	48.390	2.648	32.400	0.529	1.494	A	A
1	TH234	874.200	72.440	138.000	4.080	6.335	N	
1	U234	143.333	8.288	140.667	1.155	1.019	A	
1	U238	151.000	7.746	145.000	1.732	1.041	A	A
1	ug U	10.833	0.580	11.800	0.300	0.918	A	

Matrix: VE Vegetation Bq / kg

1	CO60	23.633	1.985	21.450	1.000	1.102	A	A
1	CS137	51.300	2.579	467.000	20.000	0.110	N	A
1	K40	854.967	58.892	656.500	20.000	1.302	W	W
1	PU239	4.847	0.696	5.204	0.428	0.931	A	A
1	SR90	818.000	43.403	736.100	7.700	1.111	A	A

Matrix: WA Water Bq / L

1	Bq U	0.558	0.028	0.541	0.025	1.031	A	A
1	CO60	56.300	2.955	51.100	3.000	1.102	A	A
1	CS137	42.767	2.197	39.375	2.405	1.086	A	A
1	H3	111.050	16.348	121.080	6.780	0.917	A	W
1	PU238	0.803	0.068	0.772	0.037	1.041	A	
1	PU239	0.940	0.124	1.009	0.058	0.931	A	N
1	SR90	4.227	0.326	4.104	0.045	1.030	A	A
1	U238	0.287	0.014	0.262	0.016	1.096	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 50 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	CO60	5.420	0.220	4.960	0.280	1.093	A	
1	CS137	6.550	0.270	6.050	0.300	1.083	A	
1	GROSS ALPHA	2.340	0.090	1.610	0.160	1.453	W	
1	GROSS BETA	1.410	0.060	1.560	0.160	0.904	A	
1	SB125	1.530	0.310	3.590	0.310	0.426	N	
Matrix: SO Soil Bq / kg								
1	AC228	53.290	3.900	47.150	2.989	1.130	A	A
1	BI214	83.640	3.310	69.900	5.660	1.197	W	
1	CS137	778.900	5.900	659.500	24.950	1.181	A	A
1	K40	430.800	22.900	362.750	20.156	1.188	A	W
1	PB212	56.200	2.360	47.925	2.572	1.173	A	A
1	PB214	88.850	6.540	71.000	7.035	1.251	A	A
1	PU239	7.710	2.850	8.112	1.068	0.950	A	
1	TH234	177.300	44.000	138.000	4.080	1.285	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	35.140	2.390	21.450	1.000	1.638	N	W
1	CS137	805.600	8.200	467.000	20.000	1.725	N	N
1	K40	1083.000	43.000	656.500	20.000	1.650	N	N
1	PU239	4.810	2.710	5.204	0.428	0.924	A	
Matrix: WA Water Bq / L								
1	CO60	68.870	0.750	51.100	3.000	1.348	N	A
1	CS137	54.700	0.840	39.375	2.405	1.389	N	A
1	GROSS ALPHA	1118.780	44.840	1090.000	20.000	1.026	A	A
1	GROSS BETA	1023.540	33.110	1100.000	40.000	0.930	A	W
1	H3	112.600	6.710	121.080	6.780	0.930	A	A
1	PU238	0.750	0.070	0.772	0.037	0.972	A	
1	PU239	1.000	0.100	1.009	0.058	0.991	A	
1	U234	0.300	0.030	0.269	0.015	1.117	A	
1	U238	0.290	0.030	0.262	0.016	1.107	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 50 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	3.000	0.100	3.010	0.140	0.997	A	
1	CO60	5.200	0.100	4.960	0.280	1.048	A	A
1	CS137	6.200	0.100	6.050	0.300	1.025	A	A
1	GROSS ALPHA	1.680	0.020	1.610	0.160	1.043	A	A
1	GROSS BETA	0.740	0.010	1.560	0.160	0.474	N	A
1	SB125	3.800	0.100	3.590	0.310	1.058	A	A
Matrix: SO Soil Bq / kg								
1	AC228	55.400	3.700	47.150	2.989	1.175	A	A
1	BI214	74.000	3.200	69.900	5.660	1.059	A	A
1	CS137	643.900	10.600	659.500	24.950	0.976	A	A
1	K40	356.700	36.400	362.750	20.156	0.983	A	N
1	PB212	44.000	2.400	47.925	2.572	0.918	A	A
1	PB214	74.000	3.200	71.000	7.035	1.042	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	21.800	1.500	21.450	1.000	1.016	A	A
1	CS137	483.500	8.600	467.000	20.000	1.035	A	A
1	K40	747.300	50.000	656.500	20.000	1.138	A	W
Matrix: WA Water Bq / L								
1	CO60	56.800	0.600	51.100	3.000	1.112	A	A
1	CS137	43.600	0.500	39.375	2.405	1.107	A	A
1	GROSS ALPHA	1140.400	18.800	1090.000	20.000	1.046	A	A
1	GROSS BETA	550.500	9.300	1100.000	40.000	0.500	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 50 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	CO60	5.140	0.100	4.960	0.280	1.036	A	A
1	CS137	6.480	0.900	6.050	0.300	1.071	A	A
1	SB125	4.320	0.500	3.590	0.310	1.203	W	A
Matrix: SO Soil Bq / kg								
1	AC228	43.500	0.400	47.150	2.989	0.923	A	
1	AM241	4.340	1.200	4.894	0.969	0.887	A	A
1	BI214	58.600	3.400	69.900	5.660	0.838	A	A
1	CS137	717.500	12.000	659.500	24.950	1.088	A	A
1	K40	341.500	45.000	362.750	20.156	0.941	A	A
1	PB212	48.800	2.200	47.925	2.572	1.018	A	A
1	PB214	70.700	0.300	71.000	7.035	0.996	A	A
1	PU239	7.660	1.500	8.112	1.068	0.944	A	A
1	SR90	41.500	5.900	32.400	0.529	1.281	A	
1	TH234	193.000	5.000	138.000	4.080	1.399	A	A
1	U234	147.000	14.500	140.667	1.155	1.045	A	A
1	U238	146.500	17.900	145.000	1.732	1.010	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	25.100	3.300	21.450	1.000	1.170	A	A
1	CS137	522.500	27.600	467.000	20.000	1.119	A	A
1	K40	623.500	131.000	656.500	20.000	0.950	A	A
Matrix: WA Water Bq / L								
1	AM241	1.110	0.120	1.146	0.051	0.969	A	A
1	CO60	51.300	7.900	51.100	3.000	1.004	A	A
1	CS137	41.200	4.700	39.375	2.405	1.046	A	A
1	PU238	0.760	0.050	0.772	0.037	0.985	A	A
1	PU239	0.980	0.060	1.009	0.058	0.971	A	A
1	SR90	4.040	0.400	4.104	0.045	0.984	A	W
1	U234	0.283	0.050	0.269	0.015	1.054	A	A
1	U238	0.269	0.050	0.262	0.016	1.027	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 50 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								
2	AM241	7.340	2.490	0.134	0.001	54.899	N	W
1	AM241	7.090	2.340	0.134	0.001	53.029	N	W
5	AM241	0.112	0.030	0.134	0.001	0.838	W	W
6	AM241	0.222	0.059	0.134	0.001	1.660	W	W
4	AM241	0.044	0.021	0.134	0.001	0.329	N	W
3	AM241	5.380	2.180	0.134	0.001	40.239	N	W
2	CO57	3.060	0.350	3.010	0.140	1.017	A	
3	CO57	3.280	0.370	3.010	0.140	1.090	A	
1	CO57	2.950	0.300	3.010	0.140	0.980	A	
1	CO60	4.340	0.490	4.960	0.280	0.875	A	A
2	CO60	5.000	0.570	4.960	0.280	1.008	A	A
3	CO60	5.250	0.550	4.960	0.280	1.058	A	A
1	CS137	6.010	0.660	6.050	0.300	0.993	A	A
3	CS137	6.650	0.720	6.050	0.300	1.099	A	A
2	CS137	5.870	0.630	6.050	0.300	0.970	A	A
1	GROSS ALPHA	2.040	0.210	1.610	0.160	1.267	A	A
1	GROSS BETA	1.590	0.160	1.560	0.160	1.019	A	A
3	PU238	0.300	0.065	0.272	0.001	1.102	A	W
1	PU238	0.146	0.036	0.272	0.001	0.536	N	W
2	PU238	0.234	0.052	0.272	0.001	0.860	W	W
2	PU239	0.094	0.024	0.124	0.003	0.756	N	W
1	PU239	0.078	0.022	0.124	0.003	0.628	N	W
3	PU239	0.134	0.031	0.124	0.003	1.078	A	W
3	SB125	3.770	0.500	3.590	0.310	1.050	A	A
2	SB125	3.560	0.560	3.590	0.310	0.992	A	A
1	SB125	3.680	0.510	3.590	0.310	1.025	A	A
2	SR90	0.308	0.106	0.644	0.014	0.478	N	N
1	SR90	0.277	0.104	0.644	0.014	0.430	N	N
3	SR90	0.293	0.108	0.644	0.014	0.455	N	N
1	ug U	7.050	0.390	4.945	0.227	1.426	W	N
2	ug U	7.740	0.420	4.945	0.227	1.565	W	N

Matrix: SO Soil Bq / kg

3	AC228	47.100	13.800	47.150	2.989	0.999	A	A
2	AC228	54.500	14.800	47.150	2.989	1.156	A	A
1	AC228	49.200	13.900	47.150	2.989	1.043	A	A
1	BI214	52.300	8.200	69.900	5.660	0.748	W	A
3	BI214	51.900	8.100	69.900	5.660	0.742	N	A
2	BI214	53.800	8.100	69.900	5.660	0.770	W	A
1	Bq U	4625.000	603.000	291.000	3.000	15.893	N	
2	Bq U	4847.000	651.000	291.000	3.000	16.656	N	
3	CS137	675.000	76.000	659.500	24.950	1.024	A	A
2	CS137	713.000	80.000	659.500	24.950	1.081	A	A
1	CS137	700.000	81.000	659.500	24.950	1.061	A	A
1	K40	424.000	54.000	362.750	20.156	1.169	A	A
3	K40	337.000	48.000	362.750	20.156	0.929	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 50 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: SO Soil Bq / kg								
2	K40	367.000	50.000	362.750	20.156	1.012	A	A
1	PB212	44.900	7.400	47.925	2.572	0.937	A	A
2	PB212	46.900	20.800	47.925	2.572	0.979	A	A
3	PB212	39.200	6.500	47.925	2.572	0.818	W	A
3	PB214	52.900	8.800	71.000	7.035	0.745	W	A
1	PB214	57.700	8.800	71.000	7.035	0.813	W	A
2	PB214	64.000	23.400	71.000	7.035	0.901	A	A
1	PU239	9.270	2.660	8.112	1.068	1.143	A	W
2	PU239	9.100	2.570	8.112	1.068	1.122	A	W
2	SR90	30.000	7.000	32.400	0.529	0.926	A	A
1	SR90	121.000	24.000	32.400	0.529	3.735	N	A
1	TH234	76.900	22.400	138.000	4.080	0.557	N	A
2	TH234	114.000	22.000	138.000	4.080	0.826	A	A
3	TH234	133.000	24.000	138.000	4.080	0.964	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.400	0.880	3.522	0.590	0.965	A	A
3	AM241	5.280	1.330	3.522	0.590	1.499	A	A
2	AM241	3.650	1.010	3.522	0.590	1.036	A	A
1	CM244	3.090	0.820	1.671	0.541	1.850	N	
2	CM244	3.400	0.980	1.671	0.541	2.035	N	
3	CM244	2.900	0.840	1.671	0.541	1.736	W	
1	CO60	18.900	4.000	21.450	1.000	0.881	A	A
2	CO60	26.300	5.300	21.450	1.000	1.226	A	A
3	CO60	20.500	4.000	21.450	1.000	0.956	A	A
1	CS137	542.000	61.000	467.000	20.000	1.161	A	A
3	CS137	541.000	61.000	467.000	20.000	1.158	A	A
2	CS137	549.000	57.000	467.000	20.000	1.176	A	A
2	K40	710.000	92.000	656.500	20.000	1.081	A	A
1	K40	744.000	87.000	656.500	20.000	1.133	A	A
3	K40	681.000	84.000	656.500	20.000	1.037	A	A
2	PU239	5.370	1.340	5.204	0.428	1.032	A	N
1	PU239	4.910	1.230	5.204	0.428	0.943	A	N
3	PU239	5.520	1.270	5.204	0.428	1.061	A	N
2	SR90	622.000	122.000	736.100	7.700	0.845	A	W
1	SR90	612.000	120.000	736.100	7.700	0.831	A	W

Matrix: WA Water Bq / L

2	AM241	1.220	0.270	1.146	0.051	1.065	A	W
1	AM241	1.290	0.270	1.146	0.051	1.126	A	W
3	AM241	1.230	0.270	1.146	0.051	1.073	A	W
3	Bq U	0.599	0.078	0.541	0.025	1.107	A	
2	Bq U	0.659	0.086	0.541	0.025	1.218	A	
1	Bq U	0.614	0.080	0.541	0.025	1.135	A	
3	CO60	57.200	4.300	51.100	3.000	1.119	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 50 Results by Laboratory**Lab:** IS Quanterra- St. Louis

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq / L								
2	CO60	50.900	4.900	51.100	3.000	0.996	A	A
1	CO60	58.500	5.600	51.100	3.000	1.145	W	A
2	CS137	40.500	4.300	39.375	2.405	1.029	A	A
3	CS137	43.700	4.500	39.375	2.405	1.110	A	A
1	CS137	45.700	4.900	39.375	2.405	1.161	A	A
1	GROSS ALPHA	873.000	89.000	1090.000	20.000	0.801	W	A
1	GROSS BETA	992.000	100.000	1100.000	40.000	0.902	A	A
3	H3	126.000	15.000	121.080	6.780	1.041	A	W
1	H3	130.000	15.000	121.080	6.780	1.074	A	W
2	H3	127.000	15.000	121.080	6.780	1.049	A	W
1	PU238	0.862	0.182	0.772	0.037	1.117	W	W
2	PU238	0.814	0.172	0.772	0.037	1.055	A	W
3	PU238	0.813	0.174	0.772	0.037	1.054	A	W
3	PU239	0.908	0.195	1.009	0.058	0.900	A	W
2	PU239	1.014	0.211	1.009	0.058	1.005	A	W
1	PU239	1.098	0.227	1.009	0.058	1.088	A	W
2	SR90	4.280	0.872	4.104	0.045	1.043	A	W
3	SR90	4.170	0.852	4.104	0.045	1.016	A	W
1	SR90	4.680	0.953	4.104	0.045	1.140	A	W

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Evaluation: A=Acceptable, 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 50 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	0.122	0.011	0.134	0.001	0.912	A	A
1	CO57	3.530	0.280	3.010	0.140	1.173	W	
1	CO60	5.130	0.070	4.960	0.280	1.034	A	A
1	CS137	6.110	0.090	6.050	0.300	1.010	A	A
1	GROSS ALPHA	1.950	0.060	1.610	0.160	1.211	A	A
1	GROSS BETA	1.670	0.070	1.560	0.160	1.071	A	A
1	PU238	0.266	0.034	0.272	0.001	0.977	A	A
1	PU239	0.120	0.016	0.124	0.003	0.965	A	A
1	SB125	3.900	0.250	3.590	0.310	1.086	A	A
1	SR90	0.660	0.070	0.644	0.014	1.025	A	A
1	U234	0.062	0.001	0.060	0.002	1.034	A	A
1	U238	0.066	0.001	0.061	0.003	1.078	A	W
1	ug U	5.440	0.360	4.945	0.227	1.100	A	A

Matrix: SO Soil Bq / kg

1	AC228	53.000	7.000	47.150	2.989	1.124	A	A
1	AM241	4.580	0.230	4.894	0.969	0.936	A	W
1	BI214	77.000	3.000	69.900	5.660	1.102	A	A
1	CS137	760.000	54.000	659.500	24.950	1.152	A	A
1	K40	407.000	76.000	362.750	20.156	1.122	A	A
1	PB212	52.000	2.000	47.925	2.572	1.085	A	A
1	PB214	88.000	14.000	71.000	7.035	1.239	A	A
1	PU238	0.430	0.160	0.364	0.085	1.182	A	W
1	PU239	7.920	0.330	8.112	1.068	0.976	A	A
1	SR90	28.500	5.000	32.400	0.529	0.880	A	A
1	TH234	235.000	89.000	138.000	4.080	1.703	W	A
1	U234	125.000	3.000	140.667	1.155	0.889	A	A
1	U238	130.000	3.000	145.000	1.732	0.897	A	A
1	ug U	10.900	0.160	11.800	0.300	0.924	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	2.970	0.070	3.522	0.590	0.843	W	A
1	CM244	1.650	0.030	1.671	0.541	0.988	A	A
1	CO60	26.600	2.300	21.450	1.000	1.240	A	A
1	CS137	572.000	11.000	467.000	20.000	1.225	A	A
1	K40	807.000	18.000	656.500	20.000	1.229	A	A
1	PU239	4.530	0.150	5.204	0.428	0.870	A	A
1	SR90	577.000	43.000	736.100	7.700	0.784	A	

Matrix: WA Water Bq / L

1	AM241	1.030	0.120	1.146	0.051	0.899	W	A
1	CO60	59.000	2.000	51.100	3.000	1.155	W	A
1	CS137	47.000	2.000	39.375	2.405	1.194	W	A

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

QAP 50 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	692.000	88.000	1090.000	20.000	0.635	W	A
1	GROSS BETA	754.000	150.000	1100.000	40.000	0.685	W	A
1	H3	126.000	3.000	121.080	6.780	1.041	A	A
1	NI63	115.000	3.000	114.000	10.000	1.009	A	A
1	PU238	0.800	0.060	0.772	0.037	1.037	A	W
1	PU239	0.990	0.030	1.009	0.058	0.981	A	A
1	SR90	3.710	0.090	4.104	0.045	0.904	A	A
1	U234	0.260	0.040	0.269	0.015	0.968	A	A
1	U238	0.340	0.080	0.262	0.016	1.298	N	A
1	ug U	0.022	0.000	0.021	0.001	1.052	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 50 Results by Laboratory**Lab:** JE Jacobs Engineering, Oak Ridge, TN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: SO Soil Bq/kg								
1	AC228	45.700	7.700	47.150	2.989	0.969	A	A
1	BI214	65.600	5.400	69.900	5.660	0.938	A	A
1	CS137	723.500	13.700	659.500	24.950	1.097	A	A
1	K40	407.300	56.100	362.750	20.156	1.123	A	A
1	PB212	48.900	2.400	47.925	2.572	1.020	A	A
1	PB214	76.100	4.300	71.000	7.035	1.072	A	A

Matrix: WA Water Bq/L

1	CO60	55.100	2.000	51.100	3.000	1.078	A	N
1	CS137	42.300	1.500	39.375	2.405	1.074	A	N
1	GROSS ALPHA	1003.900	60.400	1090.000	20.000	0.921	A	A
1	GROSS BETA	1273.100	40.400	1100.000	40.000	1.157	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 50 Results by Laboratory**Lab:** JL Jefferson Lab, Newport News, VA

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	3.180	0.220	3.010	0.140	1.056	A	
1	CO57	3.200	0.200	3.010	0.140	1.063	A	
2	CO60	5.500	0.360	4.960	0.280	1.109	W	
1	CO60	5.280	0.280	4.960	0.280	1.065	A	
1	CS137	6.380	0.420	6.050	0.300	1.055	A	
2	CS137	6.280	0.500	6.050	0.300	1.038	A	
2	SB125	3.240	0.360	3.590	0.310	0.903	A	
1	SB125	3.330	0.240	3.590	0.310	0.928	A	

Matrix: WA Water Bq / L

3	CO60	56.600	2.800	51.100	3.000	1.108	A	A
4	CO60	55.500	3.250	51.100	3.000	1.086	A	A
4	CS137	43.290	3.740	39.375	2.405	1.099	A	A
3	CS137	41.440	2.960	39.375	2.405	1.052	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 50 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	1.870	0.070	1.610	0.160	1.161	A	A
1	GROSS BETA	1.590	0.050	1.560	0.160	1.019	A	A
Matrix: SO Soil Bq / kg								
1	CS137	647.700	57.600	659.500	24.950	0.982	A	A
1	K40	365.000	48.000	362.750	20.156	1.006	A	A
1	PU239	8.290	0.430	8.112	1.068	1.022	A	A
1	SR90	35.510	1.880	32.400	0.529	1.096	A	A
Matrix: WA Water Bq / L								
1	CO60	48.900	2.400	51.100	3.000	0.957	A	A
1	CS137	43.200	1.600	39.375	2.405	1.097	A	A
1	FE55	84.500	4.100	97.400	1.650	0.868	A	A
1	GROSS ALPHA	1137.000	60.000	1090.000	20.000	1.043	A	A
1	GROSS BETA	1166.000	57.000	1100.000	40.000	1.060	A	A
1	H3	129.000	7.000	121.080	6.780	1.065	A	W
1	PU239	1.150	0.010	1.009	0.058	1.139	A	W
1	SR90	3.500	0.280	4.104	0.045	0.853	W	A
1	ug U	0.022	0.000	0.021	0.001	1.057	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 50 Results by Laboratory**Lab:** KO Korea Institute of Nuclear Safety

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter							
1	Bq U	0.144	0.003	0.123	0.004	1.170	A
1	CO57	2.860	0.030	3.010	0.140	0.950	A
1	CO60	4.940	0.130	4.960	0.280	0.996	A
1	CS137	5.830	0.110	6.050	0.300	0.964	A
1	GROSS ALPHA	1.570	0.014	1.610	0.160	0.975	A
1	GROSS BETA	1.500	0.023	1.560	0.160	0.962	A
1	PU238	0.279	0.008	0.272	0.001	1.025	A
1	PU239	0.128	0.016	0.124	0.003	1.030	A
1	SB125	3.680	0.090	3.590	0.310	1.025	A
1	SR90	0.596	0.048	0.644	0.014	0.925	A
1	U234	0.071	0.002	0.060	0.002	1.181	A
1	U238	0.070	0.002	0.061	0.003	1.143	A
1	ug U	5.670	0.170	4.945	0.227	1.147	A
Matrix: SO Soil Bq / kg							
1	AM241	4.700	0.180	4.894	0.969	0.960	A
1	Bq U	290.800	5.000	291.000	3.000	0.999	A
1	CS137	657.000	2.000	659.500	24.950	0.996	A
1	K40	380.000	6.000	362.750	20.156	1.048	A
1	PU239	7.020	0.140	8.112	1.068	0.865	W
1	SR90	31.300	2.200	32.400	0.529	0.966	A
1	U234	139.700	3.500	140.667	1.155	0.993	A
1	U238	144.900	3.600	145.000	1.732	0.999	A
1	ug U	11.700	0.300	11.800	0.300	0.992	A
Matrix: VE Vegetation Bq / kg							
1	AM241	3.290	0.040	3.522	0.590	0.934	A
1	CM244	1.740	0.120	1.671	0.541	1.041	A
1	CO60	22.800	0.600	21.450	1.000	1.063	A
1	CS137	496.000	2.000	467.000	20.000	1.062	A
1	K40	722.000	11.000	656.500	20.000	1.100	A
1	PU239	4.260	0.070	5.204	0.428	0.819	W
1	SR90	742.500	16.300	736.100	7.700	1.009	A
Matrix: WA Water Bq / L							
1	Bq U	0.578	0.010	0.541	0.025	1.068	A
1	CO60	52.300	0.700	51.100	3.000	1.023	A
1	CS137	41.800	0.500	39.375	2.405	1.062	A
1	GROSS ALPHA	1026.200	12.450	1090.000	20.000	0.941	A
1	GROSS BETA	1043.900	22.320	1100.000	40.000	0.949	A
1	H3	134.000	1.400	121.080	6.780	1.107	A
1	PU238	0.690	0.011	0.772	0.037	0.894	W
1	PU239	0.891	0.014	1.009	0.058	0.883	W

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Evaluation: A=Acceptable, 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 50 Results by Laboratory**Lab:** KO Korea Institute of Nuclear Safety

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	SR90	3.590	0.220	4.104	0.045	0.875	W	
1	U234	0.286	0.007	0.269	0.015	1.065	A	
1	U238	0.280	0.007	0.262	0.016	1.069	A	
1	ug U	0.023	0.001	0.021	0.001	1.071	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 50 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: AI Air Filter Bq / filter								
3	AM241	0.052	0.002	0.134	0.001	0.389	N	A
1	AM241	0.043	0.002	0.134	0.001	0.325	N	A
2	AM241	0.048	0.002	0.134	0.001	0.356	N	A
3	CO60	5.180	0.280	4.960	0.280	1.044	A	A
2	CO60	5.150	0.270	4.960	0.280	1.038	A	A
1	CO60	5.220	0.280	4.960	0.280	1.052	A	A
3	CS137	6.390	0.340	6.050	0.300	1.056	A	A
2	CS137	6.400	0.340	6.050	0.300	1.058	A	A
1	CS137	7.040	0.370	6.050	0.300	1.164	W	A
3	PU238	0.092	0.003	0.272	0.001	0.338	N	A
2	PU238	0.090	0.003	0.272	0.001	0.332	N	A
1	PU238	0.083	0.004	0.272	0.001	0.304	N	A
2	PU239	0.043	0.002	0.124	0.003	0.349	N	A
1	PU239	0.039	0.002	0.124	0.003	0.315	N	A
3	PU239	0.042	0.002	0.124	0.003	0.340	N	A
1	SB125	4.450	0.240	3.590	0.310	1.240	W	A
2	SB125	4.260	0.240	3.590	0.310	1.187	A	A
3	SB125	4.160	0.230	3.590	0.310	1.159	A	A
1	SR90	0.611	0.078	0.644	0.014	0.949	A	
2	SR90	0.625	0.084	0.644	0.014	0.970	A	
3	SR90	0.675	0.079	0.644	0.014	1.048	A	
3	ug U	1.900	0.190	4.945	0.227	0.384	N	
2	ug U	1.910	0.190	4.945	0.227	0.386	N	
1	ug U	1.920	0.190	4.945	0.227	0.388	N	

Matrix: SO Soil Bq / kg

2	AC228	43.000	3.000	47.150	2.989	0.912	A	
3	AC228	42.000	3.000	47.150	2.989	0.891	A	
1	AC228	41.000	3.000	47.150	2.989	0.870	A	
3	AM241	4.754	0.244	4.894	0.969	0.971	A	A
2	AM241	4.532	0.300	4.894	0.969	0.926	A	A
1	AM241	4.325	0.300	4.894	0.969	0.884	A	A
3	BI214	49.000	3.000	69.900	5.660	0.701	N	
2	BI214	55.000	3.000	69.900	5.660	0.787	W	
1	BI214	55.000	3.000	69.900	5.660	0.787	W	
1	CS137	591.000	26.000	659.500	24.950	0.896	W	N
2	CS137	611.000	27.000	659.500	24.950	0.926	A	N
3	CS137	605.000	27.000	659.500	24.950	0.917	A	N
3	K40	332.000	18.000	362.750	20.156	0.915	A	W
1	K40	295.000	17.000	362.750	20.156	0.813	W	W
2	K40	300.000	19.000	362.750	20.156	0.827	W	W
2	PB212	32.000	2.000	47.925	2.572	0.668	N	
1	PB212	30.000	2.000	47.925	2.572	0.626	N	
3	PB212	32.000	2.000	47.925	2.572	0.668	N	
1	PB214	48.000	3.000	71.000	7.035	0.676	W	
2	PB214	45.000	2.000	71.000	7.035	0.634	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 50 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	PB214	45.000	3.000	71.000	7.035	0.634	N	
3	PU239	7.966	0.377	8.112	1.068	0.982	A	A
2	PU239	7.596	0.411	8.112	1.068	0.936	A	A
1	PU239	8.266	0.433	8.112	1.068	1.019	A	A
1	SR90	47.730	18.500	32.400	0.529	1.473	A	
2	SR90	43.660	9.620	32.400	0.529	1.348	A	
1	TH234	154.000	26.000	138.000	4.080	1.116	A	
2	TH234	139.000	23.000	138.000	4.080	1.007	A	
3	TH234	114.000	16.000	138.000	4.080	0.826	A	
3	ug U	11.850	1.190	11.800	0.300	1.004	A	
1	ug U	11.340	1.130	11.800	0.300	0.961	A	
2	ug U	11.580	1.160	11.800	0.300	0.981	A	

Matrix: VE Vegetation Bq / kg

1	CO60	34.000	2.000	21.450	1.000	1.585	N	W
2	CO60	29.000	2.000	21.450	1.000	1.352	W	W
3	CO60	33.000	2.000	21.450	1.000	1.538	N	W
2	CS137	582.000	27.000	467.000	20.000	1.246	A	A
3	CS137	664.000	31.000	467.000	20.000	1.422	N	A
1	CS137	611.000	28.000	467.000	20.000	1.308	W	A
1	K40	968.000	48.000	656.500	20.000	1.474	N	W
2	K40	790.000	40.000	656.500	20.000	1.203	A	W
3	K40	912.000	45.000	656.500	20.000	1.389	W	W

Matrix: WA Water Bq / L

1	AM241	1.220	0.040	1.146	0.051	1.065	A	A
2	AM241	1.170	0.040	1.146	0.051	1.021	A	A
3	AM241	1.100	0.030	1.146	0.051	0.960	A	A
2	CO60	56.000	2.900	51.100	3.000	1.096	A	W
1	CO60	51.700	2.700	51.100	3.000	1.012	A	W
3	CO60	57.300	2.900	51.100	3.000	1.121	A	W
2	CS137	45.700	2.400	39.375	2.405	1.161	A	W
3	CS137	44.900	2.400	39.375	2.405	1.140	A	W
1	CS137	39.900	2.100	39.375	2.405	1.013	A	W
3	GROSS ALPHA	1524.400	262.000	1090.000	20.000	1.399	N	W
2	GROSS ALPHA	1450.400	249.000	1090.000	20.000	1.331	N	W
1	GROSS ALPHA	1435.600	264.400	1090.000	20.000	1.317	W	W
3	GROSS BETA	1106.300	62.900	1100.000	40.000	1.006	A	A
2	GROSS BETA	1110.000	62.900	1100.000	40.000	1.009	A	A
1	GROSS BETA	1058.200	60.200	1100.000	40.000	0.962	A	A
1	H3	127.600	33.300	121.080	6.780	1.054	A	W
2	H3	125.100	33.300	121.080	6.780	1.033	A	W
3	H3	115.400	32.900	121.080	6.780	0.953	A	W
3	PU238	0.825	0.033	0.772	0.037	1.069	A	A
1	PU238	0.818	0.037	0.772	0.037	1.060	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 50 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: WA Water Bq/L								
2	PU238	0.777	0.037	0.772	0.037	1.007	A	A
3	PU239	1.050	0.040	1.009	0.058	1.040	A	A
1	PU239	0.977	0.044	1.009	0.058	0.968	A	A
2	PU239	0.977	0.044	1.009	0.058	0.968	A	A
3	SR90	3.489	0.291	4.104	0.045	0.850	W	W
2	SR90	4.027	0.319	4.104	0.045	0.981	A	W
1	SR90	4.034	0.329	4.104	0.045	0.983	A	W
2	ug U	24.570	2.460	0.021	0.001	1,158.962	N	
3	ug U	23.550	2.360	0.021	0.001	1,110.849	N	
1	ug U	24.480	2.450	0.021	0.001	1,154.717	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 50 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	AM241	0.400	0.100	0.134	0.001	2.992	N	
1	CO57	3.200	0.300	3.010	0.140	1.063	A	
1	CO60	5.000	1.000	4.960	0.280	1.008	A	W
1	CS137	5.900	0.900	6.050	0.300	0.975	A	W
1	GROSS ALPHA	1.600	0.300	1.610	0.160	0.994	A	
1	GROSS BETA	1.600	0.100	1.560	0.160	1.026	A	
1	SB125	3.900	0.800	3.590	0.310	1.086	A	A
Matrix: SO Soil Bq / kg								
1	CS137	734.000	64.000	659.500	24.950	1.113	A	A
1	K40	422.000	88.000	362.750	20.156	1.163	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	22.000	4.000	21.450	1.000	1.026	A	N
1	CS137	516.000	46.000	467.000	20.000	1.105	A	N
1	K40	883.000	168.000	656.500	20.000	1.345	W	N
Matrix: WA Water Bq / L								
1	AM241	1.190	0.240	1.146	0.051	1.038	A	
1	CO60	55.000	4.000	51.100	3.000	1.076	A	A
1	CS137	43.000	3.000	39.375	2.405	1.092	A	A
1	GROSS ALPHA	596.000	107.000	1090.000	20.000	0.547	N	
1	GROSS BETA	735.000	41.000	1100.000	40.000	0.668	W	
1	PU238	0.230	0.060	0.772	0.037	0.298	N	
1	PU239	0.250	0.060	1.009	0.058	0.248	N	
1	U234	0.270	0.030	0.269	0.015	1.006	A	
1	U238	0.290	0.100	0.262	0.016	1.107	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 50 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	0.145	0.009	0.134	0.001	1.085	A	A
1	CO57	3.240	0.084	3.010	0.140	1.076	A	
1	CO60	5.240	0.178	4.960	0.280	1.056	A	A
1	CS137	6.590	0.184	6.050	0.300	1.089	A	A
1	GROSS ALPHA	1.600	0.018	1.610	0.160	0.994	A	
1	GROSS BETA	1.840	0.017	1.560	0.160	1.179	A	
1	PU238	0.274	0.022	0.272	0.001	1.007	A	A
1	PU239	0.128	0.011	0.124	0.003	1.030	A	A
1	SB125	4.190	0.184	3.590	0.310	1.167	A	A
1	U234	0.073	0.001	0.060	0.002	1.211	A	A
1	U238	0.064	0.000	0.061	0.003	1.047	A	A
Matrix: SO Soil Bq / kg								
1	AC228	49.900	4.300	47.150	2.989	1.058	A	
1	AM241	7.230	0.935	4.894	0.969	1.477	A	A
1	BI214	77.600	5.120	69.900	5.660	1.110	A	
1	CS137	759.000	15.200	659.500	24.950	1.151	A	N
1	K40	374.000	29.200	362.750	20.156	1.031	A	N
1	PB212	50.700	7.500	47.925	2.572	1.058	A	
1	PB214	87.100	3.830	71.000	7.035	1.227	A	
1	PU239	8.090	1.100	8.112	1.068	0.997	A	A
1	TH234	146.000	64.100	138.000	4.080	1.058	A	
1	ug U	11.835	5.110	11.800	0.300	1.003	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	3.200	0.582	3.522	0.590	0.909	A	A
1	CO60	21.500	1.720	21.450	1.000	1.002	A	A
1	CS137	500.000	10.000	467.000	20.000	1.071	A	A
1	K40	643.000	46.300	656.500	20.000	0.979	A	A
1	PU239	5.010	0.371	5.204	0.428	0.963	A	A
Matrix: WA Water Bq / L								
1	AM241	1.210	0.109	1.146	0.051	1.056	A	A
1	CO60	54.400	3.920	51.100	3.000	1.065	A	A
1	CS137	39.400	3.230	39.375	2.405	1.001	A	A
1	GROSS ALPHA	1600.000	22.600	1090.000	20.000	1.468	N	W
1	GROSS BETA	1530.000	16.600	1100.000	40.000	1.391	W	A
1	H3	141.000	5.950	121.080	6.780	1.165	A	A
1	PU238	0.815	0.128	0.772	0.037	1.056	A	W
1	PU239	0.954	0.142	1.009	0.058	0.945	A	A
1	U234	0.256	0.056	0.269	0.015	0.953	A	A
1	U238	0.277	0.058	0.262	0.016	1.058	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 50 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	CO60	5.830	0.570	4.960	0.280	1.175	W	A
1	CS137	6.200	0.270	6.050	0.300	1.025	A	W
1	GROSS ALPHA	1.600	0.110	1.610	0.160	0.994	A	A
1	GROSS BETA	1.300	0.080	1.560	0.160	0.833	W	W
1	SB125	2.900	0.250	3.590	0.310	0.808	W	W

Matrix: WA Water Bq / L

1	CO60	58.300	7.350	51.100	3.000	1.141	W	A
1	CS137	30.500	2.400	39.375	2.405	0.775	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 50 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	0.026	0.018	0.134	0.001	0.194	N	W
1	CO57	2.810	0.030	3.010	0.140	0.934	A	
1	CO60	4.750	0.090	4.960	0.280	0.958	A	A
1	CS137	5.770	0.070	6.050	0.300	0.954	A	A
2	GROSS ALPHA	4.560	0.560	1.610	0.160	2.832	N	A
2	GROSS BETA	1.390	0.760	1.560	0.160	0.891	A	W
1	PU238	0.160	0.035	0.272	0.001	0.588	N	N
1	PU239	0.079	0.018	0.124	0.003	0.636	N	N
1	SB125	3.170	0.130	3.590	0.310	0.883	A	N

Matrix: SO Soil Bq / kg

1	AC228	57.100	1.700	47.150	2.989	1.211	A	A
1	AM241	7.500	0.450	4.894	0.969	1.532	W	W
1	BI214	78.200	9.000	69.900	5.660	1.119	A	A
1	CS137	749.000	4.000	659.500	24.950	1.136	A	A
1	K40	402.000	13.000	362.750	20.156	1.108	A	A
1	PB212	62.100	3.800	47.925	2.572	1.296	W	A
1	PB214	97.900	24.500	71.000	7.035	1.379	W	A
1	TH234	101.000	6.000	138.000	4.080	0.732	W	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.060	0.790	3.522	0.590	0.869	W	W
1	CO60	22.000	1.800	21.450	1.000	1.026	A	A
1	CS137	485.000	10.000	467.000	20.000	1.039	A	A
1	K40	643.000	14.000	656.500	20.000	0.979	A	A

Matrix: WA Water Bq / L

1	AM241	1.380	0.140	1.146	0.051	1.204	A	A
1	CO60	54.900	0.800	51.100	3.000	1.074	A	A
1	CS137	42.500	0.560	39.375	2.405	1.079	A	A
1	GROSS ALPHA	1100.000	62.000	1090.000	20.000	1.009	A	A
1	GROSS BETA	673.000	42.000	1100.000	40.000	0.612	W	A
1	H3	193.000	19.300	121.080	6.780	1.594	W	A
1	PU238	0.520	0.020	0.772	0.037	0.674	N	N
1	PU239	0.590	0.050	1.009	0.058	0.585	N	N
1	U234	0.180	0.080	0.269	0.015	0.670	N	
1	U238	0.350	0.110	0.262	0.016	1.336	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 50 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	8.700	1.120	4.894	0.969	1.778	W	A
1	PU239	7.950	1.530	8.112	1.068	0.980	A	A
1	U234	132.000	9.130	140.667	1.155	0.938	A	A
1	U238	140.000	9.660	145.000	1.732	0.966	A	A

Matrix: WA Water Bq / L

2	GROSS ALPHA	1189.700	55.000	1090.000	20.000	1.091	A	A
2	GROSS BETA	1207.900	42.000	1100.000	40.000	1.098	A	A
1	H3	137.000	14.000	121.080	6.780	1.131	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 50 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	CO57	3.200	0.850	3.010	0.140	1.063	A	
1	CO60	4.000	1.000	4.960	0.280	0.806	W	N
1	CS137	6.600	1.700	6.050	0.300	1.091	A	N
Matrix: SO Soil Bq / kg								
1	AC228	41.000	9.300	47.150	2.989	0.870	A	
1	AM241	3.000	0.400	4.894	0.969	0.613	N	A
1	BI214	67.000	3.700	69.900	5.660	0.959	A	
1	CS137	755.000	31.000	659.500	24.950	1.145	A	A
1	K40	385.000	33.000	362.750	20.156	1.061	A	A
1	PB214	67.000	3.700	71.000	7.035	0.944	A	
1	TH234	107.000	8.100	138.000	4.080	0.775	W	
Matrix: VE Vegetation Bq / kg								
1	AM241	48.000	7.400	3.522	0.590	13.629	N	N
1	CO60	29.000	2.200	21.450	1.000	1.352	W	A
1	CS137	703.000	30.000	467.000	20.000	1.505	N	A
1	K40	888.000	74.000	656.500	20.000	1.353	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 50 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								
2	AM241	0.070	0.030	0.134	0.001	0.524	N	W
1	AM241	0.190	0.020	0.134	0.001	1.421	A	W
3	AM241	0.070	0.030	0.134	0.001	0.524	N	W
3	CO60	4.920	0.130	4.960	0.280	0.992	A	W
2	CO60	4.850	0.130	4.960	0.280	0.978	A	W
1	CO60	4.620	0.120	4.960	0.280	0.931	A	W
1	CS137	5.550	0.280	6.050	0.300	0.917	A	W
2	CS137	5.550	0.270	6.050	0.300	0.917	A	W
3	CS137	5.590	0.270	6.050	0.300	0.924	A	W
3	GROSS ALPHA	2.410	0.060	1.610	0.160	1.497	W	W
1	GROSS ALPHA	2.410	0.060	1.610	0.160	1.497	W	W
2	GROSS ALPHA	2.320	0.060	1.610	0.160	1.441	W	W
3	GROSS BETA	1.940	0.040	1.560	0.160	1.244	A	A
2	GROSS BETA	1.980	0.040	1.560	0.160	1.269	A	A
1	GROSS BETA	1.970	0.040	1.560	0.160	1.263	A	A
3	SB125	3.410	0.110	3.590	0.310	0.950	A	A
2	SB125	3.480	0.110	3.590	0.310	0.969	A	A
1	SB125	3.050	0.100	3.590	0.310	0.850	A	A

Matrix: SO Soil Bq / kg

2	AC228	185.000	35.900	47.150	2.989	3.924	N	
3	AC228	229.000	47.400	47.150	2.989	4.857	N	
1	AC228	146.000	17.600	47.150	2.989	3.097	N	
2	AM241	5.500	0.800	4.894	0.969	1.124	A	A
1	AM241	3.100	0.400	4.894	0.969	0.633	W	A
1	CS137	361.000	17.800	659.500	24.950	0.547	N	N
2	CS137	640.000	28.300	659.500	24.950	0.970	A	N
3	CS137	633.000	28.000	659.500	24.950	0.960	A	N
1	K40	252.000	15.000	362.750	20.156	0.695	N	W
2	K40	303.000	15.200	362.750	20.156	0.835	W	W
3	K40	311.000	15.500	362.750	20.156	0.857	W	W
2	PB214	64.400	2.000	71.000	7.035	0.907	A	A
3	PB214	66.600	1.700	71.000	7.035	0.938	A	A
1	PB214	36.400	1.600	71.000	7.035	0.513	N	A
1	TH234	219.000	19.700	138.000	4.080	1.587	W	A
2	TH234	347.000	27.100	138.000	4.080	2.514	N	A

Matrix: VE Vegetation Bq / kg

3	AM241	1.760	1.190	3.522	0.590	0.500	N	W
2	AM241	3.880	1.240	3.522	0.590	1.102	A	W
1	AM241	1.270	0.420	3.522	0.590	0.361	N	W
2	CO60	29.800	0.940	21.450	1.000	1.389	W	A
1	CO60	15.200	0.790	21.450	1.000	0.709	W	A
3	CO60	28.000	0.910	21.450	1.000	1.305	W	A
2	CS137	603.000	26.800	467.000	20.000	1.291	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 50 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: VE Vegetation Bq / kg								
3	CS137	610.000	27.000	467.000	20.000	1.306	W	A
1	CS137	322.000	16.000	467.000	20.000	0.690	N	A
1	K40	551.000	32.800	656.500	20.000	0.839	W	A
3	K40	744.000	35.700	656.500	20.000	1.133	A	A
2	K40	788.000	37.400	656.500	20.000	1.200	A	A
Matrix: WA Water Bq / L								
2	AM241	1.010	0.150	1.146	0.051	0.881	W	A
3	AM241	1.360	0.250	1.146	0.051	1.187	A	A
1	AM241	1.070	0.140	1.146	0.051	0.934	A	A
1	CO60	46.200	1.190	51.100	3.000	0.904	A	A
2	CO60	45.900	1.180	51.100	3.000	0.898	W	A
3	CO60	57.700	1.490	51.100	3.000	1.129	A	A
2	CS137	35.100	1.750	39.375	2.405	0.891	W	A
3	CS137	45.900	2.230	39.375	2.405	1.166	A	A
1	CS137	35.200	1.760	39.375	2.405	0.894	W	A
1	H3	159.000	5.100	121.080	6.780	1.313	W	W
2	H3	162.000	5.100	121.080	6.780	1.338	W	W
3	H3	161.000	5.100	121.080	6.780	1.330	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 50 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	2.810	0.150	3.010	0.140	0.934	A	
1	CO60	5.160	0.180	4.960	0.280	1.040	A	A
1	CS137	7.290	0.380	6.050	0.300	1.205	W	W
1	GROSS ALPHA	1.700	0.010	1.610	0.160	1.056	A	A
1	GROSS BETA	1.620	0.540	1.560	0.160	1.038	A	W
1	SB125	4.690	0.180	3.590	0.310	1.306	W	W
Matrix: SO Soil Bq / kg								
1	AC228	51.360	2.220	47.150	2.989	1.089	A	A
1	AM241	2.810	0.600	4.894	0.969	0.574	N	A
1	BI214	66.890	2.330	69.900	5.660	0.957	A	A
1	CS137	745.100	36.500	659.500	24.950	1.130	A	A
1	K40	420.700	20.300	362.750	20.156	1.160	A	A
1	PB212	51.170	3.610	47.925	2.572	1.068	A	A
1	PB214	75.300	2.480	71.000	7.035	1.061	A	A
1	TH234	149.700	8.200	138.000	4.080	1.085	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	2.720	0.540	3.522	0.590	0.772	W	W
1	CO60	25.020	0.850	21.450	1.000	1.166	A	A
1	CS137	571.100	28.000	467.000	20.000	1.223	A	A
1	K40	819.100	38.200	656.500	20.000	1.248	W	A
Matrix: WA Water Bq / L								
1	AM241	1.140	0.260	1.146	0.051	0.995	A	
1	CO60	52.600	1.600	51.100	3.000	1.029	A	A
1	CS137	40.500	2.000	39.375	2.405	1.029	A	A
1	GROSS ALPHA	842.400	3.900	1090.000	20.000	0.773	W	A
1	GROSS BETA	1176.200	8.800	1100.000	40.000	1.069	A	A
1	H3	95.090	5.290	121.080	6.780	0.785	W	A
1	SR90	3.840	0.340	4.104	0.045	0.936	A	
1	U234	0.275	0.029	0.269	0.015	1.024	A	A
1	U238	0.272	0.028	0.262	0.016	1.039	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 50 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	PU238	0.270	0.020	0.272	0.001	0.992	A	
1	PU239	0.120	0.008	0.124	0.003	0.965	A	
1	U234	0.060	0.005	0.060	0.002	1.001	A	
1	U238	0.070	0.005	0.061	0.003	1.143	A	
Matrix: SO Soil Bq / kg								
1	PU239	7.120	0.520	8.112	1.068	0.878	W	A
1	U234	136.010	9.620	140.667	1.155	0.967	A	A
1	U238	142.550	10.070	145.000	1.732	0.983	A	A
Matrix: VE Vegetation Bq / kg								
1	PU239	5.960	0.470	5.204	0.428	1.145	A	A
Matrix: WA Water Bq / L								
1	H3	122.500	8.210	121.080	6.780	1.012	A	A
1	PU238	0.840	0.060	0.772	0.037	1.089	A	A
1	PU239	1.030	0.070	1.009	0.058	1.021	A	A
1	U234	0.270	0.020	0.269	0.015	1.006	A	A
1	U238	0.250	0.020	0.262	0.016	0.955	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 50 Results by Laboratory**Lab:** MS Manufacturing Sciences Corporation, 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	CO57	3.060	0.310	3.010	0.140	1.017	A	
1	CO60	5.400	0.540	4.960	0.280	1.089	A	A
1	CS137	6.860	0.690	6.050	0.300	1.134	A	A
1	GROSS ALPHA	1.930	0.190	1.610	0.160	1.199	A	A
1	GROSS BETA	1.360	0.140	1.560	0.160	0.872	W	A
1	SB125	3.570	0.360	3.590	0.310	0.994	A	A
Matrix: SO Soil Bq / kg								
1	AC228	59.000	5.900	47.150	2.989	1.251	A	
1	BI214	75.000	7.500	69.900	5.660	1.073	A	
1	CS137	753.000	75.000	659.500	24.950	1.142	A	A
1	K40	378.000	38.000	362.750	20.156	1.042	A	A
1	PB212	60.000	6.000	47.925	2.572	1.252	W	
1	PB214	77.400	7.700	71.000	7.035	1.090	A	
1	TH234	172.000	17.000	138.000	4.080	1.246	A	
Matrix: WA Water Bq / L								
1	AM241	1.070	0.110	1.146	0.051	0.934	A	A
1	CO60	53.400	5.300	51.100	3.000	1.045	A	A
1	CS137	41.100	4.100	39.375	2.405	1.044	A	A
1	GROSS ALPHA	1150.000	115.000	1090.000	20.000	1.055	A	A
1	GROSS BETA	1180.000	118.000	1100.000	40.000	1.073	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 50 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	CO60	4.800	0.180	4.960	0.280	0.968	A	A
1	CS137	6.140	0.230	6.050	0.300	1.015	A	A
1	SB125	3.820	0.180	3.590	0.310	1.064	A	N
1	SR90	0.550	0.170	0.644	0.014	0.854	A	W
1	U234	0.088	0.013	0.060	0.002	1.468	W	
1	U238	0.076	0.012	0.061	0.003	1.241	A	
Matrix: SO Soil Bq / kg								
1	AC228	48.200	2.800	47.150	2.989	1.022	A	
1	BI214	74.300	3.100	69.900	5.660	1.063	A	A
1	CS137	724.000	24.000	659.500	24.950	1.098	A	A
1	K40	396.000	19.000	362.750	20.156	1.092	A	A
1	PB212	52.000	2.300	47.925	2.572	1.085	A	A
1	PB214	78.800	3.200	71.000	7.035	1.110	A	A
1	PU239	6.900	1.000	8.112	1.068	0.851	W	A
1	TH234	130.000	11.000	138.000	4.080	0.942	A	A
1	U234	145.000	8.000	140.667	1.155	1.031	A	A
1	U238	134.000	8.000	145.000	1.732	0.924	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	25.200	1.000	21.450	1.000	1.175	A	A
1	CS137	594.000	20.000	467.000	20.000	1.272	W	A
1	K40	795.000	30.000	656.500	20.000	1.211	A	A
1	PU239	4.630	0.300	5.204	0.428	0.890	A	W
1	SR90	720.000	14.000	736.100	7.700	0.978	A	A
Matrix: WA Water Bq / L								
1	CO60	52.600	1.800	51.100	3.000	1.029	A	A
1	CS137	42.400	1.500	39.375	2.405	1.077	A	A
1	H3	126.800	3.600	121.080	6.780	1.047	A	A
1	PU238	0.740	0.080	0.772	0.037	0.959	A	
1	PU239	0.960	0.080	1.009	0.058	0.951	A	
1	SR90	2.900	0.800	4.104	0.045	0.707	N	N
1	U234	0.330	0.070	0.269	0.015	1.229	W	N
1	U238	0.260	0.060	0.262	0.016	0.993	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 50 Results by Laboratory**Lab:** NF Nuclear Fueld Services, Erwin, TN

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	PU238	0.229	1.011	0.272	0.001	0.841	W	
1	PU239	0.079	0.005	0.124	0.003	0.636	N	
1	U234	0.080	0.010	0.060	0.002	1.334	A	
Matrix: SO Soil Bq / kg								
1	PU239	6.697	0.004	8.112	1.068	0.826	W	
Matrix: WA Water Bq / L								
1	PU238	0.943	0.049	0.772	0.037	1.222	W	
1	PU239	0.993	0.041	1.009	0.058	0.984	A	
1	U234	0.522	0.030	0.269	0.015	1.944	N	
1	U238	0.357	0.024	0.262	0.016	1.363	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 50 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	0.170	0.070	0.134	0.001	1.272	A	
2	AM241	0.160	0.090	0.134	0.001	1.197	A	
3	CO57	2.780	0.220	3.010	0.140	0.924	A	
2	CO57	2.920	0.290	3.010	0.140	0.970	A	
1	CO57	2.820	0.260	3.010	0.140	0.937	A	
1	CO60	4.670	0.330	4.960	0.280	0.942	A	
3	CO60	4.610	0.280	4.960	0.280	0.929	A	
2	CO60	4.730	0.310	4.960	0.280	0.954	A	
1	CS137	5.350	0.510	6.050	0.300	0.884	A	
3	CS137	5.410	0.480	6.050	0.300	0.894	A	
2	CS137	5.510	0.580	6.050	0.300	0.911	A	
2	SB125	3.090	0.270	3.590	0.310	0.861	A	
1	SB125	3.440	0.360	3.590	0.310	0.958	A	
3	SB125	3.190	0.240	3.590	0.310	0.889	A	

Matrix: WA Water Bq/L

1	AM241	1.420	0.580	1.146	0.051	1.239	A	
3	CO60	53.200	1.400	51.100	3.000	1.041	A	
2	CO60	52.600	1.500	51.100	3.000	1.029	A	
1	CO60	53.000	3.500	51.100	3.000	1.037	A	
3	CS137	40.700	2.700	39.375	2.405	1.034	A	
2	CS137	40.900	2.400	39.375	2.405	1.039	A	
1	CS137	39.300	3.700	39.375	2.405	0.998	A	
2	GROSS ALPHA	960.000	42.000	1090.000	20.000	0.881	A	
1	GROSS ALPHA	1025.000	19.000	1090.000	20.000	0.940	A	
3	GROSS ALPHA	982.000	43.000	1090.000	20.000	0.901	A	
2	GROSS BETA	1303.000	41.000	1100.000	40.000	1.185	A	
3	GROSS BETA	1272.000	41.000	1100.000	40.000	1.156	A	
1	GROSS BETA	1283.000	19.000	1100.000	40.000	1.166	A	
1	H3	138.000	8.000	121.080	6.780	1.140	A	
3	H3	125.000	8.000	121.080	6.780	1.032	A	
2	H3	137.000	8.000	121.080	6.780	1.131	A	
3	SR90	4.200	0.500	4.104	0.045	1.023	A	
1	SR90	3.700	0.500	4.104	0.045	0.902	A	
2	SR90	3.800	0.500	4.104	0.045	0.926	A	
1	U234	0.290	0.030	0.269	0.015	1.080	A	
2	U234	0.310	0.030	0.269	0.015	1.155	A	
3	U234	0.320	0.030	0.269	0.015	1.192	A	
1	U238	0.260	0.020	0.262	0.016	0.993	A	
2	U238	0.300	0.030	0.262	0.016	1.145	A	
3	U238	0.300	0.030	0.262	0.016	1.145	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 50 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	Bq U	0.139	0.017	0.123	0.004	1.131	A	A
1	CO57	3.120	0.420	3.010	0.140	1.037	A	
1	CO60	5.330	0.520	4.960	0.280	1.075	A	A
1	CS137	6.320	1.150	6.050	0.300	1.045	A	A
1	PU238	0.284	0.066	0.272	0.001	1.043	A	A
1	PU239	0.130	0.031	0.124	0.003	1.046	A	A
1	SB125	4.440	0.760	3.590	0.310	1.237	W	W
1	U234	0.069	0.017	0.060	0.002	1.159	A	A
1	U238	0.070	0.017	0.061	0.003	1.138	A	A

Matrix: SO Soil Bq / kg

1	AC228	52.800	6.500	47.150	2.989	1.120	A	A
1	BI214	68.900	12.100	69.900	5.660	0.986	A	A
1	CS137	725.000	130.000	659.500	24.950	1.099	A	A
1	K40	418.000	59.000	362.750	20.156	1.152	A	A
1	PB212	49.800	11.100	47.925	2.572	1.039	A	A
1	PB214	73.400	14.800	71.000	7.035	1.034	A	A
1	PU238	0.905	0.403	0.364	0.085	2.488	W	
1	PU239	8.340	2.090	8.112	1.068	1.028	A	A
1	TH234	127.000	25.000	138.000	4.080	0.920	A	A
1	U234	140.000	32.000	140.667	1.155	0.995	A	A
1	U238	142.000	33.000	145.000	1.732	0.979	A	A
1	ug U	11.500	2.600	11.800	0.300	0.975	A	A

Matrix: WA Water Bq / L

1	Bq U	0.583	0.070	0.541	0.025	1.078	A	A
1	CO60	56.700	5.400	51.100	3.000	1.110	A	A
1	CS137	43.400	7.900	39.375	2.405	1.102	A	A
1	PU238	0.797	0.183	0.772	0.037	1.033	A	A
1	PU239	0.998	0.228	1.009	0.058	0.989	A	A
1	U234	0.306	0.073	0.269	0.015	1.140	A	A
1	U238	0.277	0.066	0.262	0.016	1.058	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 50 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	0.143	0.007	0.134	0.001	1.070	A	A
1	CS137	7.360	0.660	6.050	0.300	1.217	W	W
1	PU238	0.278	0.009	0.272	0.001	1.021	A	A
1	PU239	0.125	0.005	0.124	0.003	1.006	A	A
1	SR90	0.683	0.103	0.644	0.014	1.061	A	A
Matrix: SO Soil Bq / kg								
1	AM241	3.940	0.270	4.894	0.969	0.805	A	A
2	AM241	4.880	0.330	4.894	0.969	0.997	A	A
3	AM241	4.800	0.340	4.894	0.969	0.981	A	A
1	CS137	685.000	49.000	659.500	24.950	1.039	A	A
2	PU239	7.920	0.310	8.112	1.068	0.976	A	W
3	PU239	7.560	0.330	8.112	1.068	0.932	A	W
1	PU239	6.340	0.270	8.112	1.068	0.782	W	W
1	SR90	28.000	4.500	32.400	0.529	0.864	A	
3	SR90	27.400	6.200	32.400	0.529	0.846	A	
2	SR90	26.600	4.600	32.400	0.529	0.821	A	
Matrix: WA Water Bq / L								
1	AM241	1.060	0.030	1.146	0.051	0.925	A	A
1	CS137	44.900	3.600	39.375	2.405	1.140	A	A
1	PU238	0.751	0.018	0.772	0.037	0.973	A	A
1	PU239	1.000	0.020	1.009	0.058	0.991	A	A
1	SR90	3.240	0.410	4.104	0.045	0.789	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 50 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	2.970	0.050	3.010	0.140	0.987	A	
1	CO60	4.950	0.110	4.960	0.280	0.998	A	A
1	CS137	5.960	0.120	6.050	0.300	0.985	A	A
1	GROSS BETA	1.500	0.030	1.560	0.160	0.962	A	A
1	SB125	3.580	0.170	3.590	0.310	0.997	A	A

Matrix: WA Water Bq / L

1	CO60	52.600	0.900	51.100	3.000	1.029	A	A
1	CS137	36.800	0.900	39.375	2.405	0.935	A	A
1	GROSS BETA	1132.900	14.200	1100.000	40.000	1.030	A	A
1	H3	140.600	29.600	121.080	6.780	1.161	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 50 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	0.120	0.008	0.134	0.001	0.898	A	W
1	GROSS ALPHA	1.810	0.270	1.610	0.160	1.124	A	A
1	GROSS BETA	1.630	0.250	1.560	0.160	1.045	A	W
1	PU238	0.216	0.013	0.272	0.001	0.794	W	W
1	PU239	0.106	0.006	0.124	0.003	0.853	W	A
1	U234	0.063	0.004	0.060	0.002	1.051	A	A
1	U238	0.064	0.004	0.061	0.003	1.045	A	A

Matrix: SO Soil Bq / kg

1	AC228	58.900	7.000	47.150	2.989	1.249	A	A
1	AM241	5.020	0.520	4.894	0.969	1.026	A	A
1	BI214	68.100	7.400	69.900	5.660	0.974	A	A
1	CS137	778.000	88.000	659.500	24.950	1.180	A	W
1	K40	436.000	52.000	362.750	20.156	1.202	A	W
1	PB212	57.400	7.400	47.925	2.572	1.198	A	A
1	PB214	72.600	8.500	71.000	7.035	1.023	A	A
1	PU239	6.720	0.630	8.112	1.068	0.828	W	W
1	TH234	146.000	19.000	138.000	4.080	1.058	A	A
1	U234	141.100	8.000	140.667	1.155	1.003	A	A
1	U238	143.200	8.200	145.000	1.732	0.988	A	A

Matrix: WA Water Bq / L

1	AM241	1.094	0.078	1.146	0.051	0.955	A	W
1	CO60	54.500	6.000	51.100	3.000	1.067	A	N
1	CS137	44.400	5.100	39.375	2.405	1.128	A	W
1	GROSS ALPHA	1086.000	67.000	1090.000	20.000	0.996	A	W
1	GROSS BETA	1110.000	95.000	1100.000	40.000	1.009	A	A
1	PU238	0.633	0.043	0.772	0.037	0.820	W	A
1	PU239	0.867	0.056	1.009	0.058	0.859	W	A
1	U234	0.282	0.019	0.269	0.015	1.050	A	A
1	U238	0.279	0.019	0.262	0.016	1.065	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 50 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	2.510	0.500	3.010	0.140	0.834	A	
1	CO60	4.510	0.900	4.960	0.280	0.909	A	
1	CS137	5.620	1.120	6.050	0.300	0.929	A	
1	SB125	3.530	0.710	3.590	0.310	0.983	A	
Matrix: SO Soil Bq / kg								
1	CS137	636.000	127.000	659.500	24.950	0.964	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	22.100	4.400	21.450	1.000	1.030	A	A
1	CS137	488.000	98.000	467.000	20.000	1.045	A	A
Matrix: WA Water Bq / L								
1	CO60	53.300	10.700	51.100	3.000	1.043	A	
1	CS137	41.100	8.200	39.375	2.405	1.044	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 50 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	2.603	0.015	3.010	0.140	0.865	A	
1	CO60	4.611	0.054	4.960	0.280	0.930	A	A
1	CS137	5.458	0.044	6.050	0.300	0.902	A	A
1	GROSS ALPHA	1.773	0.079	1.610	0.160	1.101	A	N
1	GROSS BETA	1.838	0.049	1.560	0.160	1.178	A	A
1	SB125	3.229	0.065	3.590	0.310	0.899	A	A

Matrix: WA Water Bq/L

1	Bq U	0.727	0.176	0.541	0.025	1.344	W	W
1	CO60	57.630	0.364	51.100	3.000	1.128	A	A
1	CS137	42.704	0.314	39.375	2.405	1.085	A	A
1	GROSS ALPHA	1048.465	31.796	1090.000	20.000	0.962	A	A
1	GROSS BETA	1093.958	23.760	1100.000	40.000	0.995	A	A
1	SR90	2.860	0.788	4.104	0.045	0.697	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 50 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	CO60	4.320	0.750	4.960	0.280	0.871	A	N
1	CS137	5.110	0.978	6.050	0.300	0.845	A	N
1	GROSS ALPHA	2.120	0.105	1.610	0.160	1.317	A	A
1	GROSS BETA	1.470	0.065	1.560	0.160	0.942	A	W
1	SB125	3.560	0.631	3.590	0.310	0.992	A	N
Matrix: SO Soil Bq / kg								
1	AC228	133.000	33.000	47.150	2.989	2.821	N	A
1	CS137	592.000	112.000	659.500	24.950	0.898	W	N
1	K40	319.000	77.100	362.750	20.156	0.879	W	N
1	PB212	46.200	9.370	47.925	2.572	0.964	A	A
1	PB214	18.300	17.500	71.000	7.035	0.258	N	A
1	U234	135.000	33.200	140.667	1.155	0.960	A	
1	U238	133.000	33.000	145.000	1.732	0.917	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	22.300	4.770	21.450	1.000	1.040	A	N
1	CS137	461.000	87.500	467.000	20.000	0.987	A	N
1	K40	640.000	131.000	656.500	20.000	0.975	A	N
Matrix: WA Water Bq / L								
1	CO60	63.900	11.100	51.100	3.000	1.250	N	A
1	CS137	52.400	10.100	39.375	2.405	1.331	N	A
1	GROSS ALPHA	1490.000	133.000	1090.000	20.000	1.367	N	A
1	GROSS BETA	1080.000	115.000	1100.000	40.000	0.982	A	A
1	U234	0.247	0.414	0.269	0.015	0.920	A	
1	U238	0.267	0.418	0.262	0.016	1.019	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 50 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	3.600	0.500	3.010	0.140	1.196	W	
2	CO57	3.400	0.500	3.010	0.140	1.130	A	
3	CO57	3.400	0.500	3.010	0.140	1.130	A	
3	CO60	5.200	0.500	4.960	0.280	1.048	A	A
1	CO60	5.300	0.500	4.960	0.280	1.069	A	A
2	CO60	5.400	0.500	4.960	0.280	1.089	A	A
2	CS137	6.300	0.600	6.050	0.300	1.041	A	W
1	CS137	6.500	0.600	6.050	0.300	1.074	A	W
3	CS137	6.000	0.600	6.050	0.300	0.992	A	W
1	GROSS ALPHA	1.500	0.200	1.610	0.160	0.932	A	A
2	GROSS ALPHA	1.500	0.200	1.610	0.160	0.932	A	A
3	GROSS ALPHA	1.500	0.200	1.610	0.160	0.932	A	A
1	GROSS BETA	1.600	0.200	1.560	0.160	1.026	A	W
2	GROSS BETA	1.500	0.200	1.560	0.160	0.962	A	W
3	GROSS BETA	1.500	0.200	1.560	0.160	0.962	A	W
1	SB125	3.100	0.500	3.590	0.310	0.864	A	A
2	SB125	3.600	0.500	3.590	0.310	1.003	A	A
3	SB125	3.800	0.500	3.590	0.310	1.058	A	A

Matrix: SO Soil Bq / kg

3	AC228	49.000	5.000	47.150	2.989	1.039	A	A
2	AC228	36.000	4.000	47.150	2.989	0.764	N	A
1	AC228	40.000	4.000	47.150	2.989	0.848	W	A
3	BI214	51.000	5.000	69.900	5.660	0.730	N	A
2	BI214	55.000	6.000	69.900	5.660	0.787	W	A
1	BI214	60.000	6.000	69.900	5.660	0.858	A	A
1	CS137	620.000	30.000	659.500	24.950	0.940	A	W
2	CS137	610.000	30.000	659.500	24.950	0.925	A	W
3	CS137	620.000	30.000	659.500	24.950	0.940	A	W
2	K40	390.000	39.000	362.750	20.156	1.075	A	W
1	K40	370.000	37.000	362.750	20.156	1.020	A	W
3	K40	340.000	34.000	362.750	20.156	0.937	A	W
3	PB212	51.000	5.000	47.925	2.572	1.064	A	A
2	PB212	47.000	5.000	47.925	2.572	0.981	A	A
1	PB212	50.000	5.000	47.925	2.572	1.043	A	A
2	PB214	68.000	7.000	71.000	7.035	0.958	A	A
3	PB214	68.000	7.000	71.000	7.035	0.958	A	A
1	PB214	66.000	7.000	71.000	7.035	0.930	A	A

Matrix: VE Vegetation Bq / kg

3	CO60	20.000	2.000	21.450	1.000	0.932	A	W
2	CO60	17.000	2.000	21.450	1.000	0.793	W	W
1	CO60	17.000	2.000	21.450	1.000	0.793	W	W
2	CS137	410.000	20.000	467.000	20.000	0.878	W	A
1	CS137	410.000	20.000	467.000	20.000	0.878	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 50 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: VE Vegetation Bq / kg								
3	CS137	410.000	20.000	467.000	20.000	0.878	W	A
1	K40	610.000	30.000	656.500	20.000	0.929	A	W
3	K40	610.000	30.000	656.500	20.000	0.929	A	W
2	K40	650.000	30.000	656.500	20.000	0.990	A	W
2	SR90	620.000	50.000	736.100	7.700	0.842	A	A
3	SR90	630.000	50.000	736.100	7.700	0.856	A	A
1	SR90	650.000	50.000	736.100	7.700	0.883	A	A

Matrix: WA Water Bq / L

2	CO60	57.000	6.000	51.100	3.000	1.115	A	A
3	CO60	56.000	6.000	51.100	3.000	1.096	A	A
1	CO60	58.000	6.000	51.100	3.000	1.135	A	A
3	CS137	44.000	5.000	39.375	2.405	1.117	A	A
2	CS137	44.000	5.000	39.375	2.405	1.117	A	A
1	CS137	44.000	5.000	39.375	2.405	1.117	A	A
2	GROSS ALPHA	1010.000	100.000	1090.000	20.000	0.927	A	A
1	GROSS ALPHA	1000.000	100.000	1090.000	20.000	0.917	A	A
3	GROSS ALPHA	1020.000	100.000	1090.000	20.000	0.936	A	A
3	GROSS BETA	1060.000	100.000	1100.000	40.000	0.964	A	A
1	GROSS BETA	1060.000	100.000	1100.000	40.000	0.964	A	A
2	GROSS BETA	1040.000	100.000	1100.000	40.000	0.945	A	A
1	SR90	2.400	0.200	4.104	0.045	0.585	N	A
2	SR90	2.300	0.200	4.104	0.045	0.560	N	A
3	SR90	2.300	0.200	4.104	0.045	0.560	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 50 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	2.870	0.130	3.010	0.140	0.953	A	
2	CO57	2.880	0.130	3.010	0.140	0.957	A	
2	CO60	4.710	0.080	4.960	0.280	0.950	A	A
1	CO60	4.720	0.080	4.960	0.280	0.952	A	A
1	CS137	5.820	0.260	6.050	0.300	0.962	A	A
2	CS137	5.730	0.260	6.050	0.300	0.947	A	A
1	GROSS ALPHA	1.500	0.050	1.610	0.160	0.932	A	A
1	GROSS BETA	1.890	0.060	1.560	0.160	1.212	A	A
1	SB125	3.230	0.190	3.590	0.310	0.900	A	A
2	SB125	3.420	0.200	3.590	0.310	0.953	A	A

Matrix: WA Water Bq / L

2	AM241	1.208	0.148	1.146	0.051	1.054	A	A
1	AM241	1.146	0.153	1.146	0.051	1.000	A	A
2	CO60	56.090	2.320	51.100	3.000	1.098	A	A
1	CO60	51.610	2.420	51.100	3.000	1.010	A	A
2	CS137	44.280	3.070	39.375	2.405	1.125	A	A
1	CS137	43.490	3.050	39.375	2.405	1.105	A	A
1	H3	157.850	8.670	121.080	6.780	1.304	W	A
2	PU238	0.769	0.098	0.772	0.037	0.997	A	A
1	PU238	0.914	0.120	0.772	0.037	1.185	W	A
2	PU239	1.230	0.159	1.009	0.058	1.219	W	A
1	PU239	1.009	0.126	1.009	0.058	1.000	A	A
2	SR90	4.070	0.590	4.104	0.045	0.992	A	A
1	SR90	3.760	0.480	4.104	0.045	0.916	A	A
2	U234	0.244	0.028	0.269	0.015	0.909	A	A
1	U234	0.264	0.028	0.269	0.015	0.983	A	A
2	U238	0.267	0.030	0.262	0.016	1.019	A	A
1	U238	0.245	0.027	0.262	0.016	0.935	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 50 Results by Laboratory**Lab:** OK Southwest Laboratory of Oklahoma

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
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Matrix: SO Soil Bq/kg

1	U234	128.000		140.667	1.155	0.910	A	
1	U238	136.000		145.000	1.732	0.938	A	

Matrix: WA Water Bq/L

1	GROSS ALPHA	834.000	34.000	1090.000	20.000	0.765	W	
1	GROSS BETA	1045.000	31.000	1100.000	40.000	0.950	A	
1	H3	175.000	20.000	121.080	6.780	1.445	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 50 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	2.700	0.110	3.010	0.140	0.897	A	
1	CO60	4.680	0.190	4.960	0.280	0.944	A	A
1	CS137	5.730	0.240	6.050	0.300	0.947	A	A
1	SB125	3.410	0.075	3.590	0.310	0.950	A	A
Matrix: SO Soil Bq / kg								
1	CS137	734.800	23.200	659.500	24.950	1.114	A	A
1	K40	410.400	19.500	362.750	20.156	1.131	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	24.800	0.600	21.450	1.000	1.156	A	A
1	CS137	546.400	10.100	467.000	20.000	1.170	A	A
1	K40	766.000	27.400	656.500	20.000	1.167	A	A
Matrix: WA Water Bq / L								
1	CO60	51.900	2.200	51.100	3.000	1.016	A	A
1	CS137	39.800	1.220	39.375	2.405	1.011	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 50 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	3.120	0.122	3.010	0.140	1.037	A	
2	CO57	3.120	0.125	3.010	0.140	1.037	A	
3	CO57	3.046	0.119	3.010	0.140	1.012	A	
3	CO60	4.680	0.062	4.960	0.280	0.944	A	
1	CO60	4.736	0.061	4.960	0.280	0.955	A	
2	CO60	4.732	0.062	4.960	0.280	0.954	A	
3	CS137	5.620	0.158	6.050	0.300	0.929	A	
2	CS137	5.612	0.156	6.050	0.300	0.928	A	
1	CS137	5.735	0.160	6.050	0.300	0.948	A	
3	SB125	3.439	0.111	3.590	0.310	0.958	A	
2	SB125	3.258	0.129	3.590	0.310	0.908	A	
1	SB125	3.346	0.098	3.590	0.310	0.932	A	

Matrix: WA Water Bq / L

3	CO60	59.720	0.557	51.100	3.000	1.169	W	
2	CO60	59.160	0.557	51.100	3.000	1.158	W	
1	CO60	59.420	0.568	51.100	3.000	1.163	W	
3	CS137	46.840	1.010	39.375	2.405	1.190	W	
1	CS137	45.940	1.010	39.375	2.405	1.167	A	
2	CS137	45.440	1.010	39.375	2.405	1.154	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 50 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	0.064	0.011	0.134	0.001	0.479	N	A
1	Bq U	0.120	0.030	0.123	0.004	0.975	A	A
1	CO60	5.300	0.200	4.960	0.280	1.069	A	A
1	CS137	6.600	0.200	6.050	0.300	1.091	A	A
1	GROSS ALPHA	1.400	0.100	1.610	0.160	0.870	A	A
1	GROSS BETA	1.600	0.100	1.560	0.160	1.026	A	A
1	PU238	0.230	0.020	0.272	0.001	0.845	W	A
1	PU239	0.110	0.010	0.124	0.003	0.885	W	A
1	SB125	3.900	0.300	3.590	0.310	1.086	A	A
1	SR90	0.140	0.080	0.644	0.014	0.217	N	A
Matrix: SO Soil Bq / kg								
1	AC228	44.000	7.000	47.150	2.989	0.933	A	A
1	AM241	4.400	0.700	4.894	0.969	0.899	A	A
1	BI214	66.000	10.000	69.900	5.660	0.944	A	A
1	Bq U	320.000	10.000	291.000	3.000	1.100	A	A
1	CS137	608.000	10.000	659.500	24.950	0.922	A	A
1	K40	335.000	30.000	362.750	20.156	0.924	A	A
1	PB212	47.000	3.000	47.925	2.572	0.981	A	A
1	PB214	66.000	10.000	71.000	7.035	0.930	A	A
1	PU239	7.400	0.800	8.112	1.068	0.912	A	A
1	SR90	35.000	11.000	32.400	0.529	1.080	A	A
1	TH234	160.000	10.000	138.000	4.080	1.159	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.400	0.600	3.522	0.590	0.965	A	A
1	CM244	2.200	0.400	1.671	0.541	1.317	A	A
1	CO60	21.000	3.000	21.450	1.000	0.979	A	A
1	CS137	475.000	10.000	467.000	20.000	1.017	A	A
1	K40	685.000	45.000	656.500	20.000	1.043	A	A
1	PU239	4.800	0.400	5.204	0.428	0.922	A	A
1	SR90	400.000	10.000	736.100	7.700	0.543	W	A
Matrix: WA Water Bq / L								
1	AM241	1.100	0.100	1.146	0.051	0.960	A	A
1	Bq U	0.640	0.080	0.541	0.025	1.183	A	W
1	CO60	54.000	2.000	51.100	3.000	1.057	A	A
1	CS137	42.000	1.000	39.375	2.405	1.067	A	A
1	GROSS ALPHA	1100.000	100.000	1090.000	20.000	1.009	A	A
1	GROSS BETA	1200.000	100.000	1100.000	40.000	1.091	A	A
1	H3	125.000	10.000	121.080	6.780	1.032	A	N
1	PU238	0.760	0.050	0.772	0.037	0.985	A	W
1	PU239	0.990	0.070	1.009	0.058	0.981	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 50 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	SR90	3.800	0.400	4.104	0.045	0.926	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 50 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	CO60	7.460	1.000	4.960	0.280	1.504	N	A
1	CS137	6.480	0.750	6.050	0.300	1.071	A	A
Matrix: SO Soil Bq / kg								
1	AC228	87.700	8.800	47.150	2.989	1.860	N	
1	BI214	105.000	10.500	69.900	5.660	1.502	N	A
1	CS137	955.000	95.500	659.500	24.950	1.448	N	A
1	K40	525.000	52.500	362.750	20.156	1.447	W	A
1	PB212	121.000	12.100	47.925	2.572	2.525	N	A
1	PB214	120.000	12.000	71.000	7.035	1.690	N	A
1	SR90	32.900	3.300	32.400	0.529	1.015	A	A
1	TH234	256.000	25.600	138.000	4.080	1.855	N	A
Matrix: WA Water Bq / L								
1	CO60	42.500	2.500	51.100	3.000	0.832	W	A
1	CS137	34.600	2.600	39.375	2.405	0.879	W	W
1	U234	0.379	0.010	0.269	0.015	1.412	N	N
1	U238	0.381	0.010	0.262	0.016	1.455	N	N
1	ug U	0.021	0.001	0.021	0.001	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 50 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								
1	GROSS ALPHA	1.540	0.160	1.610	0.160	0.957	A	A
2	GROSS ALPHA	1.590	0.120	1.610	0.160	0.988	A	A
3	GROSS ALPHA	1.520	0.170	1.610	0.160	0.944	A	A
3	GROSS BETA	1.530	0.130	1.560	0.160	0.981	A	A
2	GROSS BETA	1.590	0.140	1.560	0.160	1.019	A	A
1	GROSS BETA	1.610	0.160	1.560	0.160	1.032	A	A

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 50 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
Matrix: AI Air Filter Bq / filter								
1	CO57	6.560	0.340	3.010	0.140	2.179	N	
1	CO60	6.290	0.190	4.960	0.280	1.268	W	A
1	CS137	6.480	0.290	6.050	0.300	1.071	A	A
Matrix: SO Soil Bq / kg								
1	CS137	712.790	49.870	659.500	24.950	1.081	A	A
1	K40	390.460	120.210	362.750	20.156	1.076	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	38.970	11.200	21.450	1.000	1.817	N	
1	CS137	572.070	27.380	467.000	20.000	1.225	A	A
1	K40	625.840	86.680	656.500	20.000	0.953	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 50 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	0.110	0.030	0.134	0.001	0.823	W	A
1	CO60	4.500	0.200	4.960	0.280	0.907	A	W
1	CS137	5.400	0.200	6.050	0.300	0.893	A	W
Matrix: SO Soil Bq / kg								
1	AC228	47.400	3.800	47.150	2.989	1.005	A	
1	AM241	3.300	0.600	4.894	0.969	0.674	W	A
1	BI214	67.400	3.600	69.900	5.660	0.964	A	
1	CS137	641.000	32.000	659.500	24.950	0.972	A	A
1	K40	361.000	18.000	362.750	20.156	0.995	A	A
1	PB214	69.400	4.800	71.000	7.035	0.977	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	3.700	0.700	3.522	0.590	1.051	A	W
1	CO60	23.300	1.200	21.450	1.000	1.086	A	A
1	CS137	521.000	26.000	467.000	20.000	1.116	A	A
1	K40	675.000	34.000	656.500	20.000	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 50 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	125.500	2.500	121.080	6.780	1.037	A	A
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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 50 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	CO60	5.000	0.400	4.960	0.280	1.008	A	A
1	CS137	5.400	0.400	6.050	0.300	0.893	A	A
1	SB125	4.100	0.300	3.590	0.310	1.142	A	A
1	U234	0.060	0.030	0.060	0.002	1.001	A	N
1	U238	0.064	0.040	0.061	0.003	1.045	A	N
1	ug U	5.200	0.400	4.945	0.227	1.052	A	A
Matrix: SO Soil Bq / kg								
1	AC228	52.000	5.000	47.150	2.989	1.103	A	A
1	BI214	65.000	3.000	69.900	5.660	0.930	A	A
1	CS137	729.000	20.000	659.500	24.950	1.105	A	A
1	K40	410.000	75.000	362.750	20.156	1.130	A	W
1	PB212	62.000	3.000	47.925	2.572	1.294	W	A
1	PB214	64.000	4.000	71.000	7.035	0.901	A	A
1	PU239	8.900	1.800	8.112	1.068	1.097	A	W
1	SR90	32.000	6.000	32.400	0.529	0.988	A	A
1	U234	134.000	15.000	140.667	1.155	0.953	A	A
1	U238	135.000	8.000	145.000	1.732	0.931	A	A
1	ug U	10.900	0.600	11.800	0.300	0.924	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	24.000	2.000	21.450	1.000	1.119	A	A
1	CS137	535.000	20.000	467.000	20.000	1.146	A	A
1	K40	805.000	70.000	656.500	20.000	1.226	A	A
1	PU238	0.390	0.120	0.419	0.010	0.932	A	A
1	PU239	5.420	1.080	5.204	0.428	1.041	A	A
1	SR90	660.000	130.000	736.100	7.700	0.897	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 50 Results by Laboratory**Lab:** RC US NRC Region I Laboratory, 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	3.030	0.220	3.010	0.140	1.007	A	
1	CO60	4.920	0.370	4.960	0.280	0.992	A	A
1	CS137	6.290	0.480	6.050	0.300	1.040	A	A
1	GROSS ALPHA	1.990	0.120	1.610	0.160	1.236	A	A
1	GROSS BETA	1.610	0.100	1.560	0.160	1.032	A	A
1	SB125	4.400	1.100	3.590	0.310	1.226	W	A

Matrix: SO Soil Bq / kg

1	CS137	651.000	44.000	659.500	24.950	0.987	A	A
1	K40	368.000	28.000	362.750	20.156	1.014	A	A

Matrix: WA Water Bq / L

1	CO60	51.100	2.600	51.100	3.000	1.000	A	A
1	CS137	38.800	1.800	39.375	2.405	0.985	A	A
1	H3	120.000	8.000	121.080	6.780	0.991	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 50 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	0.110	0.010	0.134	0.001	0.823	W	A
1	CO57	2.600	0.290	3.010	0.140	0.864	A	
1	CO60	4.290	0.500	4.960	0.280	0.865	A	A
1	CS137	5.230	0.550	6.050	0.300	0.864	A	A
1	GROSS ALPHA	1.630	0.080	1.610	0.160	1.012	A	
1	GROSS BETA	1.420	0.080	1.560	0.160	0.910	A	
1	PU238	0.220	0.020	0.272	0.001	0.808	W	W
1	PU239	0.110	0.010	0.124	0.003	0.885	W	A
1	SB125	3.110	0.460	3.590	0.310	0.866	A	A
1	SR90	0.420	0.050	0.644	0.014	0.652	W	A
1	U234	0.060	0.010	0.060	0.002	1.001	A	A
1	U238	0.050	0.010	0.061	0.003	0.816	N	A

Matrix: SO Soil Bq / kg

1	AC228	47.200	5.100	47.150	2.989	1.001	A	
1	AM241	4.140	0.660	4.894	0.969	0.846	A	A
1	BI214	61.100	5.700	69.900	5.660	0.874	A	
1	CS137	652.000	49.000	659.500	24.950	0.989	A	A
1	K40	370.000	34.000	362.750	20.156	1.020	A	A
1	PB212	50.400	4.800	47.925	2.572	1.052	A	
1	PB214	71.800	6.700	71.000	7.035	1.011	A	
1	PU239	7.960	1.730	8.112	1.068	0.981	A	A
1	SR90	29.500	3.200	32.400	0.529	0.910	A	A
1	U234	136.000	14.000	140.667	1.155	0.967	A	A
1	U238	148.000	15.000	145.000	1.732	1.021	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.180	0.360	3.522	0.590	0.903	A	A
1	CM244	2.240	0.270	1.671	0.541	1.341	A	A
1	CO60	22.800	3.100	21.450	1.000	1.063	A	A
1	CS137	481.000	39.000	467.000	20.000	1.030	A	A
1	K40	886.000	90.000	656.500	20.000	1.350	W	W
1	PU239	4.300	0.490	5.204	0.428	0.826	W	A
1	SR90	732.000	7.000	736.100	7.700	0.994	A	A

Matrix: WA Water Bq / L

1	AM241	1.110	0.130	1.146	0.051	0.969	A	A
1	CO60	54.700	5.500	51.100	3.000	1.070	A	A
1	CS137	42.000	4.200	39.375	2.405	1.067	A	A
1	GROSS ALPHA	1050.000	36.000	1090.000	20.000	0.963	A	A
1	GROSS BETA	1040.000	27.000	1100.000	40.000	0.945	A	A
1	H3	130.000	20.000	121.080	6.780	1.074	A	A
1	PU238	0.820	0.100	0.772	0.037	1.063	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 50 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	PU239	1.030	0.110	1.009	0.058	1.021	A	A
1	SR90	3.160	0.290	4.104	0.045	0.770	W	A
1	U234	0.290	0.050	0.269	0.015	1.080	A	A
1	U238	0.310	0.050	0.262	0.016	1.184	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 50 Results by Laboratory**Lab:** RG Thermo Nutech Rocky Flats Plant, Golden

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	1096.620	54.340	1090.000	20.000	1.006	A	A
1	GROSS BETA	1048.390	40.730	1100.000	40.000	0.953	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 50 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	CO57	3.070	0.252	3.010	0.140	1.020	A	
1	CO60	4.740	0.350	4.960	0.280	0.956	A	A
1	CS137	5.810	0.523	6.050	0.300	0.960	A	W
1	PU238	0.266	0.034	0.272	0.001	0.977	A	A
1	PU239	0.119	0.019	0.124	0.003	0.957	A	N
1	SB125	4.140	0.573	3.590	0.310	1.153	A	A
1	SR90	0.685	0.043	0.644	0.014	1.064	A	A
Matrix: SO Soil Bq / kg								
1	CS137	559.000	21.000	659.500	24.950	0.848	W	A
1	PU239	9.440	1.210	8.112	1.068	1.164	A	
1	SR90	76.000	8.280	32.400	0.529	2.346	W	
Matrix: VE Vegetation Bq / kg								
1	CO60	33.400	8.910	21.450	1.000	1.557	N	N
1	CS137	616.000	30.800	467.000	20.000	1.319	W	A
1	PU239	5.520	0.403	5.204	0.428	1.061	A	
1	SR90	728.000	18.900	736.100	7.700	0.989	A	N
Matrix: WA Water Bq / L								
1	AM241	0.818	0.098	1.146	0.051	0.714	N	A
1	CO60	54.300	1.520	51.100	3.000	1.063	A	A
1	CS137	40.400	1.780	39.375	2.405	1.026	A	W
1	H3	106.000	5.860	121.080	6.780	0.875	A	
1	PU238	1.160	0.100	0.772	0.037	1.503	N	N
1	PU239	0.196	0.032	1.009	0.058	0.194	N	W
1	SR90	3.880	0.217	4.104	0.045	0.945	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 50 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	0.970	0.120	1.610	0.160	0.602	W	W
1	GROSS BETA	1.370	0.110	1.560	0.160	0.878	W	A

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 50 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	1.660	0.200	1.610	0.160	1.031	A	
1	GROSS BETA	2.070	0.170	1.560	0.160	1.327	A	
Matrix: SO Soil Bq / kg								
1	AC228	93.600	44.000	47.150	2.989	1.985	N	
1	BI214	68.800	23.300	69.900	5.660	0.984	A	
1	CS137	892.000	108.000	659.500	24.950	1.353	N	
1	K40	577.000	170.000	362.750	20.156	1.591	N	
1	PB212	63.600	15.500	47.925	2.572	1.327	W	
1	PB214	95.500	27.800	71.000	7.035	1.345	W	
1	TH234	42.600	21.100	138.000	4.080	0.309	N	
Matrix: WA Water Bq / L								
1	CO60	51.800	8.880	51.100	3.000	1.014	A	
1	CS137	42.200	7.400	39.375	2.405	1.072	A	
1	GROSS ALPHA	1045.000	162.000	1090.000	20.000	0.959	A	
1	GROSS BETA	1294.000	114.000	1100.000	40.000	1.176	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 50 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	3.190	0.490	3.010	0.140	1.060	A	
1	CO60	5.200	0.640	4.960	0.280	1.048	A	A
1	CS137	6.570	0.820	6.050	0.300	1.086	A	A
1	GROSS ALPHA	1.900	0.220	1.610	0.160	1.180	A	A
1	GROSS BETA	1.630	0.230	1.560	0.160	1.045	A	A
1	SB125	4.320	0.510	3.590	0.310	1.203	W	A
Matrix: SO Soil Bq / kg								
1	CS137	666.000	23.000	659.500	24.950	1.010	A	A
1	K40	370.000	17.000	362.750	20.156	1.020	A	A
Matrix: WA Water Bq / L								
1	CO60	54.100	7.600	51.100	3.000	1.059	A	A
1	CS137	41.600	6.600	39.375	2.405	1.057	A	A
1	H3	123.000	22.000	121.080	6.780	1.016	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 50 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	5.840	0.570	4.960	0.280	1.177	W	A
1	CS137	7.450	1.090	6.050	0.300	1.231	W	A
1	SB125	4.170	0.510	3.590	0.310	1.162	A	
Matrix: SO Soil Bq / kg								
1	AC228	62.300	6.550	47.150	2.989	1.321	W	
1	CS137	846.000	91.000	659.500	24.950	1.283	W	A
1	K40	455.000	46.000	362.750	20.156	1.254	W	A
Matrix: VE Vegetation Bq / kg								
1	CO60	35.600	3.190	21.450	1.000	1.660	N	A
1	CS137	791.000	86.000	467.000	20.000	1.694	N	A
1	K40	1086.000	105.000	656.500	20.000	1.654	N	A
Matrix: WA Water Bq / L								
1	CO60	54.000	4.820	51.100	3.000	1.057	A	W
1	CS137	40.900	4.510	39.375	2.405	1.039	A	W
1	H3	131.000	8.000	121.080	6.780	1.082	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 50 Results by Laboratory**Lab:** SK Savannah River Plant

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	0.260	0.030	0.134	0.001	1.945	W	A
1	CO57	3.040	0.200	3.010	0.140	1.010	A	
1	CO60	5.000	0.500	4.960	0.280	1.008	A	A
1	CS137	5.820	0.460	6.050	0.300	0.962	A	A
1	SB125	3.610	0.420	3.590	0.310	1.006	A	W
Matrix: SO Soil Bq / kg								
1	AC228	50.500	3.200	47.150	2.989	1.071	A	A
1	AM241	7.300	0.700	4.894	0.969	1.492	W	A
1	BI214	71.200	4.400	69.900	5.660	1.019	A	A
1	CS137	746.000	44.000	659.500	24.950	1.131	A	A
1	K40	373.000	22.000	362.750	20.156	1.028	A	A
1	PB212	53.900	3.700	47.925	2.572	1.125	A	A
1	PB214	74.200	4.600	71.000	7.035	1.045	A	A
1	TH234	144.000	10.000	138.000	4.080	1.043	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.200	0.200	3.522	0.590	0.909	A	
1	CO60	21.400	0.200	21.450	1.000	0.998	A	
1	CS137	496.000	1.000	467.000	20.000	1.062	A	
1	K40	600.000	4.000	656.500	20.000	0.914	A	
Matrix: WA Water Bq / L								
1	AM241	1.180	0.230	1.146	0.051	1.030	A	A
1	Bq U	0.548	0.026	0.541	0.025	1.013	A	
1	CO60	53.900	4.500	51.100	3.000	1.055	A	A
1	CS137	41.700	2.600	39.375	2.405	1.059	A	A
1	H3	121.000	8.000	121.080	6.780	0.999	A	
1	PU238	0.675	0.038	0.772	0.037	0.875	W	N
1	PU239	0.877	0.041	1.009	0.058	0.869	W	N
1	U234	0.263	0.011	0.269	0.015	0.980	A	
1	U238	0.275	0.012	0.262	0.016	1.050	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 50 Results by Laboratory**Lab:** SL Stanford Linear Accelerator Center

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
1	CO60	52.000	4.000	51.100	3.000	1.018	A	A
1	CS137	40.000	3.000	39.375	2.405	1.016	A	A
1	H3	127.000	7.000	121.080	6.780	1.049	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 50 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	0.147	0.032	0.134	0.001	1.099	A	A
1	Bq U	0.132	0.029	0.123	0.004	1.072	A	
1	PU238	0.314	0.060	0.272	0.001	1.154	W	A
1	PU239	0.151	0.031	0.124	0.003	1.215	W	A
Matrix: SO Soil Bq / kg								
1	AM241	4.240	2.385	4.894	0.969	0.866	A	A
1	Bq U	290.551	43.878	291.000	3.000	0.998	A	
1	PU239	7.897	3.135	8.112	1.068	0.974	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.686	1.308	3.522	0.590	1.047	A	A
1	CM244	1.878	0.947	1.671	0.541	1.124	A	A
1	PU239	5.790	1.686	5.204	0.428	1.113	A	A
Matrix: WA Water Bq / L								
1	AM241	1.165	0.179	1.146	0.051	1.017	A	A
1	Bq U	0.607	0.135	0.541	0.025	1.122	A	
1	PU238	0.813	0.134	0.772	0.037	1.054	A	A
1	PU239	0.981	0.154	1.009	0.058	0.972	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 50 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	0.148	0.016	0.134	0.001	1.107	A	A
1	CO60	5.110	0.740	4.960	0.280	1.030	A	A
1	CS137	6.020	0.870	6.050	0.300	0.995	A	A
1	GROSS ALPHA	1.520	0.130	1.610	0.160	0.944	A	A
1	GROSS BETA	1.450	0.120	1.560	0.160	0.929	A	A
1	PU238	0.299	0.033	0.272	0.001	1.098	A	A
1	PU239	0.139	0.017	0.124	0.003	1.118	A	A
1	SB125	4.310	0.630	3.590	0.310	1.201	W	N
1	SR90	0.630	0.120	0.644	0.014	0.978	A	A
1	U234	0.060	0.009	0.060	0.002	1.001	A	A
1	U238	0.061	0.009	0.061	0.003	0.996	A	A

Matrix: SO Soil Bq / kg

1	AC228	57.900	4.500	47.150	2.989	1.228	A	A
1	AM241	4.580	0.760	4.894	0.969	0.936	A	A
1	BI214	74.800	6.000	69.900	5.660	1.070	A	A
1	CS137	743.000	76.000	659.500	24.950	1.127	A	A
1	K40	472.000	50.000	362.750	20.156	1.301	W	W
1	PB212	53.700	5.500	47.925	2.572	1.121	A	A
1	PB214	76.100	5.900	71.000	7.035	1.072	A	A
1	PU239	10.830	1.850	8.112	1.068	1.335	W	A
1	SR90	41.200	19.600	32.400	0.529	1.272	A	A
1	TH234	90.600	6.900	138.000	4.080	0.657	W	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.340	0.430	3.522	0.590	0.948	A	A
1	CM244	1.710	0.310	1.671	0.541	1.024	A	A
1	CO60	24.100	4.200	21.450	1.000	1.124	A	A
1	CS137	529.000	55.000	467.000	20.000	1.133	A	A
1	K40	718.000	108.000	656.500	20.000	1.094	A	A
1	PU239	4.780	0.800	5.204	0.428	0.918	A	A
1	SR90	822.000	99.000	736.100	7.700	1.117	A	W

Matrix: WA Water Bq / L

1	AM241	1.330	0.150	1.146	0.051	1.161	A	W
1	CO60	55.000	4.000	51.100	3.000	1.076	A	A
1	CS137	41.500	2.700	39.375	2.405	1.054	A	A
1	GROSS ALPHA	940.000	103.000	1090.000	20.000	0.862	A	W
1	GROSS BETA	1130.000	100.000	1100.000	40.000	1.027	A	A
1	H3	128.000	18.000	121.080	6.780	1.057	A	A
1	PU238	0.858	0.120	0.772	0.037	1.112	W	W
1	PU239	1.106	0.130	1.009	0.058	1.096	A	W
1	SR90	2.830	0.550	4.104	0.045	0.690	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 50 Results by Laboratory**Lab:** SR Savannah River Environmental Laboratory

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	U234	0.282	0.052	0.269	0.015	1.050	A	A
1	U238	0.279	0.053	0.262	0.016	1.065	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 AcceptableIf the evaluation system is not appropriate for the types of analyses performed in your lab, apply a site specific evaluation.

QAP 50 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	119.200	6.900	121.080	6.780	0.984	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 50 Results by Laboratory**Lab:** SW Southwest Research Institute, San Antonio, TX

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	0.180	0.040	0.134	0.001	1.346	A	W
1	CO60	4.890	0.070	4.960	0.280	0.986	A	A
1	CS137	6.010	0.090	6.050	0.300	0.993	A	A
1	GROSS ALPHA	1.420	0.020	1.610	0.160	0.882	A	A
1	GROSS BETA	1.500	0.030	1.560	0.160	0.962	A	W
1	PU238	0.020	0.050	0.272	0.001	0.073	N	N
1	PU239	0.080	0.030	0.124	0.003	0.644	N	N
1	SB125	3.440	0.110	3.590	0.310	0.958	A	A
1	SR90	2.350	0.230	0.644	0.014	3.649	N	N
1	ug U	5.290		4.945	0.227	1.070	A	
Matrix: SO Soil Bq / kg								
1	AC228	72.800	2.410	47.150	2.989	1.544	W	A
1	AM241	11.180	3.230	4.894	0.969	2.284	W	A
1	BI214	79.000	5.110	69.900	5.660	1.130	A	A
1	CS137	844.000	3.700	659.500	24.950	1.280	W	W
1	K40	453.000	27.100	362.750	20.156	1.249	A	W
1	PB212	67.400	3.220	47.925	2.572	1.406	N	A
1	PB214	92.100	5.220	71.000	7.035	1.297	W	A
1	PU239	2.090	0.550	8.112	1.068	0.258	N	N
1	SR90	36.360	22.630	32.400	0.529	1.122	A	N
1	TH234	163.000	83.200	138.000	4.080	1.181	A	A
1	ug U	11.800		11.800	0.300	1.000	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	9.300	0.940	3.522	0.590	2.641	W	N
1	CM244	1.920	0.500	1.671	0.541	1.149	A	W
1	CO60	34.400	1.570	21.450	1.000	1.604	N	W
1	CS137	691.000	2.950	467.000	20.000	1.480	N	W
1	K40	912.000	15.700	656.500	20.000	1.389	W	W
1	PU239	4.690	0.660	5.204	0.428	0.901	A	W
1	SR90	637.000	56.000	736.100	7.700	0.865	A	N
Matrix: WA Water Bq / L								
1	AM241	1.620	0.220	1.146	0.051	1.414	W	W
1	CO60	56.260	0.150	51.100	3.000	1.101	A	A
1	CS137	44.680	0.150	39.375	2.405	1.135	A	A
1	GROSS ALPHA	1262.000	21.670	1090.000	20.000	1.158	A	W
1	GROSS BETA	1290.000	19.530	1100.000	40.000	1.173	A	A
1	PU238	0.410	0.120	0.772	0.037	0.531	N	N
1	PU239	0.700	0.090	1.009	0.058	0.694	N	W
1	SR90	6.010	0.430	4.104	0.045	1.464	W	N
1	ug U	0.023		0.021	0.001	1.099	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 50 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	0.020	0.134	0.001	1.047	A	
1	CO57	3.320	0.060	3.010	0.140	1.103	A	
1	CO60	5.280	0.150	4.960	0.280	1.065	A	A
1	CS137	6.960	0.150	6.050	0.300	1.150	W	A
1	GROSS ALPHA	1.240	0.030	1.610	0.160	0.770	W	W
1	GROSS BETA	1.980	0.040	1.560	0.160	1.269	A	A
1	PU238	0.260	0.020	0.272	0.001	0.955	A	
1	PU239	0.120	0.020	0.124	0.003	0.965	A	
1	SB125	4.350	0.300	3.590	0.310	1.212	W	A
1	SR90	0.650	0.190	0.644	0.014	1.009	A	A
1	U234	0.070	0.030	0.060	0.002	1.167	A	
1	U238	0.070	0.030	0.061	0.003	1.143	A	

Matrix: SO Soil Bq / kg

1	AC228	45.100	7.400	47.150	2.989	0.957	A	A
1	AM241	5.650	2.410	4.894	0.969	1.154	A	
1	BI214	67.300	3.300	69.900	5.660	0.963	A	A
1	CS137	620.500	5.900	659.500	24.950	0.941	A	A
1	K40	355.700	24.600	362.750	20.156	0.981	A	A
1	PB212	47.900	3.000	47.925	2.572	0.999	A	A
1	PB214	70.100	4.800	71.000	7.035	0.987	A	A
1	PU239	7.320	1.320	8.112	1.068	0.902	A	
1	SR90	28.300	3.500	32.400	0.529	0.873	A	A
1	TH234	227.400	35.200	138.000	4.080	1.648	W	
1	U234	132.900	6.900	140.667	1.155	0.945	A	
1	U238	139.400	7.000	145.000	1.732	0.961	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.350	0.850	3.522	0.590	0.951	A	
1	CM244	0.560	0.410	1.671	0.541	0.335	N	
1	CO60	21.000	1.900	21.450	1.000	0.979	A	A
1	CS137	453.900	5.700	467.000	20.000	0.972	A	W
1	K40	667.600	33.700	656.500	20.000	1.017	A	A
1	SR90	704.800	27.800	736.100	7.700	0.957	A	A

Matrix: WA Water Bq / L

1	AM241	1.220	0.160	1.146	0.051	1.065	A	
1	CO60	54.400	2.000	51.100	3.000	1.065	A	A
1	CS137	43.500	2.000	39.375	2.405	1.105	A	A
1	FE55	81.500	19.500	97.400	1.650	0.837	A	A
1	GROSS ALPHA	1169.100	37.000	1090.000	20.000	1.073	A	A
1	GROSS BETA	1274.600	33.300	1100.000	40.000	1.159	A	A
1	H3	90.300	24.800	121.080	6.780	0.746	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 50 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	NI63	125.800	6.300	114.000	10.000	1.104	A	
1	PU238	0.800	0.010	0.772	0.037	1.037	A	
1	PU239	1.030	0.070	1.009	0.058	1.021	A	
1	SR90	3.630	1.200	4.104	0.045	0.885	W	W
1	U234	0.330	0.080	0.269	0.015	1.229	W	
1	U238	0.330	0.080	0.262	0.016	1.260	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 50 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	0.120	0.020	0.134	0.001	0.898	A	A
1	CO60	5.300	0.500	4.960	0.280	1.069	A	A
1	CS137	6.900	0.700	6.050	0.300	1.140	W	A
1	PU238	0.260	0.040	0.272	0.001	0.955	A	A
1	PU239	0.130	0.030	0.124	0.003	1.046	A	A
1	SB125	4.000	0.400	3.590	0.310	1.114	A	A
1	SR90	0.510	0.140	0.644	0.014	0.792	W	W
Matrix: SO Soil Bq / kg								
1	AC228	55.000	6.000	47.150	2.989	1.166	A	
1	AM241	4.500	1.300	4.894	0.969	0.919	A	N
1	CS137	7600.000	800.000	659.500	24.950	11.524	N	W
1	K40	3900.000	400.000	362.750	20.156	10.751	N	A
1	PB212	53.000	5.000	47.925	2.572	1.106	A	
1	PB214	89.000	9.000	71.000	7.035	1.254	A	
1	PU239	7.100	1.800	8.112	1.068	0.875	W	A
1	SR90	17.000	4.000	32.400	0.529	0.525	N	A
1	ug U	11.200	2.000	11.800	0.300	0.949	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.200	0.700	3.522	0.590	0.909	A	A
1	CM244	2.100	0.500	1.671	0.541	1.257	A	A
1	CO60	25.000	3.000	21.450	1.000	1.166	A	A
1	CS137	5800.000	600.000	467.000	20.000	12.420	N	W
1	K40	7400.000	700.000	656.500	20.000	11.272	N	A
1	PU239	5.600	1.000	5.204	0.428	1.076	A	A
1	SR90	760.000	10.000	736.100	7.700	1.032	A	A
Matrix: WA Water Bq / L								
1	AM241	1.100	0.200	1.146	0.051	0.960	A	A
1	CO60	53.000	5.000	51.100	3.000	1.037	A	A
1	CS137	41.000	4.000	39.375	2.405	1.041	A	A
1	FE55	84.000	21.000	97.400	1.650	0.862	A	A
1	GROSS ALPHA	1600.000	100.000	1090.000	20.000	1.468	N	A
1	GROSS BETA	1100.000	100.000	1100.000	40.000	1.000	A	A
1	H3	130.000	10.000	121.080	6.780	1.074	A	N
1	NI63	120.000	10.000	114.000	10.000	1.053	A	A
1	PU238	0.700	0.200	0.772	0.037	0.907	A	A
1	PU239	0.940	0.200	1.009	0.058	0.931	A	A
1	SR90	3.800	0.400	4.104	0.045	0.926	A	A
1	ug U	0.025	0.004	0.021	0.001	1.179	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 50 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	0.133	0.018	0.134	0.001	0.995	A	
1	CO57	2.380	0.100	3.010	0.140	0.791	A	
1	CO60	4.060	0.187	4.960	0.280	0.819	W	A
1	CS137	4.670	0.210	6.050	0.300	0.772	W	A
1	GROSS ALPHA	0.619	0.103	1.610	0.160	0.384	N	A
1	GROSS BETA	0.374	0.072	1.560	0.160	0.240	N	A
1	PU238	0.291	0.035	0.272	0.001	1.069	A	A
1	PU239	0.136	0.018	0.124	0.003	1.094	A	A
1	SB125	2.980	0.310	3.590	0.310	0.830	A	A
1	SR90	0.711	0.188	0.644	0.014	1.104	A	A
1	ug U	5.210	0.267	4.945	0.227	1.054	A	A

Matrix: SO Soil Bq / kg

3	AC228	48.100	14.900	47.150	2.989	1.020	A	A
1	AC228	48.100	14.900	47.150	2.989	1.020	A	A
2	AC228	48.100	14.900	47.150	2.989	1.020	A	A
1	AM241	4.884	1.720	4.894	0.969	0.998	A	A
3	AM241	4.884	1.720	4.894	0.969	0.998	A	A
2	AM241	4.884	1.720	4.894	0.969	0.998	A	A
3	BI214	64.900	7.730	69.900	5.660	0.928	A	A
1	BI214	64.900	7.730	69.900	5.660	0.928	A	A
2	BI214	64.900	7.730	69.900	5.660	0.928	A	A
1	CS137	711.000	23.500	659.500	24.950	1.078	A	A
2	CS137	711.000	23.500	659.500	24.950	1.078	A	A
3	CS137	711.000	23.500	659.500	24.950	1.078	A	A
1	K40	406.000	47.000	362.750	20.156	1.119	A	A
3	K40	406.000	47.000	362.750	20.156	1.119	A	A
2	K40	406.000	47.000	362.750	20.156	1.119	A	A
1	PB212	60.800	5.140	47.925	2.572	1.269	W	A
3	PB212	60.800	5.140	47.925	2.572	1.269	W	A
2	PB212	60.800	5.140	47.925	2.572	1.269	W	A
3	PB214	78.600	9.910	71.000	7.035	1.107	A	A
2	PB214	78.600	9.910	71.000	7.035	1.107	A	A
1	PB214	78.600	9.910	71.000	7.035	1.107	A	A
1	PU239	9.324	1.813	8.112	1.068	1.149	A	A
2	PU239	9.324	1.813	8.112	1.068	1.149	A	A
3	PU239	9.324	1.813	8.112	1.068	1.149	A	A
3	SR90	35.200	7.290	32.400	0.529	1.086	A	A
1	SR90	35.200	7.290	32.400	0.529	1.086	A	A
2	SR90	35.200	7.290	32.400	0.529	1.086	A	A
3	TH234	164.000	29.200	138.000	4.080	1.188	A	A
2	TH234	164.000	29.200	138.000	4.080	1.188	A	A
1	TH234	164.000	29.200	138.000	4.080	1.188	A	A
3	ug U	11.800	0.606	11.800	0.300	1.000	A	A
1	ug U	11.800	0.606	11.800	0.300	1.000	A	A
2	ug U	11.800	0.606	11.800	0.300	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 50 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: VE Vegetation Bq / kg								
1	AM241	3.330	0.537	3.522	0.590	0.945	A	A
1	CM244	1.147	0.259	1.671	0.541	0.687	W	W
1	CO60	26.200	2.630	21.450	1.000	1.221	A	A
1	CS137	530.000	15.800	467.000	20.000	1.135	A	A
1	K40	681.000	40.700	656.500	20.000	1.037	A	W
1	PU239	5.032	0.629	5.204	0.428	0.967	A	A
1	SR90	752.000	93.000	736.100	7.700	1.022	A	N

Matrix: WA Water Bq / L

1	AM241	1.124	0.139	1.146	0.051	0.981	A	
1	CO60	55.800	1.770	51.100	3.000	1.092	A	A
1	CS137	44.700	1.420	39.375	2.405	1.135	A	A
1	GROSS ALPHA	1560.000	182.000	1090.000	20.000	1.431	N	N
1	GROSS BETA	1130.000	91.100	1100.000	40.000	1.027	A	A
1	H3	113.000	8.280	121.080	6.780	0.933	A	
1	PU238	0.796	0.120	0.772	0.037	1.032	A	A
1	PU239	1.042	0.147	1.009	0.058	1.032	A	A
1	SR90	3.330	0.323	4.104	0.045	0.811	W	A
1	ug U	0.023	0.001	0.021	0.001	1.085	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 50 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	0.141	0.007	0.134	0.001	1.056	A	A
1	CO60	10.560	0.430	4.960	0.280	2.129	N	A
1	CS137	12.950	0.360	6.050	0.300	2.140	N	A
1	GROSS ALPHA	2.130	0.040	1.610	0.160	1.323	A	A
1	GROSS BETA	1.322	0.027	1.560	0.160	0.847	W	W
1	PU238	0.284	0.013	0.272	0.001	1.042	A	A
1	PU239	0.137	0.008	0.124	0.003	1.102	A	A
1	SB125	7.666	0.485	3.590	0.310	2.135	N	N
1	SR90	0.626	0.038	0.644	0.014	0.971	A	A
1	U234	0.064	0.003	0.060	0.002	1.062	A	A
1	U238	0.065	0.004	0.061	0.003	1.056	A	A
1	ug U	5.465	0.332	4.945	0.227	1.105	A	A

Matrix: SO Soil Bq / kg

1	AM241	5.073	0.758	4.894	0.969	1.037	A	A
1	BI214	54.590	4.680	69.900	5.660	0.781	W	
1	CS137	585.800	7.300	659.500	24.950	0.888	W	N
1	K40	332.000	30.600	362.750	20.156	0.915	A	N
1	PB212	45.480	2.820	47.925	2.572	0.949	A	
1	PB214	48.600	6.810	71.000	7.035	0.685	W	
1	PU239	8.082	0.700	8.112	1.068	0.996	A	A
1	SR90	33.950	2.749	32.400	0.529	1.048	A	A
1	U234	136.000	4.706	140.667	1.155	0.967	A	A
1	U238	141.400	9.634	145.000	1.732	0.975	A	A
1	ug U	10.080	0.640	11.800	0.300	0.854	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.511	0.534	3.522	0.590	0.997	A	A
1	CM244	1.924	0.419	1.671	0.541	1.152	A	A
1	CO60	19.620	3.050	21.450	1.000	0.915	A	N
1	CS137	426.200	7.800	467.000	20.000	0.913	A	N
1	K40	576.600	41.000	656.500	20.000	0.878	W	N
1	PU239	5.168	0.524	5.204	0.428	0.993	A	A
1	SR90	708.080	21.990	736.100	7.700	0.962	A	A

Matrix: WA Water Bq / L

1	AM241	1.148	0.042	1.146	0.051	1.001	A	A
3	CO60	51.850	0.145	51.100	3.000	1.015	A	N
3	CS137	41.640	0.113	39.375	2.405	1.058	A	N
3	FE55	94.380	1.964	97.400	1.650	0.969	A	A
5	GROSS ALPHA	985.500	17.630	1090.000	20.000	0.904	A	W
3	GROSS BETA	1023.500	11.300	1100.000	40.000	0.930	A	A
3	H3	133.320	5.880	121.080	6.780	1.101	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 50 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								
3	NI63	105.980	1.113	114.000	10.000	0.930	A	A
3	PU238	0.824	0.032	0.772	0.037	1.067	A	A
3	PU239	1.046	0.039	1.009	0.058	1.036	A	A
1	SR90	3.664	0.099	4.104	0.045	0.893	A	A
3	U234	0.270	0.010	0.269	0.015	1.007	A	A
3	U238	0.282	0.010	0.262	0.016	1.075	A	A
3	ug U	0.023	0.001	0.021	0.001	1.104	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 50 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	AM241	0.130	0.050	0.134	0.001	0.972	A	
1	Bq U	0.130		0.123	0.004	1.056	A	
1	CO60	9.010	0.397	4.960	0.280	1.817	N	
1	CS137	9.000	0.360	6.050	0.300	1.488	N	
1	GROSS ALPHA	0.568	0.018	1.610	0.160	0.353	N	W
1	GROSS BETA	1.440	0.070	1.560	0.160	0.923	A	A
1	PU238	0.420	0.165	0.272	0.001	1.543	N	A
1	PU239	0.160	0.007	0.124	0.003	1.287	W	A
1	SB125	6.310	0.470	3.590	0.310	1.758	N	
1	SR90	0.940	0.203	0.644	0.014	1.460	W	
1	U234	0.065	0.003	0.060	0.002	1.084	A	A
1	U238	0.065	0.004	0.061	0.003	1.061	A	A
1	ug U	5.240	0.340	4.945	0.227	1.060	A	

Matrix: SO Soil Bq / kg

1	AM241	5.820	0.482	4.894	0.969	1.189	A	A
1	BI214	47.670	7.070	69.900	5.660	0.682	N	A
1	CS137	492.600	50.700	659.500	24.950	0.747	N	N
1	K40	282.000	46.400	362.750	20.156	0.777	N	N
1	PB212	35.880	6.750	47.925	2.572	0.749	W	A
1	PB214	49.770	8.590	71.000	7.035	0.701	W	A
1	PU239	7.130	0.017	8.112	1.068	0.879	W	A
1	SR90	45.390	1.970	32.400	0.529	1.401	A	A
1	U234	110.260	0.160	140.667	1.155	0.784	A	A
1	U238	120.860	10.480	145.000	1.732	0.834	A	A
1	ug U	10.200	0.760	11.800	0.300	0.864	A	

Matrix: VE Vegetation Bq / kg

1	AM241	3.280	0.499	3.522	0.590	0.931	A	A
1	CM244	1.380	0.300	1.671	0.541	0.826	A	
1	CO60	17.050	2.960	21.450	1.000	0.795	W	N
1	CS137	387.460	40.500	467.000	20.000	0.830	W	N
1	K40	503.060	76.000	656.500	20.000	0.766	N	N
1	PU239	6.960	3.760	5.204	0.428	1.337	W	
1	SR90	528.920	7.400	736.100	7.700	0.719	W	A

Matrix: WA Water Bq / L

1	AM241	0.900	0.033	1.146	0.051	0.785	W	A
1	CO60	52.630	3.830	51.100	3.000	1.030	A	A
1	CS137	39.460	3.890	39.375	2.405	1.002	A	A
1	FE55	89.580	2.670	97.400	1.650	0.920	A	A
1	GROSS ALPHA	991.000	28.460	1090.000	20.000	0.909	A	A
1	GROSS BETA	1188.000	19.770	1100.000	40.000	1.080	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 50 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: WA Water Bq/L								
1	H3	147.580	5.880	121.080	6.780	1.219	A	A
1	NI63	94.720	11.590	114.000	10.000	0.831	A	A
1	PU238	0.711	0.187	0.772	0.037	0.921	A	W
1	PU239	0.934	0.230	1.009	0.058	0.925	A	W
1	SR90	4.500	0.380	4.104	0.045	1.096	A	A
1	U234	0.280	0.040	0.269	0.015	1.043	A	A
1	U238	0.280	0.030	0.262	0.016	1.069	A	A
1	ug U	0.022	0.002	0.021	0.001	1.057	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 50 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	CO60	5.050	0.150	4.960	0.280	1.018	A	A
1	CS137	6.060	0.100	6.050	0.300	1.002	A	A
1	GROSS ALPHA	1.480	0.020	1.610	0.160	0.919	A	A
1	GROSS BETA	1.500	0.040	1.560	0.160	0.962	A	A
1	SB125	3.920	0.210	3.590	0.310	1.092	A	A
1	SR90	0.860	0.030	0.644	0.014	1.335	W	N
Matrix: SO Soil Bq / kg								
1	CS137	641.640	22.120	659.500	24.950	0.973	A	A
1	K40	328.760	3.490	362.750	20.156	0.906	A	A
1	SR90	36.560	0.840	32.400	0.529	1.128	A	W
Matrix: VE Vegetation Bq / kg								
1	CO60	20.750	1.060	21.450	1.000	0.967	A	A
1	CS137	427.870	3.210	467.000	20.000	0.916	A	A
1	K40	631.550	6.560	656.500	20.000	0.962	A	A
1	SR90	780.060	5.090	736.100	7.700	1.060	A	A
Matrix: WA Water Bq / L								
1	CO60	52.520	0.560	51.100	3.000	1.028	A	A
1	CS137	41.810	0.470	39.375	2.405	1.062	A	A
1	GROSS ALPHA	1074.600	31.000	1090.000	20.000	0.986	A	A
1	GROSS BETA	1235.700	11.800	1100.000	40.000	1.123	A	A
1	H3	93.790	3.940	121.080	6.780	0.775	W	W
1	SR90	4.070	0.240	4.104	0.045	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 50 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: SO Soil Bq / kg								
1	CS137	760.000	20.000	659.500	24.950	1.152	A	
1	K40	400.000	20.000	362.750	20.156	1.103	A	
1	SR90	28.200	3.500	32.400	0.529	0.870	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	27.000	1.000	21.450	1.000	1.259	W	
1	CS137	560.000	10.000	467.000	20.000	1.199	A	
1	K40	770.000	30.000	656.500	20.000	1.173	A	
1	SR90	600.000	60.000	736.100	7.700	0.815	A	
Matrix: WA Water Bq / L								
1	CO60	52.300	1.200	51.100	3.000	1.023	A	
1	CS137	43.500	1.200	39.375	2.405	1.105	A	
1	GROSS ALPHA	840.000	20.000	1090.000	20.000	0.771	W	
1	GROSS BETA	1100.000	10.000	1100.000	40.000	1.000	A	
1	H3	140.000	10.000	121.080	6.780	1.156	A	
1	SR90	3.300	0.200	4.104	0.045	0.804	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 50 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	0.197	0.077	0.134	0.001	1.475	W	
1	CO57	3.629	0.128	3.010	0.140	1.206	W	
1	CO60	7.960	0.841	4.960	0.280	1.605	N	
1	CS137	8.990	0.350	6.050	0.300	1.486	N	
1	SB125	4.793	0.260	3.590	0.310	1.335	W	
Matrix: SO Soil Bq / kg								
1	AM241	3.674	1.990	4.894	0.969	0.751	W	
1	CS137	632.380	32.569	659.500	24.950	0.959	A	
1	K40	290.780	21.000	362.750	20.156	0.802	W	
Matrix: VE Vegetation Bq / kg								
1	CO60	9.034	0.818	21.450	1.000	0.421	N	
1	CS137	1357.200	71.530	467.000	20.000	2.906	N	
1	K40	809.860	26.788	656.500	20.000	1.234	A	

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 50 Results by Laboratory**Lab:** TT Tracer Technologies International, Inc., Cleveland

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	58.000	1.800	51.100	3.000	1.135	A	A
1	CS137	45.300	3.100	39.375	2.405	1.150	A	A
1	H3	120.000	4.900	121.080	6.780	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 50 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	CO60	4.880	0.050	4.960	0.280	0.984	A	A
1	CS137	5.980	0.060	6.050	0.300	0.988	A	A
1	GROSS ALPHA	1.640	0.030	1.610	0.160	1.019	A	A
1	GROSS BETA	1.570	0.040	1.560	0.160	1.006	A	W
1	SB125	2.700	0.080	3.590	0.310	0.752	W	A
1	SR90	0.600	0.050	0.644	0.014	0.932	A	
Matrix: SO Soil Bq / kg								
1	AC228	45.500	2.300	47.150	2.989	0.965	A	A
1	AM241	4.700	0.100	4.894	0.969	0.960	A	
1	BI214	62.500	1.200	69.900	5.660	0.894	A	A
1	CS137	702.000	7.000	659.500	24.950	1.064	A	A
1	K40	382.000	19.000	362.750	20.156	1.053	A	A
1	PB212	50.000	1.000	47.925	2.572	1.043	A	A
1	PB214	72.000	2.000	71.000	7.035	1.014	A	A
1	PU238	0.450	0.040	0.364	0.085	1.237	A	
1	PU239	8.160	0.280	8.112	1.068	1.006	A	
1	SR90	36.100	2.600	32.400	0.529	1.114	A	
Matrix: VE Vegetation Bq / kg								
1	CO60	24.000	1.000	21.450	1.000	1.119	A	A
1	CS137	529.000	5.000	467.000	20.000	1.133	A	A
1	K40	676.000	20.000	656.500	20.000	1.030	A	A
1	SR90	716.000	9.000	736.100	7.700	0.973	A	
Matrix: WA Water Bq / L								
1	AM241	1.120	0.050	1.146	0.051	0.977	A	
1	CO60	54.000	0.500	51.100	3.000	1.057	A	A
1	CS137	42.000	0.800	39.375	2.405	1.067	A	A
1	GROSS ALPHA	1121.000	50.000	1090.000	20.000	1.028	A	W
1	GROSS BETA	1021.000	43.000	1100.000	40.000	0.928	A	A
1	H3	127.000	2.000	121.080	6.780	1.049	A	
1	PU238	0.810	0.020	0.772	0.037	1.050	A	
1	PU239	1.030	0.030	1.009	0.058	1.021	A	
1	SR90	3.200	0.200	4.104	0.045	0.780	W	
1	U234	0.331	0.008	0.269	0.015	1.233	W	
1	U238	0.312	0.008	0.262	0.016	1.191	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 50 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	0.148	0.008	0.134	0.001	1.107	A	A
1	CO57	3.210	0.030	3.010	0.140	1.066	A	
1	CO60	5.160	0.060	4.960	0.280	1.040	A	A
1	CS137	6.850	0.080	6.050	0.300	1.132	A	A
1	GROSS ALPHA	1.910	0.070	1.610	0.160	1.186	A	A
1	GROSS BETA	1.490	0.070	1.560	0.160	0.955	A	A
1	PU238	0.286	0.006	0.272	0.001	1.051	A	A
1	PU239	0.129	0.004	0.124	0.003	1.038	A	A
1	SB125	4.280	0.100	3.590	0.310	1.192	W	A
1	U234	0.068	0.003	0.060	0.002	1.134	A	A
1	U238	0.068	0.003	0.061	0.003	1.110	A	A
Matrix: SO Soil Bq / kg								
1	AC228	54.500	1.800	47.150	2.989	1.156	A	A
1	AM241	5.509	0.455	4.894	0.969	1.126	A	A
1	BI214	65.500	1.400	69.900	5.660	0.937	A	A
1	CS137	730.400	2.900	659.500	24.950	1.108	A	A
1	K40	408.100	9.200	362.750	20.156	1.125	A	A
1	PB212	51.000	1.200	47.925	2.572	1.064	A	
1	PB214	71.600	1.600	71.000	7.035	1.008	A	A
1	PU239	7.996	0.300	8.112	1.068	0.986	A	A
1	SR90	32.600	6.100	32.400	0.529	1.006	A	A
1	TH234	155.000	14.500	138.000	4.080	1.123	A	A
1	U234	138.713	1.406	140.667	1.155	0.986	A	A
1	U238	144.300	1.517	145.000	1.732	0.995	A	A
Matrix: VE Vegetation Bq / kg								
1	AM241	3.800	0.260	3.522	0.590	1.079	A	A
1	CO60	24.600	1.100	21.450	1.000	1.147	A	A
1	CS137	537.000	4.000	467.000	20.000	1.150	A	A
1	K40	737.000	19.000	656.500	20.000	1.123	A	A
1	PU239	5.000	0.270	5.204	0.428	0.961	A	A
1	SR90	690.000	25.000	736.100	7.700	0.937	A	A
Matrix: WA Water Bq / L								
1	AM241	1.053	0.057	1.146	0.051	0.919	A	A
1	CO60	52.690	0.490	51.100	3.000	1.031	A	A
1	CS137	42.010	0.320	39.375	2.405	1.067	A	A
1	GROSS ALPHA	1258.000	33.000	1090.000	20.000	1.154	A	A
1	GROSS BETA	1016.000	33.000	1100.000	40.000	0.924	A	A
1	H3	129.000	8.000	121.080	6.780	1.065	A	A
1	PU238	0.747	0.015	0.772	0.037	0.968	A	A
1	PU239	0.962	0.019	1.009	0.058	0.953	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 50 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: WA Water Bq/L								
1	SR90	4.270	0.690	4.104	0.045	1.040	A	W
1	U234	0.288	0.009	0.269	0.015	1.073	A	A
1	U238	0.283	0.009	0.262	0.016	1.081	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 50 Results by Laboratory**Lab:** UC Lockheed Martin, 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	5.102	0.538	4.960	0.280	1.029	A	A
1	CS137	7.145	1.592	6.050	0.300	1.181	W	N
1	GROSS ALPHA	1.800	0.080	1.610	0.160	1.118	A	A
1	GROSS BETA	1.900	0.070	1.560	0.160	1.218	A	A
Matrix: SO Soil Bq / kg								
1	CS137	739.170	86.010	659.500	24.950	1.121	A	W
1	K40	395.250	43.010	362.750	20.156	1.090	A	A
Matrix: VE Vegetation Bq / kg								
1	CO60	24.210	2.560	21.450	1.000	1.129	A	N
1	CS137	535.110	64.580	467.000	20.000	1.146	A	N
1	K40	744.440	80.690	656.500	20.000	1.134	A	N
Matrix: WA Water Bq / L								
1	CO60	54.260	5.480	51.100	3.000	1.062	A	A
1	CS137	42.340	4.900	39.375	2.405	1.075	A	A
1	GROSS ALPHA	1095.100	69.970	1090.000	20.000	1.005	A	A
1	GROSS BETA	985.570	43.540	1100.000	40.000	0.896	A	A
1	ug U	0.023		0.021	0.001	1.085	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 50 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	0.161	0.028	0.134	0.001	1.204	A	A
1	Bq U	0.160	0.027	0.123	0.004	1.300	A	A
1	CO57	3.000	0.185	3.010	0.140	0.997	A	
1	CO60	5.240	0.207	4.960	0.280	1.056	A	A
1	CS137	5.910	0.306	6.050	0.300	0.977	A	A
1	GROSS ALPHA	1.720	0.125	1.610	0.160	1.068	A	A
1	GROSS BETA	1.600	0.104	1.560	0.160	1.026	A	W
1	PU238	0.323	0.043	0.272	0.001	1.187	W	A
1	PU239	0.119	0.021	0.124	0.003	0.957	A	A
1	SB125	2.840	0.549	3.590	0.310	0.791	W	N
1	SR90	0.530	0.114	0.644	0.014	0.823	W	A
1	U234	0.079	0.021	0.060	0.002	1.318	A	
1	U238	0.075	0.016	0.061	0.003	1.225	A	

Matrix: SO Soil Bq / kg

1	AM241	4.440	1.160	4.894	0.969	0.907	A	A
1	Bq U	305.000	27.900	291.000	3.000	1.048	A	A
1	CS137	617.000	56.200	659.500	24.950	0.936	A	A
1	PU239	8.960	1.980	8.112	1.068	1.105	A	A
1	SR90	32.000	9.200	32.400	0.529	0.988	A	A
1	U234	152.000	20.100	140.667	1.155	1.081	A	
1	U238	144.000	19.100	145.000	1.732	0.993	A	
1	ug U	10.350	1.000	11.800	0.300	0.877	A	A

Matrix: WA Water Bq / L

1	AM241	1.280	0.151	1.146	0.051	1.117	A	A
1	CO60	54.000	1.330	51.100	3.000	1.057	A	A
1	GROSS ALPHA	1132.000	114.000	1090.000	20.000	1.039	A	A
1	GROSS BETA	1204.000	99.300	1100.000	40.000	1.095	A	A
1	H3	119.000	16.000	121.080	6.780	0.983	A	A
1	PU238	0.858	0.124	0.772	0.037	1.112	W	A
1	PU239	1.030	0.142	1.009	0.058	1.021	A	A
1	SR90	3.400	0.510	4.104	0.045	0.828	W	A
1	U238	0.324	0.065	0.262	0.016	1.237	W	
1	ug U	0.023	0.002	0.021	0.001	1.085	A	A

Matrix: AI Air Filter Bq / filter

1	AM241	0.150	0.020	0.134	0.001	1.122	A	A
1	Bq U	0.144	0.020	0.123	0.004	1.170	A	A
1	CO57	2.460	0.100	3.010	0.140	0.817	A	
1	CO60	4.650	0.400	4.960	0.280	0.938	A	A
1	CS137	5.400	0.400	6.050	0.300	0.893	A	A
1	GROSS ALPHA	1.690	0.200	1.610	0.160	1.050	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 50 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	GROSS BETA	1.560	0.200	1.560	0.160	1.000	A	W
1	PU238	0.280	0.030	0.272	0.001	1.029	A	A
1	PU239	0.130	0.010	0.124	0.003	1.046	A	A
1	SB125	3.410	0.300	3.590	0.310	0.950	A	A
1	SR90	0.560	0.040	0.644	0.014	0.870	A	A
1	U234	0.070	0.009	0.060	0.002	1.167	A	
1	U238	0.070	0.009	0.061	0.003	1.143	A	
Matrix: SO Soil Bq / kg								
1	AC228	61.900	27.000	47.150	2.989	1.313	W	A
1	AM241	4.300	0.400	4.894	0.969	0.879	A	A
1	BI214	67.000	25.000	69.900	5.660	0.959	A	A
1	Bq U	270.000	30.000	291.000	3.000	0.928	A	A
1	CS137	739.000	66.000	659.500	24.950	1.121	A	A
1	K40	410.000	110.000	362.750	20.156	1.130	A	W
1	PB212	51.400	25.000	47.925	2.572	1.073	A	A
1	PB214	68.000	25.000	71.000	7.035	0.958	A	A
1	PU239	7.150	0.900	8.112	1.068	0.881	W	A
1	SR90	23.400	1.600	32.400	0.529	0.722	W	A
1	TH234	137.000	15.000	138.000	4.080	0.993	A	A
1	U234	127.000	14.000	140.667	1.155	0.903	A	
1	U238	137.000	15.000	145.000	1.732	0.945	A	
Matrix: VE Vegetation Bq / kg								
1	AM241	3.130	0.400	3.522	0.590	0.889	W	A
1	CM244	2.100	0.300	1.671	0.541	1.257	A	W
1	CO60	28.400	7.000	21.450	1.000	1.324	W	W
1	CS137	567.000	54.000	467.000	20.000	1.214	A	A
1	K40	773.000	164.000	656.500	20.000	1.177	A	W
1	PU239	5.200	0.600	5.204	0.428	0.999	A	A
1	SR90	560.000	10.000	736.100	7.700	0.761	A	A
Matrix: WA Water Bq / L								
1	AM241	1.170	0.110	1.146	0.051	1.021	A	A
1	Bq U	0.570	0.060	0.541	0.025	1.054	A	A
1	CO60	52.900	4.100	51.100	3.000	1.035	A	A
1	CS137	42.400	5.800	39.375	2.405	1.077	A	A
1	GROSS ALPHA	1185.000	100.000	1090.000	20.000	1.087	A	A
1	GROSS BETA	1165.000	75.000	1100.000	40.000	1.059	A	A
1	H3	132.000	23.000	121.080	6.780	1.090	A	A
1	PU238	0.820	0.090	0.772	0.037	1.063	A	A
1	PU239	1.090	0.100	1.009	0.058	1.080	A	A
1	SR90	3.500	0.200	4.104	0.045	0.853	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 50 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	U234	0.280	0.030	0.269	0.015	1.043	A	
1	U238	0.280	0.030	0.262	0.016	1.069	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 50 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	0.152	0.031	0.134	0.001	1.137	A	W
1	Bq U	0.124	0.023	0.123	0.004	1.007	A	W
1	CO57	3.200	0.300	3.010	0.140	1.063	A	
1	CO60	5.400	0.300	4.960	0.280	1.089	A	A
1	CS137	6.900	1.100	6.050	0.300	1.140	W	A
1	GROSS ALPHA	1.850	0.040	1.610	0.160	1.149	A	A
1	GROSS BETA	1.700	0.040	1.560	0.160	1.090	A	A
1	PU238	0.270	0.050	0.272	0.001	0.992	A	A
1	PU239	0.140	0.030	0.124	0.003	1.126	A	W
1	SB125	4.400	0.400	3.590	0.310	1.226	W	A
1	SR90	0.610	0.190	0.644	0.014	0.947	A	A
1	U234	0.056	0.016	0.060	0.002	0.934	A	A
1	U238	0.065	0.016	0.061	0.003	1.061	A	W

Matrix: SO Soil Bq / kg

1	AC228	53.700	5.200	47.150	2.989	1.139	A	A
1	AM241	4.480	0.440	4.894	0.969	0.915	A	A
1	BI214	67.700	4.400	69.900	5.660	0.969	A	A
1	Bq U	300.000	10.000	291.000	3.000	1.031	A	A
1	CS137	733.000	33.000	659.500	24.950	1.111	A	A
1	K40	403.000	30.000	362.750	20.156	1.111	A	W
1	PB212	50.700	3.300	47.925	2.572	1.058	A	A
1	PB214	77.000	4.800	71.000	7.035	1.085	A	A
1	PU239	6.820	0.460	8.112	1.068	0.841	W	A
1	SR90	41.800	3.700	32.400	0.529	1.290	A	A
1	TH234	172.000	44.000	138.000	4.080	1.246	A	A
1	U234	142.000	7.000	140.667	1.155	1.009	A	A
1	U238	143.000	7.000	145.000	1.732	0.986	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	4.700	0.520	3.522	0.590	1.334	A	W
1	CM244	2.290	0.370	1.671	0.541	1.371	W	W
1	CO60	24.200	1.100	21.450	1.000	1.128	A	A
1	CS137	503.000	7.000	467.000	20.000	1.077	A	A
1	K40	825.000	22.000	656.500	20.000	1.257	W	A
1	PU239	3.320	0.450	5.204	0.428	0.638	N	A
1	SR90	855.000	15.000	736.100	7.700	1.162	W	W

Matrix: WA Water Bq / L

1	AM241	1.190	0.140	1.146	0.051	1.038	A	W
1	Bq U	0.600	0.070	0.541	0.025	1.109	A	A
1	CO60	54.400	1.100	51.100	3.000	1.065	A	A
1	CS137	42.000	1.300	39.375	2.405	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 50 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: WA Water Bq/L								
1	GROSS ALPHA	874.000	81.000	1090.000	20.000	0.802	W	A
1	GROSS BETA	1130.000	70.000	1100.000	40.000	1.027	A	A
1	H3	123.000	4.000	121.080	6.780	1.016	A	A
1	NI63	110.000	6.000	114.000	10.000	0.965	A	A
1	PU238	0.700	0.130	0.772	0.037	0.907	A	A
1	PU239	0.970	0.140	1.009	0.058	0.961	A	W
1	SR90	4.000	0.600	4.104	0.045	0.975	A	A
1	U234	0.300	0.050	0.269	0.015	1.117	A	A
1	U238	0.270	0.050	0.262	0.016	1.031	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 50 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	0.160	0.050	0.134	0.001	1.197	A	A
1	CO60	4.900	0.400	4.960	0.280	0.988	A	A
1	CS137	6.100	0.800	6.050	0.300	1.008	A	A
1	GROSS ALPHA	1.600	0.200	1.610	0.160	0.994	A	A
1	GROSS BETA	1.600	0.200	1.560	0.160	1.026	A	A
1	PU238	0.290	0.090	0.272	0.001	1.065	A	A
1	PU239	0.140	0.050	0.124	0.003	1.126	A	A
1	SB125	3.900	0.400	3.590	0.310	1.086	A	A
1	SR90	0.560	0.110	0.644	0.014	0.870	A	A
1	U234	0.150	0.050	0.060	0.002	2.502	N	A
1	U238	0.130	0.040	0.061	0.003	2.123	W	A
Matrix: SO Soil Bq / kg								
1	AM241	5.700	2.100	4.894	0.969	1.165	A	A
1	CS137	705.000	104.000	659.500	24.950	1.069	A	A
1	K40	484.000	60.000	362.750	20.156	1.334	W	W
1	PU239	9.300	3.100	8.112	1.068	1.146	A	A
1	SR90	82.000	12.000	32.400	0.529	2.531	W	A
Matrix: VE Vegetation Bq / kg								
1	AM241	4.400	1.700	3.522	0.590	1.249	A	W
1	CM244	2.200	1.100	1.671	0.541	1.317	A	A
1	CO60	16.000	2.000	21.450	1.000	0.746	W	A
1	CS137	523.000	73.000	467.000	20.000	1.120	A	A
1	K40	864.000	104.000	656.500	20.000	1.316	W	W
1	PU239	5.200	1.800	5.204	0.428	0.999	A	A
1	SR90	901.000	128.000	736.100	7.700	1.224	W	A
Matrix: WA Water Bq / L								
1	AM241	1.210	0.380	1.146	0.051	1.056	A	A
1	CO60	55.000	4.300	51.100	3.000	1.076	A	W
1	CS137	43.000	5.800	39.375	2.405	1.092	A	W
1	GROSS ALPHA	1158.000	119.000	1090.000	20.000	1.062	A	A
1	GROSS BETA	530.000	107.000	1100.000	40.000	0.482	N	A
1	H3	103.000	22.000	121.080	6.780	0.851	A	A
1	PU238	0.820	0.260	0.772	0.037	1.063	A	A
1	PU239	0.990	0.310	1.009	0.058	0.981	A	A
1	SR90	3.500	0.460	4.104	0.045	0.853	W	A
1	U234	0.140	0.050	0.269	0.015	0.521	N	A
1	U238	0.130	0.050	0.262	0.016	0.496	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 50 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	0.199	0.020	0.134	0.001	1.488	W	
1	CO60	5.180	0.122	4.960	0.280	1.044	A	A
1	CS137	6.230	0.330	6.050	0.300	1.030	A	W
1	PU239	0.173	0.025	0.124	0.003	1.392	W	
1	SB125	1.080	0.087	3.590	0.310	0.301	N	W
1	SR90	0.690	0.210	0.644	0.014	1.071	A	N
1	U238	9.460	7.700	0.061	0.003	154.474	N	
Matrix: SO Soil Bq / kg								
1	AC228	68.200	6.600	47.150	2.989	1.446	W	A
1	BI214	72.300	5.600	69.900	5.660	1.034	A	A
1	CS137	835.000	40.000	659.500	24.950	1.266	W	A
1	K40	468.000	95.000	362.750	20.156	1.290	W	A
1	PB212	60.400	7.300	47.925	2.572	1.260	W	A
1	PB214	71.100	6.000	71.000	7.035	1.001	A	A
1	PU239	17.400	5.500	8.112	1.068	2.145	N	
1	SR90	26.800	16.000	32.400	0.529	0.827	A	A
1	TH234	101.000	29.500	138.000	4.080	0.732	W	A
1	U238	325.000	280.000	145.000	1.732	2.241	N	
Matrix: VE Vegetation Bq / kg								
1	AM241	4.990	0.590	3.522	0.590	1.417	A	
1	CO60	24.100	1.400	21.450	1.000	1.124	A	A
1	CS137	547.000	26.500	467.000	20.000	1.171	A	A
1	K40	837.000	45.000	656.500	20.000	1.275	W	A
1	PU238	234.800	30.300	0.419	0.010	561.051	N	
1	PU239	221.000	29.000	5.204	0.428	42.465	N	
1	SR90	800.000	6.500	736.100	7.700	1.087	A	W
Matrix: WA Water Bq / L								
1	CO60	54.900	1.400	51.100	3.000	1.074	A	A
1	CS137	43.700	2.300	39.375	2.405	1.110	A	A
1	H3	98.100	12.000	121.080	6.780	0.810	W	
1	PU238	0.971	0.100	0.772	0.037	1.258	N	
1	PU239	1.190	0.120	1.009	0.058	1.179	W	
1	SR90	2.900	0.550	4.104	0.045	0.707	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 50 Results by Laboratory**Lab:** WI WIPP Site, Westinghouse Electric Corp.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: WA Water Bq/L								
2	CO60	55.800	3.360	51.100	3.000	1.092	A	A
1	CO60	55.620	3.340	51.100	3.000	1.088	A	A
2	CS137	43.620	2.870	39.375	2.405	1.108	A	A
1	CS137	43.230	2.840	39.375	2.405	1.098	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 50 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								
1	AM241	0.150	0.050	0.134	0.001	1.122	A	
2	AM241	0.110	0.050	0.134	0.001	0.823	W	
3	AM241	0.130	0.080	0.134	0.001	0.972	A	
1	CO57	2.970	0.080	3.010	0.140	0.987	A	
2	CO57	2.880	0.080	3.010	0.140	0.957	A	
3	CO57	2.840	0.090	3.010	0.140	0.944	A	
3	CO60	4.890	0.150	4.960	0.280	0.986	A	
2	CO60	4.960	0.110	4.960	0.280	1.000	A	
1	CO60	5.220	0.120	4.960	0.280	1.052	A	
3	CS137	5.850	0.240	6.050	0.300	0.967	A	
2	CS137	5.930	0.110	6.050	0.300	0.980	A	
1	CS137	6.240	0.220	6.050	0.300	1.031	A	
1	SB125	3.860	0.090	3.590	0.310	1.075	A	
3	SB125	3.530	0.130	3.590	0.310	0.983	A	
2	SB125	3.640	0.080	3.590	0.310	1.014	A	

Matrix: SO Soil Bq / kg

2	AC228	56.700	1.500	47.150	2.989	1.203	A	
1	AC228	59.200	1.500	47.150	2.989	1.256	A	
3	AC228	59.700	2.500	47.150	2.989	1.266	A	
1	AM241	3.700	1.600	4.894	0.969	0.756	W	
2	AM241	6.800	1.500	4.894	0.969	1.389	A	
3	BI214	66.300	2.700	69.900	5.660	0.948	A	
2	BI214	62.900	1.800	69.900	5.660	0.900	A	
1	BI214	65.600	1.800	69.900	5.660	0.938	A	
2	CS137	685.000	8.000	659.500	24.950	1.039	A	
1	CS137	696.000	8.000	659.500	24.950	1.055	A	
3	CS137	695.000	9.000	659.500	24.950	1.054	A	
3	K40	340.000	26.000	362.750	20.156	0.937	A	
2	K40	315.000	18.000	362.750	20.156	0.868	W	
1	K40	332.000	19.000	362.750	20.156	0.915	A	
2	PB212	46.900	0.800	47.925	2.572	0.979	A	
3	PB212	49.400	1.200	47.925	2.572	1.031	A	
1	PB212	48.400	0.800	47.925	2.572	1.010	A	
3	PB214	67.400	2.000	71.000	7.035	0.949	A	
1	PB214	66.600	1.300	71.000	7.035	0.938	A	
2	PB214	66.400	1.300	71.000	7.035	0.935	A	

Matrix: VE Vegetation Bq / kg

1	AM241	5.000	1.700	3.522	0.590	1.420	A	
2	AM241	4.500	1.700	3.522	0.590	1.278	A	
3	CO60	28.100	1.000	21.450	1.000	1.310	W	
2	CO60	28.000	1.400	21.450	1.000	1.305	W	
1	CO60	28.600	1.000	21.450	1.000	1.333	W	
2	CS137	619.000	9.000	467.000	20.000	1.325	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 50 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	CS137	621.000	8.000	467.000	20.000	1.330	W	
3	CS137	612.000	8.000	467.000	20.000	1.310	W	
1	K40	781.900	30.600	656.500	20.000	1.191	A	
3	K40	757.000	38.800	656.500	20.000	1.153	A	
2	K40	770.700	30.400	656.500	20.000	1.174	A	

Matrix: WA Water Bq / L

1	AM241	1.200	0.400	1.146	0.051	1.047	A	
3	AM241	0.500	0.400	1.146	0.051	0.436	N	
2	AM241	0.800	0.500	1.146	0.051	0.698	N	
1	CO60	56.800	1.200	51.100	3.000	1.112	A	
2	CO60	56.300	1.300	51.100	3.000	1.102	A	
3	CO60	55.100	1.200	51.100	3.000	1.078	A	
1	CS137	42.500	1.600	39.375	2.405	1.079	A	
3	CS137	43.600	1.600	39.375	2.405	1.107	A	
2	CS137	43.000	1.600	39.375	2.405	1.092	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 50 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								
2	Bq U	8.100	1.600	0.123	0.004	65.800	N	
1	Bq U	7.400	1.500	0.123	0.004	60.114	N	
2	CO57	3.300	0.500	3.010	0.140	1.096	A	
1	CO57	3.100	0.400	3.010	0.140	1.030	A	
1	CO60	6.000	1.300	4.960	0.280	1.210	W	
2	CO60	6.000	2.000	4.960	0.280	1.210	W	
2	CS137	8.000	2.000	6.050	0.300	1.322	W	
1	CS137	7.200	1.200	6.050	0.300	1.190	W	
2	GROSS ALPHA	2.900	0.100	1.610	0.160	1.801	N	
1	GROSS ALPHA	2.700	0.100	1.610	0.160	1.677	N	
2	GROSS BETA	1.600	0.100	1.560	0.160	1.026	A	
1	GROSS BETA	1.500	0.100	1.560	0.160	0.962	A	
1	SB125	4.500	1.100	3.590	0.310	1.253	W	
2	SB125	4.500	1.300	3.590	0.310	1.253	W	

Matrix: SO Soil Bq / kg

1	AC228	40.000	11.000	47.150	2.989	0.848	W	
2	AC228	43.000	12.000	47.150	2.989	0.912	A	
2	BI214	78.000	13.000	69.900	5.660	1.116	A	
1	BI214	77.000	17.000	69.900	5.660	1.102	A	
1	Bq U	283.000	68.000	291.000	3.000	0.973	A	
2	Bq U	395.000	74.000	291.000	3.000	1.357	W	
1	CS137	616.000	98.000	659.500	24.950	0.934	A	
2	CS137	607.000	56.000	659.500	24.950	0.920	A	
1	K40	345.000	79.000	362.750	20.156	0.951	A	
2	K40	352.000	54.000	362.750	20.156	0.970	A	
1	PB212	47.000	8.000	47.925	2.572	0.981	A	
2	PB212	44.000	5.000	47.925	2.572	0.918	A	
1	PB214	80.000	13.000	71.000	7.035	1.127	A	
2	PB214	78.000	8.000	71.000	7.035	1.099	A	
1	TH234	167.000	33.000	138.000	4.080	1.210	A	
2	TH234	173.000	45.000	138.000	4.080	1.254	A	

Matrix: VE Vegetation Bq / kg

2	CO60	23.000	4.000	21.450	1.000	1.072	A	
1	CO60	22.000	5.000	21.450	1.000	1.026	A	
2	CS137	450.000	40.000	467.000	20.000	0.964	A	
1	CS137	460.000	70.000	467.000	20.000	0.985	A	
1	K40	650.000	140.000	656.500	20.000	0.990	A	
2	K40	620.000	90.000	656.500	20.000	0.944	A	

Matrix: WA Water Bq / L

1	Bq U	0.720	0.190	0.541	0.025	1.331	W	
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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 50 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								
2	Bq U	0.770	0.200	0.541	0.025	1.423	N	
2	CO60	58.000	10.000	51.100	3.000	1.135	A	
1	CO60	58.000	4.000	51.100	3.000	1.135	A	
1	CS137	42.000	3.000	39.375	2.405	1.067	A	
2	CS137	42.000	6.000	39.375	2.405	1.067	A	
2	GROSS ALPHA	1220.000	60.000	1090.000	20.000	1.119	A	
1	GROSS ALPHA	1280.000	60.000	1090.000	20.000	1.174	W	
2	GROSS BETA	1150.000	40.000	1100.000	40.000	1.045	A	
1	GROSS BETA	1150.000	40.000	1100.000	40.000	1.045	A	
1	H3	133.000	7.000	121.080	6.780	1.098	A	
2	H3	126.000	7.000	121.080	6.780	1.041	A	
2	SR90	3.900	0.600	4.104	0.045	0.950	A	
1	SR90	3.900	0.600	4.104	0.045	0.950	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 50 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	1.708	0.040	1.610	0.160	1.061	A	A
Matrix: SO Soil Bq / kg								
1	AM241	52.170	1.480	4.894	0.969	10.659	N	W
1	CS137	596.810	37.740	659.500	24.950	0.905	A	A
1	K40	335.220	27.160	362.750	20.156	0.924	A	A
1	U238	142.820	29.490	145.000	1.732	0.985	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 50 Results by Laboratory**Lab:** WV West Valley Nuclear Services Co, Inc, 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	2.770	0.045	3.010	0.140	0.920	A	
1	CO60	4.860	0.153	4.960	0.280	0.980	A	
1	CS137	5.800	0.121	6.050	0.300	0.959	A	
1	GROSS ALPHA	1.450	0.042	1.610	0.160	0.901	A	A
1	GROSS BETA	1.680	0.040	1.560	0.160	1.077	A	A
1	SB125	3.090	0.184	3.590	0.310	0.861	A	
Matrix: WA Water Bq / L								
1	CO60	53.900	1.090	51.100	3.000	1.055	A	A
1	CS137	41.000	0.760	39.375	2.405	1.041	A	A
1	GROSS ALPHA	829.000	67.000	1090.000	20.000	0.761	W	W
1	GROSS BETA	1035.000	57.000	1100.000	40.000	0.941	A	A
1	H3	126.000	5.600	121.080	6.780	1.041	A	A
1	SR90	3.810	0.240	4.104	0.045	0.928	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 50 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	0.130	0.004	0.134	0.001	0.972	A	A
1	Bq U	0.150	0.010	0.123	0.004	1.219	A	A
1	CO60	5.340	0.310	4.960	0.280	1.077	A	A
1	CS137	6.530	0.350	6.050	0.300	1.079	A	A
1	GROSS ALPHA	1.490	0.040	1.610	0.160	0.925	A	A
1	GROSS BETA	1.350	0.030	1.560	0.160	0.865	W	W
1	PU238	0.260	0.010	0.272	0.001	0.955	A	A
1	PU239	0.130	0.009	0.124	0.003	1.046	A	A
1	SB125	4.530	0.290	3.590	0.310	1.262	W	
1	SR90	9.790	0.630	0.644	0.014	15.202	N	A
1	U234	0.070	0.006	0.060	0.002	1.167	A	
1	U238	0.070	0.006	0.061	0.003	1.143	A	

Matrix: SO Soil Bq / kg

1	AM241	4.730	0.690	4.894	0.969	0.966	A	A
1	Bq U	300.770	11.410	291.000	3.000	1.034	A	A
1	CS137	859.140	4.260	659.500	24.950	1.303	W	W
1	K40	442.340	12.950	362.750	20.156	1.219	A	A
1	PU239	7.830	0.630	8.112	1.068	0.965	A	A
1	SR90	27.750	1.740	32.400	0.529	0.856	A	A
1	U234	142.770	7.830	140.667	1.155	1.015	A	A
1	U238	151.030	8.270	145.000	1.732	1.042	A	A

Matrix: VE Vegetation Bq / kg

1	AM241	3.170	0.110	3.522	0.590	0.900	A	A
1	CM244	2.040	0.090	1.671	0.541	1.221	A	W
1	CO60	22.900	0.920	21.450	1.000	1.068	A	A
1	CS137	517.820	4.070	467.000	20.000	1.109	A	A
1	K40	726.310	20.900	656.500	20.000	1.106	A	A
1	PU239	5.510	0.150	5.204	0.428	1.059	A	A
1	SR90	718.170	9.800	736.100	7.700	0.976	A	A

Matrix: WA Water Bq / L

1	AM241	1.130	0.050	1.146	0.051	0.986	A	A
1	Bq U	0.660	0.030	0.541	0.025	1.220	A	
1	CO60	51.890	0.790	51.100	3.000	1.015	A	A
1	CS137	41.000	0.890	39.375	2.405	1.041	A	A
1	FE55	101.530	8.500	97.400	1.650	1.042	A	A
1	H3	132.320	3.370	121.080	6.780	1.093	A	A
1	NI63	113.600	9.330	114.000	10.000	0.996	A	A
1	PU238	0.840	0.020	0.772	0.037	1.089	A	A
1	PU239	1.010	0.020	1.009	0.058	1.001	A	A
1	SR90	4.120	0.230	4.104	0.045	1.004	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 50 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	U234	0.320	0.020	0.269	0.015	1.192	A	
1	U238	0.320	0.020	0.262	0.016	1.222	W	
1	ug U	0.022	0.000	0.021	0.001	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 50 Results by Laboratory**Lab:** YP US Army Proving Ground, Yuma, AZ

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	Reported EML	Evaluation	QAP 49 Evaluation
Matrix: AI Air Filter Bq / filter								
1	ug U	4.580	0.273	4.945	0.227	0.926	A	A
Matrix: SO Soil Bq / kg								
1	ug U	11.500	0.895	11.800	0.300	0.975	A	A
Matrix: WA Water Bq / L								
1	ug U	0.020	0.002	0.021	0.001	0.948	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: AM241

EML Value: 0.1337
EML Error: 0.0012

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.1490	0.0090	1.11		A
AF	1	0.2000	0.0100	1.50	N	W
AG	1	0.1410	0.0250	1.05	N	A
AM	1	0.0600	0.0300	0.45	A	N
AN	1	0.1400	0.0100	1.05	A	A
AR	1	0.1230	0.0400	0.92		A
AS	1	0.1320	0.0810	0.99		A
AU	1	0.1411	0.0096	1.05	W	A
BE	1	0.1400	0.0200	1.05	A	A
BL	2	0.1330	0.0360	1.00	A	A
BL	1	0.1970	0.0500	1.47	A	W
BM	1	0.1400	0.0190	1.05	A	A
BU	1	0.1380	0.0070	1.03	A	A
BX	1	0.1410	0.0240	1.05	A	A
CB	3	0.1690	0.0170	1.26	A	A
CB	2	0.1400	0.0480	1.05	A	A
CB	1	0.1710	0.0400	1.28	A	A
CH	1	0.1420	0.0080	1.06	A	A
CL	1	0.2540	0.0700	1.90	A	W
CN	1	0.2300	0.0200	1.72	W	W
CO	2	0.1300	0.0400	0.97		A
CO	1	0.1400	0.0500	1.05		A
CO	3	0.1400	0.0400	1.05		A
CS	1	0.1854	0.0299	1.39	A	A
CW	1	0.1440	0.0040	1.08		A
DH	1	0.1790	0.0500	1.34		A
EG	1	0.1510	0.0120	1.13	A	A
EL	1	0.8000		5.98		N
EL	2	1.0000		7.48		N
FG	1	0.1579	0.0489	1.18		A
FL	1	0.1400	0.0200	1.05		A
FM	1	0.1600	0.0200	1.20	A	A
GA	1	0.1500	0.0050	1.12	A	A
GE	1	0.1767	0.0502	1.32	A	A
GP	1	0.1300	0.0100	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: AM241

EML Value: 0.1337
EML Error: 0.0012

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GT	1	0.1500	0.0200	1.12	A	A
HU	1	0.1500	0.0300	1.12	N	A
IS	1	7.0900	2.3400	53.03	W	N
IS	3	5.3800	2.1800	40.24	W	N
IS	2	7.3400	2.4900	54.90	W	N
IS	4	0.0440	0.0210	0.33	W	N
IS	5	0.1120	0.0300	0.84	W	W
IS	6	0.2220	0.0590	1.66	W	W
IT	1	0.1220	0.0110	0.91	A	A
LA	1	0.0434	0.0015	0.32	A	N
LA	2	0.0476	0.0015	0.36	A	N
LA	3	0.0520	0.0017	0.39	A	N
LB	1	0.4000	0.1000	2.99		N
LL	1	0.1450	0.0089	1.09	A	A
LV	1	0.0259	0.0180	0.19	W	N
ME	2	0.0700	0.0300	0.52	W	N
ME	1	0.1900	0.0200	1.42	W	A
ME	3	0.0700	0.0300	0.52	W	N
NJ	2	0.1600	0.0900	1.20		A
NJ	1	0.1700	0.0700	1.27		A
NM	1	0.1430	0.0070	1.07	A	A
NQ	1	0.1200	0.0080	0.90	W	A
OT	1	0.0640	0.0110	0.48	A	N
PO	1	0.1100	0.0300	0.82	A	W
RE	1	0.1100	0.0100	0.82	A	W
SK	1	0.2600	0.0300	1.95	A	W
SN	1	0.1470	0.0320	1.10	A	A
SR	1	0.1480	0.0160	1.11	A	A
SW	1	0.1800	0.0400	1.35	W	A
TE	1	0.1400	0.0200	1.05		A
TI	1	0.1200	0.0200	0.90	A	A
TM	1	0.1330	0.0179	1.00		A
TN	1	0.1412	0.0074	1.06	A	A
TO	1	0.1300	0.0500	0.97		A
TR	1	0.1972	0.0770	1.48		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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: AM241

EML Value: 0.1337
EML Error: 0.0012

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TX	1	0.1480	0.0080	1.11	A	A
UP	1	0.1610	0.0280	1.20	A	A
UY	1	0.1500	0.0200	1.12	A	A
WA	1	0.1520	0.0310	1.14	W	A
WC	1	0.1600	0.0500	1.20	A	A
WE	1	0.1990	0.0200	1.49		W
WN	1	0.1500	0.0500	1.12		A
WN	3	0.1300	0.0800	0.97		A
WN	2	0.1100	0.0500	0.82		W
YA	1	0.1300	0.0040	0.97	A	A

Total Number Reported: 80

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: Bq U

EML Value: 0.1231
EML Error: 0.0036

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.1460	0.0230	1.19	A	A
AM	1	0.2000	0.0200	1.63	W	W
BL	1	0.1490	0.0020	1.21	A	A
BU	1	0.1380	0.0140	1.12	A	A
CH	1	0.1250	0.0110	1.01	A	A
CL	1	0.2000	0.0200	1.63	A	W
GP	1	0.1300		1.06	N	A
ID	1	0.1310	0.0070	1.06		A
KO	1	0.1440	0.0030	1.17		A
NL	1	0.1392	0.0170	1.13	A	A
OT	1	0.1200	0.0300	0.98	A	A
SN	1	0.1320	0.0290	1.07		A
TO	1	0.1300		1.06		A
UP	1	0.1600	0.0266	1.30	A	A
UY	1	0.1440	0.0200	1.17	A	A
WA	1	0.1240	0.0230	1.01	W	A
WO	2	8.1000	1.6000	65.80		N
WO	1	7.4000	1.5000	60.11		N
YA	1	0.1500	0.0100	1.22	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 3.0100
EML Error: 0.1400

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	2.9000	0.1500	0.96		A
AG	1	2.7000	0.4700	0.90		A
AN	1	3.2500	0.2900	1.08		A
AS	1	2.8820	0.1010	0.96		A
AU	1	3.7900	0.1600	1.26		W
AW	1	3.2000	0.2000	1.06		A
BA	1	2.9300	0.1300	0.97		A
BC	1	2.7200	0.0700	0.90		A
BE	1	3.3000	0.4000	1.10		A
BL	1	3.8900	0.1700	1.29		W
BN	3	4.9600	0.4100	1.65		N
BN	1	5.2200	0.3600	1.73		N
BN	2	4.4800	0.3400	1.49		N
BU	1	2.8000	0.2000	0.93		A
BX	1	2.6500	0.1400	0.88		A
CA	1	2.8800	0.0280	0.96		A
CB	2	3.4310	0.0720	1.14		W
CB	3	3.1320	0.1100	1.04		A
CB	1	3.1820	0.1300	1.06		A
CD	1	3.2000	0.3000	1.06		A
CH	1	3.4800	0.0270	1.16		W
CL	1	2.8400	0.1140	0.94		A
CN	1	3.6900	0.2300	1.23		W
CW	1	2.8300	0.1600	0.94		A
DH	1	2.7600	0.1000	0.92		A
EG	1	3.2000	0.2000	1.06		A
EP	1	2.9200	0.1800	0.97		A
FG	1	8.8650	0.5390	2.94		N
FL	1	3.0300	0.0300	1.01		A
FM	1	3.2000	0.0600	1.06		A
FN	1	3.3500	0.2200	1.11		A
GP	1	3.1000	0.4000	1.03		A
HU	1	3.2100	0.1400	1.07		A
ID	1	3.0200	0.1530	1.00		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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 3.0100
EML Error: 0.1400

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IL	1	3.0000	0.1000	1.00		A
IS	1	2.9500	0.3000	0.98		A
IS	3	3.2800	0.3700	1.09		A
IS	2	3.0600	0.3500	1.02		A
IT	1	3.5300	0.2800	1.17		W
JL	1	3.2000	0.2000	1.06		A
JL	2	3.1800	0.2200	1.06		A
KO	1	2.8600	0.0300	0.95		A
LB	1	3.2000	0.3000	1.06		A
LL	1	3.2400	0.0844	1.08		A
LV	1	2.8100	0.0300	0.93		A
MA	1	3.2000	0.8500	1.06		A
MH	1	2.8100	0.1500	0.93		A
MS	1	3.0600	0.3100	1.02		A
NJ	3	2.7800	0.2200	0.92		A
NJ	2	2.9200	0.2900	0.97		A
NJ	1	2.8200	0.2600	0.94		A
NL	1	3.1200	0.4200	1.04		A
NP	1	2.9700	0.0500	0.99		A
NR	1	2.5100	0.5000	0.83		A
NS	1	2.6030	0.0150	0.87		A
OC	2	3.4000	0.5000	1.13		A
OC	3	3.4000	0.5000	1.13		A
OC	1	3.6000	0.5000	1.20		W
OD	2	2.8800	0.1300	0.96		A
OD	1	2.8700	0.1300	0.95		A
OL	1	2.7000	0.1100	0.90		A
OS	3	3.0460	0.1190	1.01		A
OS	2	3.1200	0.1250	1.04		A
OS	1	3.1200	0.1220	1.04		A
PK	1	6.5600	0.3400	2.18		N
RC	1	3.0300	0.2200	1.01		A
RE	1	2.6000	0.2900	0.86		A
RI	1	3.0700	0.2520	1.02		A
SA	1	3.1900	0.4900	1.06		A

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO57

EML Value: 3.0100
EML Error: 0.1400

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
SK	1	3.0400	0.2000	1.01		A
TE	1	3.3200	0.0600	1.10		A
TM	1	2.3800	0.1000	0.79		A
TR	1	3.6290	0.1280	1.21		W
TX	1	3.2100	0.0300	1.07		A
UP	1	3.0000	0.1850	1.00		A
UY	1	2.4600	0.1000	0.82		A
WA	1	3.2000	0.3000	1.06		A
WN	3	2.8400	0.0900	0.94		A
WN	2	2.8800	0.0800	0.96		A
WN	1	2.9700	0.0800	0.99		A
WO	2	3.3000	0.5000	1.10		A
WO	1	3.1000	0.4000	1.03		A
WV	1	2.7700	0.0450	0.92		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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 4.9600
EML Error: 0.2800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	5.0600	0.2800	1.02		A
AF	1	5.7000	0.7000	1.15	A	W
AG	1	4.7400	0.8100	0.96	A	A
AM	1	2.4800	0.0800	0.50	W	N
AN	1	5.5000	0.3400	1.11	A	W
AR	1	5.0000	1.0000	1.01		A
AS	1	4.7320	0.3410	0.95		A
AU	1	6.1200	0.2000	1.23	A	W
AW	1	3.2000	0.2000	0.64		N
BA	1	5.0700	0.4400	1.02	A	A
BC	1	4.9600	0.1800	1.00	N	A
BE	1	5.4000	0.5000	1.09	A	A
BL	1	5.6600	0.2300	1.14	A	W
BM	1	5.4600	0.2500	1.10	A	W
BN	3	6.7300	0.5600	1.36	N	N
BN	1	6.4800	0.5100	1.31	N	W
BN	2	5.5100	0.3600	1.11	N	W
BQ	1	4.8700	0.0900	0.98	A	A
BU	1	4.8000	0.4000	0.97	A	A
BX	1	4.3700	0.2400	0.88	N	A
CA	1	5.0800	0.0900	1.02	A	A
CB	1	5.1420	0.1400	1.04	A	A
CB	3	5.1900	0.1420	1.05	A	A
CB	2	4.5890	0.0800	0.93	A	A
CD	1	5.4000	0.5000	1.09	A	A
CH	1	5.8900	0.0800	1.19	A	W
CL	1	5.3200	0.2700	1.07	A	A
CN	1	5.7600	0.3400	1.16	A	W
CO	2	6.0000	0.1000	1.21	A	W
CO	1	6.0000	0.1000	1.21	A	W
CO	3	6.1000	0.1000	1.23	A	W
CR	1	6.9000	0.4000	1.39	N	N
CS	1	4.5540	0.2280	0.92	A	A
CW	1	4.9200	0.1100	0.99		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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 4.9600
EML Error: 0.2800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
DH	1	4.8400	0.1000	0.98		A
EG	1	5.2000	0.4000	1.05	A	A
EL	2	12.2000		2.46		N
EL	3	10.9000		2.20		N
EP	1	5.1000	0.3000	1.03	A	A
FG	1	5.2860	0.3470	1.07	A	A
FL	1	5.4000	0.0700	1.09	A	A
FM	1	5.3000	0.0700	1.07	A	A
FN	1	5.0200	0.4000	1.01	A	A
GA	1	4.8000	0.0500	0.97	A	A
GC	3	4.4100	0.3500	0.89		A
GC	2	4.6500	0.3800	0.94		A
GC	1	5.3400	0.3700	1.08		A
GE	1	4.9488	0.9477	1.00	A	A
GP	1	5.0000	0.8000	1.01	A	A
GT	1	5.1000	0.6000	1.03	A	A
HU	1	5.6700	0.0500	1.14	A	W
ID	1	5.0070	0.2590	1.01	A	A
IE	1	5.4200	0.2200	1.09		A
IL	1	5.2000	0.1000	1.05	A	A
IN	1	5.1400	0.1000	1.04	A	A
IS	2	5.0000	0.5700	1.01	A	A
IS	3	5.2500	0.5500	1.06	A	A
IS	1	4.3400	0.4900	0.88	A	A
IT	1	5.1300	0.0700	1.03	A	A
JL	2	5.5000	0.3600	1.11		W
JL	1	5.2800	0.2800	1.07		A
KO	1	4.9400	0.1300	1.00		A
LA	3	5.1800	0.2800	1.04	A	A
LA	2	5.1500	0.2700	1.04	A	A
LA	1	5.2200	0.2800	1.05	A	A
LB	1	5.0000	1.0000	1.01	W	A
LL	1	5.2400	0.1780	1.06	A	A
LN	1	5.8300	0.5700	1.17	A	W
LV	1	4.7500	0.0900	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 4.9600
EML Error: 0.2800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MA	1	4.0000	1.0000	0.81	N	W
ME	1	4.6200	0.1200	0.93	W	A
ME	2	4.8500	0.1300	0.98	W	A
ME	3	4.9200	0.1300	0.99	W	A
MH	1	5.1600	0.1800	1.04	A	A
MS	1	5.4000	0.5400	1.09	A	A
NA	1	4.8000	0.1800	0.97	A	A
NJ	1	4.6700	0.3300	0.94		A
NJ	2	4.7300	0.3100	0.95		A
NJ	3	4.6100	0.2800	0.93		A
NL	1	5.3300	0.5200	1.08	A	A
NP	1	4.9500	0.1100	1.00	A	A
NR	1	4.5100	0.9000	0.91		A
NS	1	4.6110	0.0540	0.93	A	A
OB	1	4.3200	0.7500	0.87	N	A
OC	2	5.4000	0.5000	1.09	A	A
OC	1	5.3000	0.5000	1.07	A	A
OC	3	5.2000	0.5000	1.05	A	A
OD	1	4.7200	0.0800	0.95	A	A
OD	2	4.7100	0.0800	0.95	A	A
OL	1	4.6800	0.1900	0.94	A	A
OS	2	4.7320	0.0620	0.95		A
OS	3	4.6800	0.0619	0.94		A
OS	1	4.7360	0.0610	0.95		A
OT	1	5.3000	0.2000	1.07	A	A
OU	1	7.4600	1.0000	1.50	A	N
PK	1	6.2900	0.1900	1.27	A	W
PO	1	4.5000	0.2000	0.91	W	A
RA	1	5.0000	0.4000	1.01	A	A
RC	1	4.9200	0.3700	0.99	A	A
RE	1	4.2900	0.5000	0.87	A	A
RI	1	4.7400	0.3500	0.96	A	A
SA	1	5.2000	0.6400	1.05	A	A
SB	1	5.8400	0.5700	1.18	A	W
SK	1	5.0000	0.5000	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CO60

EML Value: 4.9600
EML Error: 0.2800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SR	1	5.1100	0.7400	1.03	A	A
SW	1	4.8900	0.0700	0.99	A	A
TE	1	5.2800	0.1500	1.07	A	A
TI	1	5.3000	0.5000	1.07	A	A
TM	1	4.0600	0.1870	0.82	A	W
TN	1	10.5600	0.4300	2.13	A	N
TO	1	9.0100	0.3970	1.82		N
TP	1	5.0500	0.1500	1.02	A	A
TR	1	7.9600	0.8410	1.61		N
TW	1	4.8800	0.0500	0.98	A	A
TX	1	5.1600	0.0600	1.04	A	A
UC	1	5.1020	0.5380	1.03	A	A
UP	1	5.2400	0.2070	1.06	A	A
UY	1	4.6500	0.4000	0.94	A	A
WA	1	5.4000	0.3000	1.09	A	A
WC	1	4.9000	0.4000	0.99	A	A
WE	1	5.1800	0.1220	1.04	A	A
WN	3	4.8900	0.1500	0.99		A
WN	2	4.9600	0.1100	1.00		A
WN	1	5.2200	0.1200	1.05		A
WO	1	6.0000	1.3000	1.21		W
WO	2	6.0000	2.0000	1.21		W
WV	1	4.8600	0.1530	0.98		A
YA	1	5.3400	0.3100	1.08	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.0500
EML Error: 0.3000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	6.1700	0.4600	1.02		A
AF	1	6.5000	0.8000	1.07	A	A
AG	1	6.1000	1.0000	1.01	A	A
AM	1	2.8800	0.8200	0.48	W	N
AN	1	6.5900	0.3500	1.09	A	A
AR	1	6.0000	1.0000	0.99		A
AS	1	5.7720	0.2800	0.95		A
AU	1	7.6200	0.3700	1.26	A	W
AW	1	6.4000	0.3000	1.06		A
BA	1	6.0200	0.4300	1.00	A	A
BC	1	6.1100	0.2100	1.01	N	A
BE	1	6.3000	0.7000	1.04	A	A
BL	1	7.4000	0.2900	1.22	W	W
BM	1	6.5700	0.2300	1.09	A	A
BN	2	9.1800	0.8600	1.52	N	N
BN	1	10.4700	1.2300	1.73	N	N
BN	3	9.7700	0.9600	1.62	N	N
BQ	1	6.7400	0.0800	1.11	A	A
BU	1	5.9000	0.5000	0.98	A	A
BX	1	5.7000	0.4200	0.94	N	A
CA	1	6.3900	0.1900	1.06	A	A
CB	3	6.1810	0.2230	1.02	A	A
CB	1	6.1990	0.2200	1.02	A	A
CB	2	6.4890	0.1970	1.07	A	A
CD	1	6.1000	0.6000	1.01	A	A
CH	1	7.3100	0.0690	1.21	A	W
CL	1	6.4300	0.3200	1.06	A	A
CN	1	7.1200	0.4200	1.18	A	W
CO	3	7.4000	0.1000	1.22	A	W
CO	2	7.2000	0.1000	1.19	A	W
CO	1	7.3000	0.1000	1.21	A	W
CR	1	8.1000	0.5000	1.34	N	W
CS	1	5.4420	0.2890	0.90	A	A
CW	1	5.7200	0.1700	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.0500
EML Error: 0.3000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
DH	1	5.7100	0.1000	0.94		A
EG	1	6.3000	0.5000	1.04	A	A
EL	2	15.1000		2.50		N
EL	1	12.7000		2.10		N
EP	1	5.9800	0.3400	0.99	A	A
FG	1	6.6360	0.3010	1.10	A	A
FL	1	7.2600	0.1000	1.20	A	W
FM	1	7.0000	0.1000	1.16	A	W
FN	1	6.0500	0.5100	1.00	A	A
GA	1	6.0000	0.2000	0.99	A	A
GC	1	6.2400	0.4300	1.03		A
GC	3	5.9900	0.4700	0.99		A
GC	2	6.0500	0.5200	1.00		A
GE	1	6.0588	0.9895	1.00	A	A
GP	1	6.3000	0.8000	1.04	A	A
GT	1	6.4000	1.0000	1.06	A	A
HU	1	6.8600	0.0700	1.13	W	A
ID	1	6.3370	0.3230	1.05	A	A
IE	1	6.5500	0.2700	1.08		A
IL	1	6.2000	0.1000	1.02	A	A
IN	1	6.4800	0.9000	1.07	A	A
IS	3	6.6500	0.7200	1.10	A	A
IS	1	6.0100	0.6600	0.99	A	A
IS	2	5.8700	0.6300	0.97	A	A
IT	1	6.1100	0.0900	1.01	A	A
JL	1	6.3800	0.4200	1.05		A
JL	2	6.2800	0.5000	1.04		A
KO	1	5.8300	0.1100	0.96		A
LA	2	6.4000	0.3400	1.06	A	A
LA	1	7.0400	0.3700	1.16	A	W
LA	3	6.3900	0.3400	1.06	A	A
LB	1	5.9000	0.9000	0.98	W	A
LL	1	6.5900	0.1840	1.09	A	A
LN	1	6.2000	0.2700	1.02	W	A
LV	1	5.7700	0.0700	0.95	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.0500
EML Error: 0.3000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MA	1	6.6000	1.7000	1.09	N	A
ME	1	5.5500	0.2800	0.92	W	A
ME	2	5.5500	0.2700	0.92	W	A
ME	3	5.5900	0.2700	0.92	W	A
MH	1	7.2900	0.3800	1.21	W	W
MS	1	6.8600	0.6900	1.13	A	A
NA	1	6.1400	0.2300	1.01	A	A
NJ	3	5.4100	0.4800	0.89		A
NJ	2	5.5100	0.5800	0.91		A
NJ	1	5.3500	0.5100	0.88		A
NL	1	6.3200	1.1500	1.04	A	A
NM	1	7.3600	0.6600	1.22	W	W
NP	1	5.9600	0.1200	0.99	A	A
NR	1	5.6200	1.1200	0.93		A
NS	1	5.4580	0.0440	0.90	A	A
OB	1	5.1100	0.9780	0.85	N	A
OC	2	6.3000	0.6000	1.04	W	A
OC	1	6.5000	0.6000	1.07	W	A
OC	3	6.0000	0.6000	0.99	W	A
OD	1	5.8200	0.2600	0.96	A	A
OD	2	5.7300	0.2600	0.95	A	A
OL	1	5.7300	0.2400	0.95	A	A
OS	1	5.7350	0.1600	0.95		A
OS	2	5.6120	0.1560	0.93		A
OS	3	5.6200	0.1580	0.93		A
OT	1	6.6000	0.2000	1.09	A	A
OU	1	6.4800	0.7500	1.07	A	A
PK	1	6.4800	0.2900	1.07	A	A
PO	1	5.4000	0.2000	0.89	W	A
RA	1	5.4000	0.4000	0.89	A	A
RC	1	6.2900	0.4800	1.04	A	A
RE	1	5.2300	0.5500	0.86	A	A
RI	1	5.8100	0.5230	0.96	W	A
SA	1	6.5700	0.8200	1.09	A	A
SB	1	7.4500	1.0900	1.23	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: CS137

EML Value: 6.0500
EML Error: 0.3000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SK	1	5.8200	0.4600	0.96	A	A
SR	1	6.0200	0.8700	1.00	A	A
SW	1	6.0100	0.0900	0.99	A	A
TE	1	6.9600	0.1500	1.15	A	W
TI	1	6.9000	0.7000	1.14	A	W
TM	1	4.6700	0.2100	0.77	A	W
TN	1	12.9500	0.3600	2.14	A	N
TO	1	9.0000	0.3600	1.49		N
TP	1	6.0600	0.1000	1.00	A	A
TR	1	8.9900	0.3500	1.49		N
TW	1	5.9800	0.0600	0.99	A	A
TX	1	6.8500	0.0800	1.13	A	A
UC	1	7.1450	1.5920	1.18	N	W
UP	1	5.9100	0.3060	0.98	A	A
UY	1	5.4000	0.4000	0.89	A	A
WA	1	6.9000	1.1000	1.14	A	W
WC	1	6.1000	0.8000	1.01	A	A
WE	1	6.2300	0.3300	1.03	W	A
WN	1	6.2400	0.2200	1.03		A
WN	2	5.9300	0.1100	0.98		A
WN	3	5.8500	0.2400	0.97		A
WO	1	7.2000	1.2000	1.19		W
WO	2	8.0000	2.0000	1.32		W
WV	1	5.8000	0.1210	0.96		A
YA	1	6.5300	0.3500	1.08	A	A

Total Number Reported: 129

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS ALPHA

EML Value: 1.6100
EML Error: 0.1600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	1.6000	0.1000	0.99		A
AM	1	1.4800	0.0200	0.92	W	A
AR	1	2.1600	0.2400	1.34		W
AS	1	1.7570	0.0330	1.09		A
AT	1	1.5700	0.1400	0.98		A
AU	1	2.0300	0.0500	1.26	A	A
BC	1	1.5800	0.0400	0.98	W	A
BE	1	1.5000	0.1000	0.93	A	A
BL	2	1.7100	0.0400	1.06	A	A
BL	1	1.6700	0.0300	1.04	A	A
BN	3	1.4200	0.0700	0.88	A	A
BN	2	1.4700	0.0700	0.91	A	A
BN	1	1.4600	0.0700	0.91	A	A
BQ	1	1.6500	0.0200	1.02	N	A
BU	1	1.6000	0.0800	0.99	A	A
BX	1	1.6900	0.0400	1.05	W	A
CA	1	1.6200	0.0200	1.01	A	A
CH	1	1.7000	0.0630	1.06	A	A
CS	1	1.7000	0.0800	1.06	A	A
DH	1	1.6600	0.3000	1.03	A	A
FG	1	1.9350	0.1330	1.20	A	A
FL	1	1.3500	0.0600	0.84	A	A
GE	1	1.6791	0.0055	1.04	A	A
GP	1	1.7000	0.2000	1.06	A	A
GT	1	1.6000	0.1000	0.99	A	A
HC	1	1.3750	0.0600	0.85	A	A
ID	1	1.4700	0.0960	0.91	A	A
IE	1	2.3400	0.0900	1.45		W
IL	1	1.6800	0.0200	1.04	A	A
IS	1	2.0400	0.2100	1.27	A	A
IT	1	1.9500	0.0600	1.21	A	A
KA	1	1.8700	0.0700	1.16	A	A
KO	1	1.5700	0.0140	0.98		A
LB	1	1.6000	0.3000	0.99		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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS ALPHA

EML Value: 1.6100
EML Error: 0.1600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LL	1	1.6000	0.0178	0.99		A
LN	1	1.6000	0.1100	0.99	A	A
LV	2	4.5600	0.5600	2.83	A	N
ME	1	2.4100	0.0600	1.50	W	W
ME	2	2.3200	0.0600	1.44	W	W
ME	3	2.4100	0.0600	1.50	W	W
MH	1	1.7000	0.0100	1.06	A	A
MS	1	1.9300	0.1900	1.20	A	A
NQ	1	1.8100	0.2700	1.12	A	A
NS	1	1.7730	0.0790	1.10	N	A
OB	1	2.1200	0.1050	1.32	A	A
OC	3	1.5000	0.2000	0.93	A	A
OC	2	1.5000	0.2000	0.93	A	A
OC	1	1.5000	0.2000	0.93	A	A
OD	1	1.5000	0.0500	0.93	A	A
OT	1	1.4000	0.1000	0.87	A	A
PA	3	1.5200	0.1700	0.94	A	A
PA	1	1.5400	0.1600	0.96	A	A
PA	2	1.5900	0.1200	0.99	A	A
RC	1	1.9900	0.1200	1.24	A	A
RE	1	1.6300	0.0800	1.01		A
RK	1	0.9700	0.1200	0.60	W	W
RL	1	1.6600	0.2000	1.03		A
SA	1	1.9000	0.2200	1.18	A	A
SR	1	1.5200	0.1300	0.94	A	A
SW	1	1.4200	0.0200	0.88	A	A
TE	1	1.2400	0.0300	0.77	W	W
TM	1	0.6190	0.1030	0.38	A	N
TN	1	2.1300	0.0400	1.32	A	A
TO	1	0.5680	0.0180	0.35	W	N
TP	1	1.4800	0.0200	0.92	A	A
TW	1	1.6400	0.0300	1.02	A	A
TX	1	1.9100	0.0700	1.19	A	A
UC	1	1.8000	0.0800	1.12	A	A
UP	1	1.7200	0.1250	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS ALPHA

EML Value: 1.6100
EML Error: 0.1600

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
UY	1	1.6900	0.2000	1.05	W	A
WA	1	1.8500	0.0400	1.15	A	A
WC	1	1.6000	0.2000	0.99	A	A
WO	1	2.7000	0.1000	1.68		N
WO	2	2.9000	0.1000	1.80		N
WS	1	1.7080	0.0400	1.06	A	A
WV	1	1.4500	0.0420	0.90	A	A
YA	1	1.4900	0.0400	0.93	A	A

Total Number Reported: 77

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS BETA

EML Value: 1.5600
EML Error: 0.1600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	1.9000	0.1000	1.22		A
AM	1	1.5000	0.0200	0.96	A	A
AR	1	1.5800	0.1200	1.01		A
AS	1	1.7140	0.0310	1.10		A
AT	1	1.7300	0.1300	1.11		A
AU	1	1.6830	0.0330	1.08	A	A
BC	1	1.4400	0.0500	0.92	A	A
BE	1	1.3800	0.0700	0.88	W	W
BL	2	1.3600	0.0400	0.87	W	W
BL	1	1.2600	0.0300	0.81	W	W
BN	1	1.2800	0.0600	0.82	W	W
BN	3	1.3400	0.0600	0.86	W	W
BN	2	1.4100	0.0700	0.90	W	A
BQ	1	1.3000	0.0100	0.83	A	W
BU	1	1.5000	0.1000	0.96	W	A
BX	1	1.4300	0.0500	0.92	A	A
CA	1	1.5500	0.1000	0.99	W	A
CD	1	2.1000	0.3000	1.35	A	A
CH	1	1.5100	0.0250	0.97	A	A
CS	1	2.2300	0.1700	1.43	A	W
DH	1	1.5500	0.2400	0.99	W	A
FG	1	1.1620	0.1110	0.75	W	W
FL	1	1.6500	0.0600	1.06	A	A
GE	1	1.4000	0.0030	0.90	W	A
GP	1	1.5000	0.1000	0.96	A	A
GT	1	1.5000	0.1000	0.96	A	A
HC	1	1.2020	0.0500	0.77	W	W
ID	1	1.7400	0.0870	1.12	A	A
IE	1	1.4100	0.0600	0.90		A
IL	1	0.7400	0.0100	0.47	A	N
IS	1	1.5900	0.1600	1.02	A	A
IT	1	1.6700	0.0700	1.07	A	A
KA	1	1.5900	0.0500	1.02	A	A
KO	1	1.5000	0.0230	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS BETA

EML Value: 1.5600
EML Error: 0.1600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LB	1	1.6000	0.1000	1.03		A
LL	1	1.8400	0.0170	1.18		A
LN	1	1.3000	0.0800	0.83	W	W
LV	2	1.3900	0.7600	0.89	W	A
ME	1	1.9700	0.0400	1.26	A	A
ME	3	1.9400	0.0400	1.24	A	A
ME	2	1.9800	0.0400	1.27	A	A
MH	1	1.6200	0.5400	1.04	W	A
MS	1	1.3600	0.1400	0.87	A	W
NP	1	1.5000	0.0300	0.96	A	A
NQ	1	1.6300	0.2500	1.04	W	A
NS	1	1.8380	0.0490	1.18	A	A
OB	1	1.4700	0.0647	0.94	W	A
OC	3	1.5000	0.2000	0.96	W	A
OC	2	1.5000	0.2000	0.96	W	A
OC	1	1.6000	0.2000	1.03	W	A
OD	1	1.8900	0.0600	1.21	A	A
OT	1	1.6000	0.1000	1.03	A	A
PA	3	1.5300	0.1300	0.98	A	A
PA	1	1.6100	0.1600	1.03	A	A
PA	2	1.5900	0.1400	1.02	A	A
RC	1	1.6100	0.1000	1.03	A	A
RE	1	1.4200	0.0800	0.91		A
RK	1	1.3700	0.1100	0.88	A	W
RL	1	2.0700	0.1700	1.33		A
SA	1	1.6300	0.2300	1.04	A	A
SR	1	1.4500	0.1200	0.93	A	A
SW	1	1.5000	0.0300	0.96	W	A
TE	1	1.9800	0.0400	1.27	A	A
TM	1	0.3740	0.0724	0.24	A	N
TN	1	1.3220	0.0270	0.85	W	W
TO	1	1.4400	0.0700	0.92	A	A
TP	1	1.5000	0.0400	0.96	A	A
TW	1	1.5700	0.0400	1.01	W	A
TX	1	1.4900	0.0700	0.95	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: GROSS BETA

EML Value: 1.5600
EML Error: 0.1600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
UC	1	1.9000	0.0700	1.22	A	A
UP	1	1.6000	0.1040	1.03	W	A
UY	1	1.5600	0.2000	1.00	W	A
WA	1	1.7000	0.0400	1.09	A	A
WC	1	1.6000	0.2000	1.03	A	A
WO	1	1.5000	0.1000	0.96		A
WO	2	1.6000	0.1000	1.03		A
WV	1	1.6800	0.0400	1.08	A	A
YA	1	1.3500	0.0300	0.87	W	W

Total Number Reported: 78

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU238

EML Value: 0.2722
EML Error: 0.0009

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.2600	0.0270	0.95		A
AF	1	0.3000	0.0100	1.10	N	A
AG	1	0.2780	0.0400	1.02	N	A
AM	1	0.1300	0.0300	0.48	N	N
AN	1	0.3100	0.0200	1.14	A	A
AR	1	0.2730	0.0640	1.00		A
AU	1	0.2829	0.0169	1.04	N	A
BA	1	0.2560	0.0700	0.94		A
BE	1	0.2800	0.0300	1.03	A	A
BL	1	0.2890	0.0200	1.06	A	A
BL	2	0.2930	0.0220	1.08	A	A
BM	1	0.3200	0.0320	1.18	A	W
BU	1	0.2360	0.0240	0.87	A	W
BX	1	0.2920	0.0140	1.07	A	A
CH	1	0.2640	0.0110	0.97	A	A
CL	1	0.2500	0.0700	0.92	N	A
CW	1	0.2660	0.0060	0.98		A
EG	1	0.2660	0.0230	0.98	A	A
EP	1	0.2540	0.0190	0.93	A	A
GA	1	0.2100	0.0170	0.77	W	W
GE	1	0.2899	0.0836	1.07	A	A
GP	1	0.2600	0.0300	0.95	A	A
GT	1	0.3100	0.0600	1.14	A	A
ID	1	0.2630	0.0140	0.97	A	A
IS	2	0.2340	0.0520	0.86	W	W
IS	1	0.1460	0.0360	0.54	W	N
IS	3	0.3000	0.0650	1.10	W	A
IT	1	0.2660	0.0340	0.98	A	A
KO	1	0.2790	0.0080	1.02		A
LA	3	0.0919	0.0029	0.34	A	N
LA	1	0.0827	0.0035	0.30	A	N
LA	2	0.0905	0.0029	0.33	A	N
LL	1	0.2740	0.0223	1.01	A	A
LV	1	0.1600	0.0350	0.59	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU238

EML Value: 0.2722
EML Error: 0.0009

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ML	1	0.2700	0.0200	0.99		A
NF	1	0.2290	1.0110	0.84		W
NL	1	0.2840	0.0660	1.04	A	A
NM	1	0.2780	0.0090	1.02	A	A
NQ	1	0.2160	0.0130	0.79	W	W
OT	1	0.2300	0.0200	0.85	A	W
RE	1	0.2200	0.0200	0.81	W	W
RI	1	0.2660	0.0335	0.98	A	A
SN	1	0.3140	0.0600	1.15	A	W
SR	1	0.2990	0.0330	1.10	A	A
SW	1	0.0200	0.0500	0.07	N	N
TE	1	0.2600	0.0200	0.95		A
TI	1	0.2600	0.0400	0.95	A	A
TM	1	0.2910	0.0346	1.07	A	A
TN	1	0.2836	0.0127	1.04	A	A
TO	1	0.4200	0.1650	1.54	A	N
TX	1	0.2860	0.0060	1.05	A	A
UP	1	0.3230	0.0430	1.19	A	W
UY	1	0.2800	0.0300	1.03	A	A
WA	1	0.2700	0.0500	0.99	A	A
WC	1	0.2900	0.0900	1.07	A	A
YA	1	0.2600	0.0100	0.95	A	A

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU239

EML Value: 0.1243
EML Error: 0.0028

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.1130	0.0130	0.91		A
AF	1	0.1000	0.0100	0.81	N	W
AG	1	0.1260	0.0220	1.01	N	A
AM	1	0.1100	0.0200	0.88	W	W
AN	1	0.1400	0.0100	1.13	A	A
AR	1	0.1370	0.0430	1.10		A
AU	1	0.1298	0.0090	1.04	N	A
BA	1	0.1000	0.0370	0.81		W
BE	1	0.1300	0.0200	1.05	A	A
BL	1	0.1700	0.0170	1.37	A	W
BL	2	0.1300	0.0160	1.05	A	A
BM	1	0.1500	0.0160	1.21	A	W
BU	1	0.1280	0.0070	1.03	A	A
BX	1	0.1220	0.0090	0.98	A	A
CH	1	0.1260	0.0060	1.01	A	A
CL	1	0.1500	0.0400	1.21	A	W
CW	1	0.1240	0.0040	1.00		A
EG	1	0.1400	0.0130	1.13	A	A
EP	1	0.1270	0.0098	1.02	A	A
GA	1	0.1300	0.0130	1.05	A	A
GE	1	0.1367	0.0488	1.10	A	A
GP	1	0.1200	0.0100	0.96	A	A
GT	1	0.1500	0.0300	1.21	A	W
ID	1	0.1130	0.0080	0.91	A	A
IS	2	0.0940	0.0240	0.76	W	N
IS	3	0.1340	0.0310	1.08	W	A
IS	1	0.0780	0.0220	0.63	W	N
IT	1	0.1200	0.0160	0.96	A	A
KO	1	0.1280	0.0160	1.03		A
LA	3	0.0423	0.0017	0.34	A	N
LA	2	0.0434	0.0017	0.35	A	N
LA	1	0.0391	0.0021	0.31	A	N
LL	1	0.1280	0.0108	1.03	A	A
LV	1	0.0790	0.0180	0.64	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: PU239

EML Value: 0.1243
EML Error: 0.0028

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ML	1	0.1200	0.0080	0.96		A
NF	1	0.0790	0.0050	0.64		N
NL	1	0.1300	0.0310	1.05	A	A
NM	1	0.1250	0.0050	1.01	A	A
NQ	1	0.1060	0.0060	0.85	A	W
OT	1	0.1100	0.0100	0.88	A	W
RE	1	0.1100	0.0100	0.88	A	W
RI	1	0.1190	0.0190	0.96	N	A
SN	1	0.1510	0.0310	1.22	A	W
SR	1	0.1390	0.0170	1.12	A	A
SW	1	0.0800	0.0300	0.64	N	N
TE	1	0.1200	0.0200	0.96		A
TI	1	0.1300	0.0300	1.05	A	A
TM	1	0.1360	0.0181	1.09	A	A
TN	1	0.1370	0.0076	1.10	A	A
TO	1	0.1600	0.0070	1.29	A	W
TX	1	0.1290	0.0040	1.04	A	A
UP	1	0.1190	0.0210	0.96	A	A
UY	1	0.1300	0.0100	1.05	A	A
WA	1	0.1400	0.0300	1.13	W	A
WC	1	0.1400	0.0500	1.13	A	A
WE	1	0.1730	0.0250	1.39		W
YA	1	0.1300	0.0090	1.05	A	A

Total Number Reported: 57

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SB125

EML Value: 3.5900
EML Error: 0.3100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	5.7100	1.0000	1.59		N
AF	1	4.0000	0.9000	1.11	A	A
AG	1	4.0900	0.7400	1.14	A	A
AM	1	1.9800	0.3400	0.55	W	N
AN	1	4.2800	0.5800	1.19	A	W
AR	1	4.0000	1.0000	1.11		A
AS	1	3.8040	0.4800	1.06		A
AU	1	4.1200	0.3800	1.15	A	A
AW	1	4.2000	0.3000	1.17		A
BA	1	4.3200	0.2800	1.20	W	W
BC	1	3.7400	0.2900	1.04	N	A
BE	1	3.7000	0.3000	1.03	A	A
BL	1	4.3300	0.2500	1.21	A	W
BN	2	5.8100	0.2300	1.62	N	N
BN	3	5.8100	0.2400	1.62	N	N
BN	1	6.3600	0.3200	1.77	N	N
BQ	1	1.2900	0.0700	0.36	A	N
BX	1	0.3670	0.2800	0.10	N	N
CA	1	3.6200	0.2500	1.01	A	A
CB	2	3.9710	0.0970	1.11	A	A
CB	3	3.6460	0.0960	1.02	A	A
CB	1	3.8550	0.1000	1.07	A	A
CD	1	3.9000	0.4000	1.09	A	A
CH	1	4.2500	0.1060	1.18	A	A
CL	1	1.6700	0.3800	0.47	A	N
CN	1	4.1300	2.6000	1.15	A	A
CO	1	4.8000	0.3000	1.34	A	W
CO	2	5.0000	0.3000	1.39	A	W
CO	3	5.1000	0.2000	1.42	A	W
CR	1	5.9000	0.2000	1.64	N	N
CS	1	3.0140	0.2470	0.84	A	A
CW	1	4.2400	0.2200	1.18		A
DH	1	3.8000	0.1000	1.06		A
EG	1	4.1000	0.3000	1.14	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SB125

EML Value: 3.5900
EML Error: 0.3100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EL	1	7.2000		2.01		N
EL	2	8.8000		2.45		N
EP	1	4.0000	0.3400	1.11	A	A
FG	1	4.9170	0.7840	1.37	W	W
FL	1	3.7000	0.1000	1.03	W	A
FM	1	4.3000	0.0900	1.20	A	W
FN	1	4.4000	0.4500	1.23	A	W
GA	1	4.1000	0.7700	1.14	A	A
GC	2	4.2200	0.5600	1.17		A
GC	3	3.9100	0.4700	1.09		A
GC	1	4.3000	0.5400	1.20		W
GE	1	3.6524	0.9892	1.02	N	A
GP	1	3.7000	1.0000	1.03	N	A
GT	1	4.4000	0.4000	1.23	A	W
HU	1	4.3300	0.0500	1.21	A	W
ID	1	3.8930	0.2410	1.08	A	A
IE	1	1.5300	0.3100	0.43		N
IL	1	3.8000	0.1000	1.06	A	A
IN	1	4.3200	0.5000	1.20	A	W
IS	1	3.6800	0.5100	1.02	A	A
IS	2	3.5600	0.5600	0.99	A	A
IS	3	3.7700	0.5000	1.05	A	A
IT	1	3.9000	0.2500	1.09	A	A
JL	1	3.3300	0.2400	0.93		A
JL	2	3.2400	0.3600	0.90		A
KO	1	3.6800	0.0900	1.02		A
LA	1	4.4500	0.2400	1.24	A	W
LA	3	4.1600	0.2300	1.16	A	A
LA	2	4.2600	0.2400	1.19	A	A
LB	1	3.9000	0.8000	1.09	A	A
LL	1	4.1900	0.1840	1.17	A	A
LN	1	2.9000	0.2500	0.81	W	W
LV	1	3.1700	0.1300	0.88	N	A
ME	3	3.4100	0.1100	0.95	A	A
ME	2	3.4800	0.1100	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SB125

EML Value: 3.5900
EML Error: 0.3100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ME	1	3.0500	0.1000	0.85	A	A
MH	1	4.6900	0.1800	1.31	W	W
MS	1	3.5700	0.3600	0.99	A	A
NA	1	3.8200	0.1800	1.06	N	A
NJ	3	3.1900	0.2400	0.89		A
NJ	1	3.4400	0.3600	0.96		A
NJ	2	3.0900	0.2700	0.86		A
NL	1	4.4400	0.7600	1.24	W	W
NP	1	3.5800	0.1700	1.00	A	A
NR	1	3.5300	0.7100	0.98		A
NS	1	3.2290	0.0650	0.90	A	A
OB	1	3.5600	0.6310	0.99	N	A
OC	3	3.8000	0.5000	1.06	A	A
OC	2	3.6000	0.5000	1.00	A	A
OC	1	3.1000	0.5000	0.86	A	A
OD	2	3.4200	0.2000	0.95	A	A
OD	1	3.2300	0.1900	0.90	A	A
OL	1	3.4100	0.0750	0.95	A	A
OS	1	3.3460	0.0980	0.93		A
OS	2	3.2580	0.1290	0.91		A
OS	3	3.4390	0.1110	0.96		A
OT	1	3.9000	0.3000	1.09	A	A
RA	1	4.1000	0.3000	1.14	A	A
RC	1	4.4000	1.1000	1.23	A	W
RE	1	3.1100	0.4600	0.87	A	A
RI	1	4.1400	0.5730	1.15	A	A
SA	1	4.3200	0.5100	1.20	A	W
SB	1	4.1700	0.5100	1.16		A
SK	1	3.6100	0.4200	1.01	W	A
SR	1	4.3100	0.6300	1.20	N	W
SW	1	3.4400	0.1100	0.96	A	A
TE	1	4.3500	0.3000	1.21	A	W
TI	1	4.0000	0.4000	1.11	A	A
TM	1	2.9800	0.3100	0.83	A	A
TN	1	7.6660	0.4850	2.13	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 site specific evaluation.

QAP 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SB125

EML Value: 3.5900
EML Error: 0.3100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TO	1	6.3100	0.4700	1.76		N
TP	1	3.9200	0.2100	1.09	A	A
TR	1	4.7930	0.2600	1.34		W
TW	1	2.7000	0.0800	0.75	A	W
TX	1	4.2800	0.1000	1.19	A	W
UP	1	2.8400	0.5490	0.79	N	W
UY	1	3.4100	0.3000	0.95	A	A
WA	1	4.4000	0.4000	1.23	A	W
WC	1	3.9000	0.4000	1.09	A	A
WE	1	1.0800	0.0870	0.30	W	N
WN	1	3.8600	0.0900	1.08		A
WN	3	3.5300	0.1300	0.98		A
WN	2	3.6400	0.0800	1.01		A
WO	1	4.5000	1.1000	1.25		W
WO	2	4.5000	1.3000	1.25		W
WV	1	3.0900	0.1840	0.86		A
YA	1	4.5300	0.2900	1.26		W

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SR90

EML Value: 0.6440
EML Error: 0.0145

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	0.3000	0.1000	0.47	A	N
AG	1	0.5800	0.1100	0.90	A	A
AM	1	0.8500	0.0500	1.32	W	A
AN	1	0.6300	0.0200	0.98	A	A
AR	1	0.5920	0.3220	0.92		A
BA	1	0.5200	0.1000	0.81		W
BC	1	0.6400	0.1960	0.99	A	A
BE	1	0.6880	0.0620	1.07	A	A
BL	2	0.4720	0.3280	0.73	A	W
BL	1	0.4530	0.3350	0.70	A	W
BM	1	0.6200	0.0410	0.96	A	A
BX	1	0.8140	0.2550	1.26		A
CH	1	0.6620	0.0490	1.03	A	A
CL	1	1.1200	0.2200	1.74	A	W
EG	1	0.6400	0.0500	0.99	A	A
GA	1	0.8300	0.0700	1.29	W	A
GE	1	0.5526	0.0867	0.86	A	A
GP	1	0.3100	0.1000	0.48	A	N
GT	1	0.5000	0.1000	0.78	A	W
IS	3	0.2930	0.1080	0.46	N	N
IS	1	0.2770	0.1040	0.43	N	N
IS	2	0.3080	0.1060	0.48	N	N
IT	1	0.6600	0.0700	1.02	A	A
KO	1	0.5960	0.0480	0.93		A
LA	1	0.6110	0.0780	0.95		A
LA	3	0.6750	0.0790	1.05		A
LA	2	0.6250	0.0840	0.97		A
NA	1	0.5500	0.1700	0.85	W	A
NM	1	0.6830	0.1030	1.06	A	A
OT	1	0.1400	0.0800	0.22	A	N
RE	1	0.4200	0.0500	0.65	A	W
RI	1	0.6850	0.0425	1.06	A	A
SR	1	0.6300	0.1200	0.98	A	A
SW	1	2.3500	0.2300	3.65	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: SR90

EML Value: 0.6440
EML Error: 0.0145

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TE	1	0.6500	0.1900	1.01	A	A
TI	1	0.5100	0.1400	0.79	W	W
TM	1	0.7110	0.1880	1.10		A
TN	1	0.6256	0.0384	0.97	A	A
TO	1	0.9400	0.2030	1.46		W
TP	1	0.8600	0.0300	1.34	N	W
TW	1	0.6000	0.0500	0.93		A
UP	1	0.5300	0.1140	0.82	A	W
UY	1	0.5600	0.0400	0.87	A	A
WA	1	0.6100	0.1900	0.95	A	A
WC	1	0.5600	0.1100	0.87	A	A
WE	1	0.6900	0.2100	1.07	N	A
YA	1	9.7900	0.6300	15.20	A	N

Total Number Reported: 47

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U234

EML Value: 0.0600
EML Error: 0.0019

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.0581	0.0041	0.97		A
AF	1	0.1000	0.0100	1.67		W
AG	1	0.0700	0.0150	1.17	A	A
AM	1	0.1100	0.0100	1.84	W	W
AN	1	0.0660	0.0040	1.10	A	A
AR	1	0.0640	0.0310	1.07		A
AU	1	0.0614	0.0078	1.02	N	A
BA	1	0.0600	0.0160	1.00		A
BC	1	0.0640	0.0145	1.07	A	A
BE	1	0.0620	0.0110	1.03	A	A
BL	1	0.0730	0.0010	1.22	A	A
BM	1	0.0620	0.0090	1.03	A	A
BU	1	0.0720	0.0070	1.20	A	A
BX	1	0.0881	0.0153	1.47	A	W
CH	1	0.0610	0.0050	1.02	A	A
CL	1	0.0870	0.0100	1.45	A	W
CW	1	0.0654	0.0016	1.09		A
EG	1	0.0700	0.0090	1.17	A	A
GA	1	0.0710	0.0070	1.18	A	A
GE	1	0.0699	0.0291	1.17	A	A
GP	1	0.0640	0.0070	1.07	N	A
IT	1	0.0620	0.0010	1.03	A	A
KO	1	0.0708	0.0022	1.18		A
LL	1	0.0726	0.0009	1.21	A	A
ML	1	0.0600	0.0050	1.00		A
NA	1	0.0880	0.0130	1.47		W
NF	1	0.0800	0.0100	1.33		A
NL	1	0.0695	0.0170	1.16	A	A
NQ	1	0.0630	0.0040	1.05	A	A
RA	1	0.0600	0.0300	1.00	N	A
RE	1	0.0600	0.0100	1.00	A	A
SR	1	0.0600	0.0090	1.00	A	A
TE	1	0.0700	0.0300	1.17		A
TN	1	0.0637	0.0035	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U234

EML Value: 0.0600
EML Error: 0.0019

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
TO	1	0.0650	0.0030	1.08	A	A
TX	1	0.0680	0.0030	1.13	A	A
UP	1	0.0790	0.0210	1.32		A
UY	1	0.0700	0.0090	1.17		A
WA	1	0.0560	0.0160	0.93	A	A
WC	1	0.1500	0.0500	2.50	A	N
YA	1	0.0700	0.0060	1.17		A

Total Number Reported: 41

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U238

EML Value: 0.0612
EML Error: 0.0028

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.0607	0.0044	0.99		A
AF	1	0.1000	0.0100	1.63		W
AG	1	0.0710	0.0170	1.16	A	A
AM	1	0.0900	0.0100	1.47	W	W
AN	1	0.0630	0.0040	1.03	A	A
AR	1	0.0540	0.0270	0.88		W
AU	1	0.0599	0.0078	0.98	N	A
BA	1	0.0760	0.0180	1.24		A
BC	1	0.0747	0.0148	1.22	A	A
BE	1	0.0650	0.0110	1.06	A	A
BL	1	0.0730	0.0010	1.19	A	A
BM	1	0.0640	0.0093	1.04	A	A
BU	1	0.0610	0.0060	1.00	A	A
BX	1	0.0729	0.0139	1.19	A	A
CH	1	0.0640	0.0060	1.04	A	A
CL	1	0.0880	0.0100	1.44	A	W
CW	1	0.0634	0.0016	1.03		A
EG	1	0.0660	0.0100	1.08	A	A
GA	1	0.0660	0.0040	1.08	A	A
GE	1	0.0675	0.0278	1.10	A	A
GP	1	0.0630	0.0070	1.03	N	A
GT	1	0.0600	0.0100	0.98	A	A
IT	1	0.0660	0.0010	1.08	W	A
KO	1	0.0700	0.0021	1.14		A
LL	1	0.0641	0.0005	1.05	A	A
ML	1	0.0700	0.0050	1.14		A
NA	1	0.0760	0.0120	1.24		A
NL	1	0.0697	0.0171	1.14	A	A
NQ	1	0.0640	0.0040	1.04	A	A
RA	1	0.0640	0.0400	1.04	N	A
RE	1	0.0500	0.0100	0.82	A	N
SR	1	0.0610	0.0090	1.00	A	A
TE	1	0.0700	0.0300	1.14		A
TN	1	0.0647	0.0036	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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: U238

EML Value: 0.0612
EML Error: 0.0028

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TO	1	0.0650	0.0040	1.06	A	A
TX	1	0.0680	0.0030	1.11	A	A
UP	1	0.0750	0.0158	1.23		A
UY	1	0.0700	0.0090	1.14		A
WA	1	0.0650	0.0160	1.06	W	A
WC	1	0.1300	0.0400	2.12	A	W
WE	1	9.4600	7.7000	**.**		N
YA	1	0.0700	0.0060	1.14		A

Total Number Reported: 42

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 50 Results by Nuclide

Matrix: AI Air Filter Bq / filter
Radionuclide: µg U

EML Value: 4.9450
EML Error: 0.2266

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	5.6000	1.3000	1.13	A	A
AR	1	4.8000	0.2000	0.97		A
BE	1	5.4000		1.09	A	A
BL	1	5.9700	0.0900	1.21	A	A
BQ	1	6.5000	0.3000	1.31	A	W
CH	1	5.2100	0.0440	1.05	A	A
GA	1	5.3000	0.2700	1.07	A	A
GE	1	5.4900	0.0976	1.11	W	A
IS	1	7.0500	0.3900	1.43	N	W
IS	2	7.7400	0.4200	1.57	N	W
IT	1	5.4400	0.3600	1.10	A	A
KO	1	5.6700	0.1700	1.15		A
LA	3	1.9000	0.1900	0.38		N
LA	2	1.9100	0.1900	0.39		N
LA	1	1.9200	0.1900	0.39		N
RA	1	5.2000	0.4000	1.05	A	A
SW	1	5.2900		1.07		A
TM	1	5.2100	0.2670	1.05	A	A
TN	1	5.4650	0.3320	1.11	A	A
TO	1	5.2400	0.3400	1.06		A
YP	1	4.5800	0.2730	0.93	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AC228

EML Value: 47.1500
EML Error: 2.9890

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	50.0000	3.3000	1.06		A
AF	1	29.6000	11.1000	0.63	A	N
AG	1	53.0000	10.0000	1.12	A	A
AM	1	54.3800	5.3800	1.15	A	A
AR	1	49.9000	11.2000	1.06		A
AS	1	40.7560	4.6790	0.86		W
AU	1	54.8000	7.8000	1.16		A
BC	1	53.3000	4.6300	1.13		A
BE	1	57.0000	6.0000	1.21		A
BL	1	43.7000	5.3000	0.93	A	A
BN	1	37.3700	1.8900	0.79	A	W
BN	3	40.3300	1.9900	0.86	A	W
BN	2	40.3300	1.9000	0.86	A	W
BQ	1	82.0000	14.0000	1.74	A	W
BU	1	46.0000	5.0000	0.98		A
BX	1	43.7000	4.0000	0.93		A
CD	1	54.0000	5.0000	1.14	A	A
CH	1	54.2000	5.2000	1.15	A	A
CL	1	71.0000	13.5000	1.51	A	W
CN	1	44.5800	3.0300	0.94		A
CO	1	52.0000	9.0000	1.10		A
CO	2	50.0000	9.0000	1.06		A
CO	3	50.0000	7.0000	1.06		A
CR	1	58.7000	3.9000	1.25	A	A
CS	1	45.9000	1.4200	0.97	A	A
DC	1	58.5000	18.8000	1.24		A
EC	1	44.7000	2.7000	0.95		A
EL	2	83.0000		1.76		N
EL	1	71.0000		1.51		W
FG	1	56.9000	20.0000	1.21	A	A
FS	1	40.7000	1.9000	0.86	A	W
GA	1	52.0000	5.7000	1.10		A
GC	3	42.4000	3.8000	0.90	A	A
GC	1	50.9900	5.4000	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AC228

EML Value: 47.1500
EML Error: 2.9890

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GC	2	38.7000	4.8200	0.82	A	W
GE	1	49.8760	11.4929	1.06	A	A
HU	1	52.5000	1.3000	1.11	A	A
ID	1	60.4170	4.4670	1.28	A	A
IE	1	53.2900	3.9000	1.13	A	A
IL	1	55.4000	3.7000	1.17	A	A
IN	1	43.5000	0.4000	0.92		A
IS	1	49.2000	13.9000	1.04	A	A
IS	2	54.5000	14.8000	1.16	A	A
IS	3	47.1000	13.8000	1.00	A	A
IT	1	53.0000	7.0000	1.12	A	A
JE	1	45.7000	7.7000	0.97	A	A
LA	3	42.0000	3.0000	0.89		A
LA	2	43.0000	3.0000	0.91		A
LA	1	41.0000	3.0000	0.87		A
LL	1	49.9000	4.3000	1.06		A
LV	1	57.1000	1.7000	1.21	A	A
MA	1	41.0000	9.3000	0.87		A
ME	1	146.0000	17.6000	3.10		N
ME	3	229.0000	47.4000	4.86		N
ME	2	185.0000	35.9000	3.92		N
MH	1	51.3600	2.2200	1.09	A	A
MS	1	59.0000	5.9000	1.25		A
NA	1	48.2000	2.8000	1.02		A
NL	1	52.8000	6.5000	1.12	A	A
NQ	1	58.9000	7.0000	1.25	A	A
OB	1	133.0000	33.0000	2.82	A	N
OC	1	40.0000	4.0000	0.85	A	W
OC	2	36.0000	4.0000	0.76	A	N
OC	3	49.0000	5.0000	1.04	A	A
OT	1	44.0000	7.0000	0.93	A	A
OU	1	87.7000	8.8000	1.86		N
PO	1	47.4000	3.8000	1.00		A
RA	1	52.0000	5.0000	1.10	A	A
RE	1	47.2000	5.1000	1.00		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AC228

EML Value: 47.1500
EML Error: 2.9890

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RL	1	93.6000	44.0000	1.99		N
SB	1	62.3000	6.5500	1.32		W
SK	1	50.5000	3.2000	1.07	A	A
SR	1	57.9000	4.5000	1.23	A	A
SW	1	72.8000	2.4100	1.54	A	W
TE	1	45.1000	7.4000	0.96	A	A
TI	1	55.0000	6.0000	1.17		A
TM	1	48.1000	14.9000	1.02	A	A
TM	2	48.1000	14.9000	1.02	A	A
TM	3	48.1000	14.9000	1.02	A	A
TW	1	45.5000	2.3000	0.96	A	A
TX	1	54.5000	1.8000	1.16	A	A
UY	1	61.9000	27.0000	1.31	A	W
WA	1	53.7000	5.2000	1.14	A	A
WE	1	68.2000	6.6000	1.45	A	W
WN	1	59.2000	1.5000	1.26		A
WN	3	59.7000	2.5000	1.27		A
WN	2	56.7000	1.5000	1.20		A
WO	1	40.0000	11.0000	0.85		W
WO	2	43.0000	12.0000	0.91		A

Total Number Reported: 89

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AM241

EML Value: 4.8943
EML Error: 0.9690

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	6.5100	1.8500	1.33		A
AF	1	17.0000	5.2000	3.47	A	N
AG	1	5.4000	1.0000	1.10	A	A
AM	1	6.2400	0.2800	1.27	A	A
AN	1	5.0300	0.2800	1.03	A	A
AR	1	4.8800	3.3300	1.00		A
AS	1	5.1740	1.6050	1.06		A
AT	1	6.3100	1.2500	1.29	A	A
AU	1	4.4500	0.6400	0.91	A	A
BE	1	4.6500	0.7000	0.95	A	A
BL	1	4.7400	0.6300	0.97	N	A
BL	2	5.1900	0.9700	1.06	N	A
BM	1	3.8600	0.5600	0.79	A	W
BX	1	3.5800	0.8400	0.73	A	W
CH	1	5.3000	0.6400	1.08	A	A
CL	1	5.6500	1.7000	1.15	W	A
CO	1	35.0000	14.0000	7.15		N
CO	3	31.0000	10.0000	6.33		N
CO	2	30.0000	14.0000	6.13		N
CS	1	3.7530	0.5640	0.77	A	W
DH	1	5.4500	2.0000	1.11	W	A
EG	1	4.6300	0.4500	0.95	A	A
EP	1	5.0000	0.4880	1.02	A	A
FL	1	4.3000	0.6000	0.88	A	A
GA	1	4.8000	0.4200	0.98	A	A
GE	1	4.4955	0.8746	0.92	A	A
GP	1	7.2000	2.1000	1.47		A
GT	1	4.6000	1.3000	0.94	A	A
HT	1	14.9000	1.5000	3.04	N	N
IN	1	4.3400	1.2000	0.89	A	A
IT	1	4.5800	0.2300	0.94	W	A
KO	1	4.7000	0.1800	0.96		A
LA	1	4.3250	0.3000	0.88	A	A
LA	2	4.5320	0.3000	0.93	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AM241

EML Value: 4.8943
EML Error: 0.9690

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LA	3	4.7540	0.2440	0.97	A	A
LL	1	7.2300	0.9350	1.48	A	A
LV	1	7.5000	0.4500	1.53	W	W
LW	1	8.7000	1.1200	1.78	A	W
MA	1	3.0000	0.4000	0.61	A	N
ME	1	3.1000	0.4000	0.63	A	W
ME	2	5.5000	0.8000	1.12	A	A
MH	1	2.8100	0.6000	0.57	A	N
NM	1	3.9400	0.2700	0.81	A	A
NM	2	4.8800	0.3300	1.00	A	A
NM	3	4.8000	0.3400	0.98	A	A
NQ	1	5.0200	0.5200	1.03	A	A
OT	1	4.4000	0.7000	0.90	A	A
PO	1	3.3000	0.6000	0.67	A	W
RE	1	4.1400	0.6600	0.85	A	A
SK	1	7.3000	0.7000	1.49	A	W
SN	1	4.2400	2.3850	0.87	A	A
SR	1	4.5800	0.7600	0.94		A
SW	1	11.1800	3.2300	2.28	A	W
TE	1	5.6500	2.4100	1.15		A
TI	1	4.5000	1.3000	0.92	N	A
TM	1	4.8840	1.7200	1.00	A	A
TM	3	4.8840	1.7200	1.00	A	A
TM	2	4.8840	1.7200	1.00	A	A
TN	1	5.0730	0.7578	1.04	A	A
TO	1	5.8200	0.4820	1.19	A	A
TR	1	3.6740	1.9900	0.75		W
TW	1	4.7000	0.1000	0.96		A
TX	1	5.5090	0.4550	1.13	A	A
UP	1	4.4400	1.1600	0.91	A	A
UY	1	4.3000	0.4000	0.88	A	A
WA	1	4.4800	0.4400	0.92	A	A
WC	1	5.7000	2.1000	1.16	A	A
WN	1	3.7000	1.6000	0.76		W
WN	2	6.8000	1.5000	1.39		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: AM241

EML Value: 4.8943
EML Error: 0.9690

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
WS	1	52.1700	1.4800	10.66	W	N
YA	1	4.7300	0.6900	0.97	A	A

Total Number Reported: 71

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI214

EML Value: 69.9000
EML Error: 5.6600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	84.7000	4.4000	1.21		W
AF	1	51.8000	7.4000	0.74	A	N
AG	1	64.0000	12.0000	0.92	A	A
AM	1	58.0800	3.3300	0.83	A	A
AR	1	68.7000	5.0000	0.98		A
AS	1	57.7760	3.6590	0.83		W
AU	1	78.4000	7.4000	1.12		A
BC	1	65.9000	5.4000	0.94		A
BE	1	90.0000	8.0000	1.29		W
BL	1	64.6000	5.2000	0.92	A	A
BN	3	62.5300	2.3700	0.89	A	A
BN	2	59.5700	2.1900	0.85	A	A
BN	1	55.5000	2.1300	0.79	A	W
BQ	1	110.0000	9.0000	1.57		N
BU	1	60.0000	8.0000	0.86		A
BX	1	67.7000	5.5000	0.97		A
CD	1	68.0000	7.0000	0.97	A	A
CH	1	67.2000	1.8000	0.96	A	A
CL	1	115.0000	10.4000	1.64	A	N
CM	1	75.2000	2.3000	1.08		A
CN	1	68.2300	5.0200	0.98		A
CO	3	72.0000	6.0000	1.03		A
CO	1	72.0000	7.0000	1.03		A
CO	2	70.0000	7.0000	1.00		A
CR	1	73.2000	5.7000	1.05	A	A
CS	1	67.4400	2.2000	0.96	A	A
DC	1	75.0000	18.5000	1.07		A
EC	1	67.9000	3.7000	0.97		A
EL	1	63.0000		0.90		A
EL	2	93.0000		1.33		W
FG	1	57.5000	11.0000	0.82	A	W
FS	1	66.3000	3.7000	0.95	A	A
GC	1	61.9000	4.1200	0.89	A	A
GC	2	59.8000	5.1500	0.86	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI214

EML Value: 69.9000
EML Error: 5.6600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GC	3	62.1000	4.4200	0.89	A	A
GE	1	74.1480	14.4967	1.06		A
HU	1	66.0000	1.6000	0.94	A	A
ID	1	61.8530	4.0380	0.88	A	A
IE	1	83.6400	3.3100	1.20		W
IL	1	74.0000	3.2000	1.06	A	A
IN	1	58.6000	3.4000	0.84	A	A
IS	3	51.9000	8.1000	0.74	A	N
IS	2	53.8000	8.1000	0.77	A	W
IS	1	52.3000	8.2000	0.75	A	W
IT	1	77.0000	3.0000	1.10	A	A
JE	1	65.6000	5.4000	0.94	A	A
LA	3	49.0000	3.0000	0.70		N
LA	2	55.0000	3.0000	0.79		W
LA	1	55.0000	3.0000	0.79		W
LL	1	77.6000	5.1200	1.11		A
LV	1	78.2000	9.0000	1.12	A	A
MA	1	67.0000	3.7000	0.96		A
MH	1	66.8900	2.3300	0.96	A	A
MS	1	75.0000	7.5000	1.07		A
NA	1	74.3000	3.1000	1.06	A	A
NL	1	68.9000	12.1000	0.99	A	A
NQ	1	68.1000	7.4000	0.97	A	A
OC	3	51.0000	5.0000	0.73	A	N
OC	2	55.0000	6.0000	0.79	A	W
OC	1	60.0000	6.0000	0.86	A	A
OT	1	66.0000	10.0000	0.94	A	A
OU	1	105.0000	10.5000	1.50	A	N
PO	1	67.4000	3.6000	0.96		A
RA	1	65.0000	3.0000	0.93	A	A
RE	1	61.1000	5.7000	0.87		A
RL	1	68.8000	23.3000	0.98		A
SK	1	71.2000	4.4000	1.02	A	A
SR	1	74.8000	6.0000	1.07	A	A
SW	1	79.0000	5.1100	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: BI214

EML Value: 69.9000
EML Error: 5.6600

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TE	1	67.3000	3.3000	0.96	A	A
TM	1	64.9000	7.7300	0.93	A	A
TM	3	64.9000	7.7300	0.93	A	A
TM	2	64.9000	7.7300	0.93	A	A
TN	1	54.5900	4.6800	0.78		W
TO	1	47.6700	7.0700	0.68	A	N
TW	1	62.5000	1.2000	0.89	A	A
TX	1	65.5000	1.4000	0.94	A	A
UY	1	67.0000	25.0000	0.96	A	A
WA	1	67.7000	4.4000	0.97	A	A
WE	1	72.3000	5.6000	1.03	A	A
WN	1	65.6000	1.8000	0.94		A
WN	3	66.3000	2.7000	0.95		A
WN	2	62.9000	1.8000	0.90		A
WO	1	77.0000	17.0000	1.10		A
WO	2	78.0000	13.0000	1.12		A

Total Number Reported: 85

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: Bq U

EML Value: 291.0000
EML Error: 3.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	310.0000	26.0000	1.07	A	A
AM	1	305.5800	22.0000	1.05	A	A
BL	1	300.0000		1.03	A	A
BU	1	279.7000	14.0000	0.96	A	A
CH	1	260.0000	11.8000	0.89	A	A
CL	1	245.0000	49.0000	0.84	A	A
GP	1	285.0000		0.98		A
HT	1	293.2000	21.0000	1.01	N	A
ID	1	262.6670	14.0290	0.90	A	A
IS	2	4847.0000	651.0000	16.66		N
IS	1	4625.0000	603.0000	15.89		N
KO	1	290.8000	5.0000	1.00		A
OT	1	320.0000	10.0000	1.10	A	A
SN	1	290.5510	43.8780	1.00		A
UP	1	305.0000	27.9000	1.05	A	A
UY	1	270.0000	30.0000	0.93	A	A
WA	1	300.0000	10.0000	1.03	A	A
WO	2	395.0000	74.0000	1.36		W
WO	1	283.0000	68.0000	0.97		A
YA	1	300.7700	11.4100	1.03	A	A

Total Number Reported: 20

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 659.5000
EML Error: 24.9500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	685.0000	4.0000	1.04		A
AF	1	558.6000	59.2000	0.85	N	W
AG	1	770.0000	130.0000	1.17	W	A
AM	1	763.2200	2.2200	1.16	A	A
AN	1	746.0000	5.0000	1.13	A	A
AR	1	722.0000	47.0000	1.10		A
AS	1	616.7900	5.4560	0.94		A
AT	1	637.3000	56.6000	0.97	A	A
AU	1	719.0000	34.0000	1.09	A	A
BA	1	672.0000	42.0000	1.02	A	A
BC	1	777.0000	53.7000	1.18	A	A
BE	1	650.0000	88.0000	0.99	A	A
BL	1	659.0000	46.0000	1.00	A	A
BM	1	669.0000	5.0000	1.01	A	A
BN	3	629.0000	52.2700	0.95	A	A
BN	2	621.6000	51.9700	0.94	A	A
BN	1	621.6000	52.6500	0.94	A	A
BQ	1	725.0000	9.0000	1.10	A	A
BU	1	570.0000	50.0000	0.86	A	W
BX	1	777.0000	60.0000	1.18	A	A
CD	1	720.0000	70.0000	1.09	A	A
CH	1	803.0000	2.8000	1.22	A	W
CL	1	672.0000	16.1000	1.02	A	A
CM	1	717.0000	57.4000	1.09	A	A
CN	1	707.9000	41.7000	1.07	A	A
CO	2	766.0000	29.0000	1.16	A	A
CO	3	763.0000	28.0000	1.16	A	A
CO	1	760.0000	28.0000	1.15	A	A
CR	1	735.7000	54.7000	1.12	W	A
CS	1	715.5500	21.9000	1.09	A	A
DC	1	825.6000	281.0000	1.25		W
DH	1	650.0000	4.0000	0.99	A	A
EC	1	734.5000	31.6000	1.11		A
EG	1	750.0000	60.0000	1.14	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 659.5000
EML Error: 24.9500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EL	2	864.0000		1.31		W
EL	1	635.0000		0.96		A
FG	1	659.9000	113.0000	1.00	A	A
FL	1	616.0000	2.0000	0.93	A	A
FN	1	645.0000	65.0000	0.98	A	A
FS	1	620.0000	24.0000	0.94	A	A
GA	1	716.0000	29.0000	1.09	A	A
GC	2	592.3400	35.0300	0.90	A	W
GC	3	654.5000	39.4100	0.99	A	A
GC	1	594.9000	22.8000	0.90	A	A
GE	1	655.8250	111.3270	0.99	A	A
GP	1	665.0000	65.0000	1.01	A	A
GT	1	770.0000	78.0000	1.17	W	A
HU	1	765.6000	20.2000	1.16	A	A
ID	1	741.7000	37.0910	1.13	A	A
IE	1	778.9000	5.9000	1.18	A	A
IL	1	643.9000	10.6000	0.98	A	A
IN	1	717.5000	12.0000	1.09	A	A
IS	2	713.0000	80.0000	1.08	A	A
IS	1	700.0000	81.0000	1.06	A	A
IS	3	675.0000	76.0000	1.02	A	A
IT	1	760.0000	54.0000	1.15	A	A
JE	1	723.5000	13.7000	1.10	A	A
KA	1	647.7000	57.6000	0.98	A	A
KO	1	657.0000	2.0000	1.00		A
LA	3	605.0000	27.0000	0.92	N	A
LA	2	611.0000	27.0000	0.93	N	A
LA	1	591.0000	26.0000	0.90	N	W
LB	1	734.0000	64.0000	1.11	A	A
LL	1	759.0000	15.2000	1.15	N	A
LV	1	749.0000	4.0000	1.14	A	A
MA	1	755.0000	31.0000	1.14	A	A
ME	1	361.0000	17.8000	0.55	N	N
ME	2	640.0000	28.3000	0.97	N	A
ME	3	633.0000	28.0000	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 659.5000
EML Error: 24.9500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MH	1	745.1000	36.5000	1.13	A	A
MS	1	753.0000	75.0000	1.14	A	A
NA	1	724.0000	24.0000	1.10	A	A
NL	1	725.0000	130.0000	1.10	A	A
NM	1	685.0000	49.0000	1.04	A	A
NQ	1	778.0000	88.0000	1.18	W	A
NR	1	636.0000	127.0000	0.96	A	A
OB	1	592.0000	112.0000	0.90	N	W
OC	1	620.0000	30.0000	0.94	W	A
OC	3	620.0000	30.0000	0.94	W	A
OC	2	610.0000	30.0000	0.93	W	A
OL	1	734.8000	23.2000	1.11	A	A
OT	1	608.0000	10.0000	0.92	A	A
OU	1	955.0000	95.5000	1.45	A	N
PK	1	712.7900	49.8700	1.08	A	A
PO	1	641.0000	32.0000	0.97	A	A
RA	1	729.0000	20.0000	1.11	A	A
RC	1	651.0000	44.0000	0.99	A	A
RE	1	652.0000	49.0000	0.99	A	A
RI	1	559.0000	21.0000	0.85	A	W
RL	1	892.0000	108.0000	1.35		N
SA	1	666.0000	23.0000	1.01	A	A
SB	1	846.0000	91.0000	1.28	A	W
SK	1	746.0000	44.0000	1.13	A	A
SR	1	743.0000	76.0000	1.13	A	A
SW	1	844.0000	3.7000	1.28	W	W
TE	1	620.5000	5.9000	0.94	A	A
TI	1	7600.0000	800.0000	11.52	W	N
TM	1	711.0000	23.5000	1.08	A	A
TM	2	711.0000	23.5000	1.08	A	A
TM	3	711.0000	23.5000	1.08	A	A
TN	1	585.8000	7.3000	0.89	N	W
TO	1	492.6000	50.7000	0.75	N	N
TP	1	641.6400	22.1200	0.97	A	A
TQ	1	760.0000	20.0000	1.15		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: CS137

EML Value: 659.5000
EML Error: 24.9500

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TR	1	632.3800	32.5690	0.96		A
TW	1	702.0000	7.0000	1.06	A	A
TX	1	730.4000	2.9000	1.11	A	A
UC	1	739.1700	86.0100	1.12	W	A
UP	1	617.0000	56.2000	0.94	A	A
UY	1	739.0000	66.0000	1.12	A	A
WA	1	733.0000	33.0000	1.11	A	A
WC	1	705.0000	104.0000	1.07	A	A
WE	1	835.0000	40.0000	1.27	A	W
WN	3	695.0000	9.0000	1.05		A
WN	2	685.0000	8.0000	1.04		A
WN	1	696.0000	8.0000	1.05		A
WO	1	616.0000	98.0000	0.93		A
WO	2	607.0000	56.0000	0.92		A
WS	1	596.8100	37.7400	0.90	A	A
YA	1	859.1400	4.2600	1.30	W	W

Total Number Reported: 120

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 362.7500
EML Error: 20.1560

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	377.0000	7.0000	1.04		A
AF	1	325.6000	48.1000	0.90	N	W
AG	1	392.0000	70.0000	1.08	W	A
AM	1	431.0000	8.1400	1.19	A	A
AN	1	387.0000	13.0000	1.07	A	A
AR	1	389.0000	36.0000	1.07		A
AS	1	349.3540	23.5630	0.96		A
AT	1	335.6000	36.9000	0.93	A	A
AU	1	388.0000	30.0000	1.07	A	A
BC	1	407.0000	27.8000	1.12	W	A
BE	1	433.0000	70.0000	1.19	A	A
BL	1	347.0000	25.0000	0.96	A	A
BN	3	310.8000	24.7400	0.86	A	W
BN	1	301.1800	23.9700	0.83	A	W
BN	2	297.8500	23.6800	0.82	A	W
BQ	1	410.0000	94.0000	1.13	N	A
BU	1	330.0000	30.0000	0.91	A	A
BX	1	381.0000	24.0000	1.05	W	A
CD	1	370.0000	40.0000	1.02	A	A
CH	1	420.0000	11.0000	1.16	A	A
CL	1	532.0000	76.6000	1.47	W	W
CM	1	402.0000	16.5000	1.11	A	A
CN	1	362.4000	22.1000	1.00	A	A
CR	1	475.0000	121.0000	1.31	A	W
CS	1	411.5300	19.1000	1.13	A	A
DC	1	372.6000	181.0000	1.03		A
DH	1	352.0000	17.0000	0.97	A	A
EC	1	436.2000	49.5000	1.20		A
EG	1	420.0000	70.0000	1.16	A	A
EL	1	488.0000		1.35		W
EL	2	560.0000		1.54		N
FG	1	341.7000	75.0000	0.94	A	A
FL	1	343.0000	7.0000	0.95	A	A
FN	1	410.0000	42.0000	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 362.7500
EML Error: 20.1560

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
FS	1	336.0000	20.0000	0.93	A	A
GC	3	381.9000	27.4700	1.05	A	A
GC	2	337.5000	29.6900	0.93	A	A
GC	1	350.6000	24.7000	0.97	A	A
GE	1	357.9010	53.8470	0.99	A	A
GP	1	370.0000	35.0000	1.02	A	A
GT	1	420.0000	52.0000	1.16	W	A
HU	1	453.8000	31.6000	1.25	A	W
ID	1	455.6000	75.4050	1.26	A	W
IE	1	430.8000	22.9000	1.19	W	A
IL	1	356.7000	36.4000	0.98	N	A
IN	1	341.5000	45.0000	0.94	A	A
IS	1	424.0000	54.0000	1.17	A	A
IS	2	367.0000	50.0000	1.01	A	A
IS	3	337.0000	48.0000	0.93	A	A
IT	1	407.0000	76.0000	1.12	A	A
JE	1	407.3000	56.1000	1.12	A	A
KA	1	365.0000	48.0000	1.01	A	A
KO	1	380.0000	6.0000	1.05		A
LA	3	332.0000	18.0000	0.92	W	A
LA	1	295.0000	17.0000	0.81	W	W
LA	2	300.0000	19.0000	0.83	W	W
LB	1	422.0000	88.0000	1.16	A	A
LL	1	374.0000	29.2000	1.03	N	A
LV	1	402.0000	13.0000	1.11	A	A
MA	1	385.0000	33.0000	1.06	A	A
ME	1	252.0000	15.0000	0.69	W	N
ME	2	303.0000	15.2000	0.83	W	W
ME	3	311.0000	15.5000	0.86	W	W
MH	1	420.7000	20.3000	1.16	A	A
MS	1	378.0000	38.0000	1.04	A	A
NA	1	396.0000	19.0000	1.09	A	A
NL	1	418.0000	59.0000	1.15	A	A
NQ	1	436.0000	52.0000	1.20	W	A
OB	1	319.0000	77.1000	0.88	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 362.7500
EML Error: 20.1560

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
OC	3	340.0000	34.0000	0.94	W	A
OC	2	390.0000	39.0000	1.08	W	A
OC	1	370.0000	37.0000	1.02	W	A
OL	1	410.4000	19.5000	1.13	A	A
OT	1	335.0000	30.0000	0.92	A	A
OU	1	525.0000	52.5000	1.45	A	W
PK	1	390.4600	120.2100	1.08		A
PO	1	361.0000	18.0000	1.00	A	A
RA	1	410.0000	75.0000	1.13	W	A
RC	1	368.0000	28.0000	1.01	A	A
RE	1	370.0000	34.0000	1.02	A	A
RL	1	577.0000	170.0000	1.59		N
SA	1	370.0000	17.0000	1.02	A	A
SB	1	455.0000	46.0000	1.25	A	W
SK	1	373.0000	22.0000	1.03	A	A
SR	1	472.0000	50.0000	1.30	W	W
SW	1	453.0000	27.1000	1.25	W	A
TE	1	355.7000	24.6000	0.98	A	A
TI	1	3900.0000	400.0000	10.75	A	N
TM	2	406.0000	47.0000	1.12	A	A
TM	1	406.0000	47.0000	1.12	A	A
TM	3	406.0000	47.0000	1.12	A	A
TN	1	332.0000	30.6000	0.92	N	A
TO	1	282.0000	46.4000	0.78	N	N
TP	1	328.7600	3.4900	0.91	A	A
TQ	1	400.0000	20.0000	1.10		A
TR	1	290.7800	21.0000	0.80		W
TW	1	382.0000	19.0000	1.05	A	A
TX	1	408.1000	9.2000	1.13	A	A
UC	1	395.2500	43.0100	1.09	A	A
UY	1	410.0000	110.0000	1.13	W	A
WA	1	403.0000	30.0000	1.11	W	A
WC	1	484.0000	60.0000	1.33	W	W
WE	1	468.0000	95.0000	1.29	A	W
WN	2	315.0000	18.0000	0.87		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: K40

EML Value: 362.7500
EML Error: 20.1560

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
WN	3	340.0000	26.0000	0.94		A
WN	1	332.0000	19.0000	0.92		A
WO	2	352.0000	54.0000	0.97		A
WO	1	345.0000	79.0000	0.95		A
WS	1	335.2200	27.1600	0.92	A	A
YA	1	442.3400	12.9500	1.22	A	A

Total Number Reported: 110

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB212

EML Value: 47.9250
EML Error: 2.5720

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	55.1000	4.1000	1.15		A
AF	1	40.7000	7.4000	0.85	A	W
AG	1	51.1000	9.0000	1.07	A	A
AM	1	59.3800	1.1100	1.24	A	W
AR	1	55.9000	6.1000	1.17		A
AS	1	42.6420	2.0650	0.89		W
AU	1	53.3000	6.0000	1.11		A
BC	1	51.8000	3.2200	1.08		A
BE	1	57.0000	6.0000	1.19		A
BL	1	48.9000	4.3000	1.02	A	A
BN	3	38.8500	3.1500	0.81	A	W
BN	2	38.4800	2.9500	0.80	A	W
BN	1	38.8500	2.8800	0.81	A	W
BQ	1	50.0000	4.0000	1.04	A	A
BU	1	46.0000	6.0000	0.96		A
BX	1	57.7000	3.4000	1.20		A
CD	1	55.0000	6.0000	1.15	A	A
CH	1	51.3000	2.5000	1.07	A	A
CL	1	57.0000	2.8500	1.19	A	A
CM	1	60.1000	5.9000	1.25		W
CR	1	61.8000	5.3000	1.29	A	W
CS	1	48.9400	2.3100	1.02	A	A
DC	1	74.0000	17.0000	1.54		N
EC	1	56.2000	9.3000	1.17		A
EL	1	74.0000		1.54		N
EL	2	74.0000		1.54		N
FG	1	55.7000	8.0000	1.16	A	A
GC	3	44.2300	3.1900	0.92	A	A
GC	2	40.7200	3.4500	0.85	A	W
GC	1	45.4200	2.6700	0.95	A	A
GE	1	49.5360	10.3672	1.03	A	A
HU	1	49.4000	1.7000	1.03	A	A
ID	1	54.1470	2.8640	1.13	A	A
IE	1	56.2000	2.3600	1.17	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB212

EML Value: 47.9250
EML Error: 2.5720

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IL	1	44.0000	2.4000	0.92	A	A
IN	1	48.8000	2.2000	1.02	A	A
IS	1	44.9000	7.4000	0.94	A	A
IS	2	46.9000	20.8000	0.98	A	A
IS	3	39.2000	6.5000	0.82	A	W
IT	1	52.0000	2.0000	1.09	A	A
JE	1	48.9000	2.4000	1.02	A	A
LA	3	32.0000	2.0000	0.67		N
LA	1	30.0000	2.0000	0.63		N
LA	2	32.0000	2.0000	0.67		N
LL	1	50.7000	7.5000	1.06		A
LV	1	62.1000	3.8000	1.30	A	W
MH	1	51.1700	3.6100	1.07	A	A
MS	1	60.0000	6.0000	1.25		W
NA	1	52.0000	2.3000	1.09	A	A
NL	1	49.8000	11.1000	1.04	A	A
NQ	1	57.4000	7.4000	1.20	A	A
OB	1	46.2000	9.3700	0.96	A	A
OC	3	51.0000	5.0000	1.06	A	A
OC	2	47.0000	5.0000	0.98	A	A
OC	1	50.0000	5.0000	1.04	A	A
OT	1	47.0000	3.0000	0.98	A	A
OU	1	121.0000	12.1000	2.53	A	N
RA	1	62.0000	3.0000	1.29	A	W
RE	1	50.4000	4.8000	1.05		A
RL	1	63.6000	15.5000	1.33		W
SK	1	53.9000	3.7000	1.13	A	A
SR	1	53.7000	5.5000	1.12	A	A
SW	1	67.4000	3.2200	1.41	A	N
TE	1	47.9000	3.0000	1.00	A	A
TI	1	53.0000	5.0000	1.11		A
TM	1	60.8000	5.1400	1.27	A	W
TM	2	60.8000	5.1400	1.27	A	W
TM	3	60.8000	5.1400	1.27	A	W
TN	1	45.4800	2.8200	0.95		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB212

EML Value: 47.9250
EML Error: 2.5720

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TO	1	35.8800	6.7500	0.75	A	W
TW	1	50.0000	1.0000	1.04	A	A
TX	1	51.0000	1.2000	1.06		A
UY	1	51.4000	25.0000	1.07	A	A
WA	1	50.7000	3.3000	1.06	A	A
WE	1	60.4000	7.3000	1.26	A	W
WN	2	46.9000	0.8000	0.98		A
WN	3	49.4000	1.2000	1.03		A
WN	1	48.4000	0.8000	1.01		A
WO	2	44.0000	5.0000	0.92		A
WO	1	47.0000	8.0000	0.98		A

Total Number Reported: 80

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB214

EML Value: 71.0000
EML Error: 7.0350

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	90.7000	2.2000	1.28		W
AF	1	55.5000	11.1000	0.78	A	W
AG	1	74.0000	13.0000	1.04	A	A
AM	1	21.0900	1.3600	0.30	A	N
AR	1	76.5000	5.7000	1.08		A
AS	1	61.9010	3.8740	0.87		W
AU	1	82.1000	9.3000	1.16		A
BC	1	72.5000	4.7700	1.02		A
BE	1	93.0000	7.0000	1.31		W
BL	1	71.5000	5.4000	1.01	A	A
BN	1	56.2400	4.6200	0.79	A	W
BN	2	62.1600	5.0300	0.88	A	W
BN	3	68.4500	5.5300	0.96	A	A
BQ	1	108.0000	11.0000	1.52		N
BU	1	61.0000	8.0000	0.86		W
BX	1	73.6000	4.6000	1.04		A
CD	1	78.0000	8.0000	1.10	A	A
CH	1	75.0000	4.2000	1.06	A	A
CL	1	122.0000	13.4000	1.72	A	N
CM	1	90.6000	5.3000	1.28		W
CN	1	68.5500	4.3500	0.96		A
CO	3	89.0000	6.0000	1.25		A
CO	2	86.0000	9.0000	1.21		A
CO	1	87.0000	7.0000	1.23		A
CR	1	78.2000	4.8000	1.10	A	A
CS	1	65.6100	2.5400	0.92	A	A
DC	1	69.6000	15.6000	0.98		A
EC	1	71.2000	8.6000	1.00		A
EL	2	103.0000		1.45		N
EL	1	72.0000		1.01		A
FG	1	55.8000	10.0000	0.79	A	W
FS	1	63.2000	3.6000	0.89	A	A
GC	2	67.5000	6.2900	0.95		A
GC	3	70.3000	5.1500	0.99		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB214

EML Value: 71.0000
EML Error: 7.0350

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GC	1	67.7000	4.8600	0.95		A
GE	1	82.0290	16.0184	1.15	A	A
HU	1	78.1000	1.7000	1.10	A	A
ID	1	71.4730	3.9620	1.01	A	A
IE	1	88.8500	6.5400	1.25	A	A
IL	1	74.0000	3.2000	1.04	A	A
IN	1	70.7000	0.3000	1.00	A	A
IS	3	52.9000	8.8000	0.75	A	W
IS	1	57.7000	8.8000	0.81	A	W
IS	2	64.0000	23.4000	0.90	A	A
IT	1	88.0000	14.0000	1.24	A	A
JE	1	76.1000	4.3000	1.07	A	A
LA	1	48.0000	3.0000	0.68		W
LA	3	45.0000	3.0000	0.63		N
LA	2	45.0000	2.0000	0.63		N
LL	1	87.1000	3.8300	1.23		A
LV	1	97.9000	24.5000	1.38	A	W
MA	1	67.0000	3.7000	0.94		A
ME	2	64.4000	2.0000	0.91	A	A
ME	1	36.4000	1.6000	0.51	A	N
ME	3	66.6000	1.7000	0.94	A	A
MH	1	75.3000	2.4800	1.06	A	A
MS	1	77.4000	7.7000	1.09		A
NA	1	78.8000	3.2000	1.11	A	A
NL	1	73.4000	14.8000	1.03	A	A
NQ	1	72.6000	8.5000	1.02	A	A
OB	1	18.3000	17.5000	0.26	A	N
OC	3	68.0000	7.0000	0.96	A	A
OC	2	68.0000	7.0000	0.96	A	A
OC	1	66.0000	7.0000	0.93	A	A
OT	1	66.0000	10.0000	0.93	A	A
OU	1	120.0000	12.0000	1.69	A	N
PO	1	69.4000	4.8000	0.98		A
RA	1	64.0000	4.0000	0.90	A	A
RE	1	71.8000	6.7000	1.01		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PB214

EML Value: 71.0000
EML Error: 7.0350

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
RL	1	95.5000	27.8000	1.35		W
SK	1	74.2000	4.6000	1.04	A	A
SR	1	76.1000	5.9000	1.07	A	A
SW	1	92.1000	5.2200	1.30	A	W
TE	1	70.1000	4.8000	0.99	A	A
TI	1	89.0000	9.0000	1.25		A
TM	1	78.6000	9.9100	1.11	A	A
TM	2	78.6000	9.9100	1.11	A	A
TM	3	78.6000	9.9100	1.11	A	A
TN	1	48.6000	6.8100	0.69		W
TO	1	49.7700	8.5900	0.70	A	W
TW	1	72.0000	2.0000	1.01	A	A
TX	1	71.6000	1.6000	1.01	A	A
UY	1	68.0000	25.0000	0.96	A	A
WA	1	77.0000	4.8000	1.09	A	A
WE	1	71.1000	6.0000	1.00	A	A
WN	3	67.4000	2.0000	0.95		A
WN	2	66.4000	1.3000	0.94		A
WN	1	66.6000	1.3000	0.94		A
WO	2	78.0000	8.0000	1.10		A
WO	1	80.0000	13.0000	1.13		A

Total Number Reported: 90

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU238

EML Value: 0.3637
EML Error: 0.0854

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
CW	3	0.3490	0.0580	0.96		A
CW	2	0.3590	0.0270	0.99		A
CW	1	0.3520	0.0280	0.97		A
EG	1	0.3200	0.0600	0.88	A	A
IT	1	0.4300	0.1600	1.18	W	A
NL	1	0.9050	0.4030	2.49		W
TW	1	0.4500	0.0400	1.24		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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU239

EML Value: 8.1117
EML Error: 1.0683

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	7.2900	0.8800	0.90		A
AF	1	5.2000	2.2000	0.64	W	N
AG	1	8.3000	1.5000	1.02	A	A
AM	1	14.0600	0.7300	1.73	A	W
AN	1	8.4800	0.4500	1.04	A	A
AR	1	7.8100	4.2600	0.96		A
AU	1	5.0600	0.6300	0.62	A	N
BE	1	8.4700	1.0500	1.04	A	A
BL	1	9.1800	0.3400	1.13	A	A
BL	2	8.9900	0.4600	1.11	A	A
BM	1	7.8900	0.7200	0.97	A	A
BU	1	7.5600	0.7600	0.93	W	A
BX	1	4.9600	0.6300	0.61	A	N
CH	1	8.3000	0.5300	1.02	A	A
CL	1	9.2000	3.8000	1.13	A	A
CO	3	8.1000	0.5000	1.00		A
CO	1	7.6000	0.5000	0.94		A
CO	2	7.9000	0.5000	0.97		A
CW	3	7.9800	0.3400	0.98		A
CW	2	7.9800	0.1600	0.98		A
CW	1	8.4100	0.1800	1.04		A
EG	1	7.6700	0.6800	0.95	A	A
EP	1	7.9900	0.6240	0.99	A	A
GA	1	7.0000	1.1000	0.86	W	W
GE	1	7.6220	1.5218	0.94	A	A
GP	1	7.8000	3.1000	0.96		A
GT	1	8.8000	1.9000	1.09	A	A
HT	1	68.0000	6.0000	8.38	N	N
ID	1	7.3570	0.4440	0.91	A	A
IE	1	7.7100	2.8500	0.95		A
IN	1	7.6600	1.5000	0.94	A	A
IS	1	9.2700	2.6600	1.14	W	A
IS	2	9.1000	2.5700	1.12	W	A
IT	1	7.9200	0.3300	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU239

EML Value: 8.1117
EML Error: 1.0683

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
KA	1	8.2900	0.4300	1.02	A	A
KO	1	7.0200	0.1400	0.87		W
LA	1	8.2660	0.4329	1.02	A	A
LA	2	7.5960	0.4107	0.94	A	A
LA	3	7.9660	0.3774	0.98	A	A
LL	1	8.0900	1.1000	1.00	A	A
LW	1	7.9500	1.5300	0.98	A	A
ML	1	7.1200	0.5200	0.88	A	W
NA	1	6.9000	1.0000	0.85	A	W
NF	1	6.6970	0.0040	0.83		W
NL	1	8.3400	2.0900	1.03	A	A
NM	3	7.5600	0.3300	0.93	W	A
NM	2	7.9200	0.3100	0.98	W	A
NM	1	6.3400	0.2700	0.78	W	W
NQ	1	6.7200	0.6300	0.83	W	W
OT	1	7.4000	0.8000	0.91	A	A
RA	1	8.9000	1.8000	1.10	W	A
RE	1	7.9600	1.7300	0.98	A	A
RI	1	9.4400	1.2100	1.16		A
SN	1	7.8970	3.1350	0.97	A	A
SR	1	10.8300	1.8500	1.34		W
SW	1	2.0900	0.5500	0.26	N	N
TE	1	7.3200	1.3200	0.90		A
TI	1	7.1000	1.8000	0.88	A	W
TM	1	9.3240	1.8130	1.15	A	A
TM	3	9.3240	1.8130	1.15	A	A
TM	2	9.3240	1.8130	1.15	A	A
TN	1	8.0820	0.6999	1.00	A	A
TO	1	7.1300	0.0170	0.88	A	W
TW	1	8.1600	0.2800	1.01		A
TX	1	7.9960	0.3000	0.99	A	A
UP	1	8.9600	1.9800	1.11	A	A
UY	1	7.1500	0.9000	0.88	A	W
WA	1	6.8200	0.4600	0.84	A	W
WC	1	9.3000	3.1000	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: PU239

EML Value: 8.1117
EML Error: 1.0683

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
WE	1	17.4000	5.5000	2.14		N
YA	1	7.8300	0.6300	0.96	A	A

Total Number Reported: 71

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: SR90

EML Value: 32.4000
EML Error: 0.5292

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	51.8000	40.7000	1.60	A	A
AG	1	30.7000	6.3000	0.95	A	A
AM	1	39.4400	5.5500	1.22	A	A
AN	1	32.9000	0.8500	1.01	A	A
AR	1	24.8000	31.2000	0.76		W
AU	1	34.0000	4.0000	1.05	A	A
BC	1	14.9000	5.7400	0.46	W	N
BE	1	30.5000	4.2000	0.94	A	A
BL	2	27.2000	6.0000	0.84	A	A
BL	1	28.8000	7.3000	0.89	A	A
BM	1	34.6500	4.9800	1.07	A	A
BX	1	10.8000	4.5000	0.33	W	N
CH	1	31.0000	2.6000	0.96	A	A
CL	1	24.3000	13.6000	0.75	W	W
EG	1	34.9000	1.8000	1.08	A	A
GE	1	37.7881	4.4458	1.17	A	A
GP	1	17.0000	5.0000	0.52	N	N
GT	1	29.0000	9.0000	0.89	A	A
ID	1	48.3900	2.6480	1.49	A	A
IN	1	41.5000	5.9000	1.28		A
IS	2	30.0000	7.0000	0.93	A	A
IS	1	121.0000	24.0000	3.73	A	N
IT	1	28.5000	5.0000	0.88	A	A
KA	1	35.5100	1.8800	1.10	A	A
KO	1	31.3000	2.2000	0.97		A
LA	1	47.7300	18.5000	1.47		A
LA	2	43.6600	9.6200	1.35		A
NM	1	28.0000	4.5000	0.86		A
NM	2	26.6000	4.6000	0.82		A
NM	3	27.4000	6.2000	0.85		A
OT	1	35.0000	11.0000	1.08	A	A
OU	1	32.9000	3.3000	1.01	A	A
RA	1	32.0000	6.0000	0.99	A	A
RE	1	29.5000	3.2000	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: SR90

EML Value: 32.4000
EML Error: 0.5292

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RI	1	76.0000	8.2800	2.35		W
SR	1	41.2000	19.6000	1.27	A	A
SW	1	36.3600	22.6300	1.12	N	A
TE	1	28.3000	3.5000	0.87	A	A
TI	1	17.0000	4.0000	0.52	A	N
TM	2	35.2000	7.2900	1.09	A	A
TM	1	35.2000	7.2900	1.09	A	A
TM	3	35.2000	7.2900	1.09	A	A
TN	1	33.9500	2.7492	1.05	A	A
TO	1	45.3900	1.9700	1.40	A	A
TP	1	36.5600	0.8400	1.13	W	A
TQ	1	28.2000	3.5000	0.87		A
TW	1	36.1000	2.6000	1.11		A
TX	1	32.6000	6.1000	1.01	A	A
UP	1	32.0000	9.2000	0.99	A	A
UY	1	23.4000	1.6000	0.72	A	W
WA	1	41.8000	3.7000	1.29	A	A
WC	1	82.0000	12.0000	2.53	A	W
WE	1	26.8000	16.0000	0.83	A	A
YA	1	27.7500	1.7400	0.86	A	A

Total Number Reported: 54

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: TH234

EML Value: 138.0000
EML Error: 4.0800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	132.0000	7.0000	0.96		A
AF	1	118.4000	29.6000	0.86	A	A
AG	1	128.0000	31.0000	0.93	A	A
AM	1	179.8000	10.7300	1.30	A	A
AR	1	146.0000	24.0000	1.06		A
AS	1	147.1300	19.9230	1.07		A
AU	1	185.0000	23.0000	1.34		A
BC	1	172.0000	47.0000	1.25		A
BE	1	146.0000	16.0000	1.06		A
BL	1	165.0000	15.0000	1.20	A	A
BQ	1	147.0000	23.0000	1.07	A	A
BX	1	140.0000	28.0000	1.01		A
CH	1	223.0000	64.0000	1.62		W
CL	1	253.0000	22.8000	1.83		W
CN	1	135.8000	9.4000	0.98		A
CS	1	169.3000	17.9000	1.23	A	A
EC	1	174.3000	15.8000	1.26		A
FS	1	121.0000	12.0000	0.88	A	A
GE	1	132.0530	44.7572	0.96	A	A
ID	1	874.2000	72.4400	6.34		N
IE	1	177.3000	44.0000	1.28	A	A
IN	1	193.0000	5.0000	1.40	A	A
IS	3	133.0000	24.0000	0.96	A	A
IS	2	114.0000	22.0000	0.83	A	A
IS	1	76.9000	22.4000	0.56	A	N
IT	1	235.0000	89.0000	1.70	A	W
LA	2	139.0000	23.0000	1.01		A
LA	3	114.0000	16.0000	0.83		A
LA	1	154.0000	26.0000	1.12		A
LL	1	146.0000	64.1000	1.06		A
LV	1	101.0000	6.0000	0.73	A	W
MA	1	107.0000	8.1000	0.77		W
ME	1	219.0000	19.7000	1.59	A	W
ME	2	347.0000	27.1000	2.51	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: TH234

EML Value: 138.0000
EML Error: 4.0800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MH	1	149.7000	8.2000	1.09		A
MS	1	172.0000	17.0000	1.25		A
NA	1	130.0000	11.0000	0.94	A	A
NL	1	127.0000	25.0000	0.92	A	A
NQ	1	146.0000	19.0000	1.06	A	A
OT	1	160.0000	10.0000	1.16	A	A
OU	1	256.0000	25.6000	1.86	A	N
RL	1	42.6000	21.1000	0.31		N
SK	1	144.0000	10.0000	1.04	A	A
SR	1	90.6000	6.9000	0.66		W
SW	1	163.0000	83.2000	1.18	A	A
TE	1	227.4000	35.2000	1.65		W
TM	1	164.0000	29.2000	1.19	A	A
TM	2	164.0000	29.2000	1.19	A	A
TM	3	164.0000	29.2000	1.19	A	A
TX	1	155.0000	14.5000	1.12	A	A
UY	1	137.0000	15.0000	0.99	A	A
WA	1	172.0000	44.0000	1.25	A	A
WE	1	101.0000	29.5000	0.73	A	W
WO	2	173.0000	45.0000	1.25		A
WO	1	167.0000	33.0000	1.21		A

Total Number Reported: 55

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U234

EML Value: 140.6670
EML Error: 1.1550

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	149.8000	18.9000	1.07		A
AG	1	145.0000	18.0000	1.03	A	A
AM	1	166.8500	8.3400	1.19	W	W
AN	1	123.0000	2.5000	0.87	N	A
AR	1	141.0000	21.0000	1.00		A
AU	1	140.0000	16.0000	1.00	A	A
BC	1	122.0000	7.0300	0.87	N	A
BE	1	127.8000	8.2000	0.91	A	A
BL	1	147.0000		1.04	A	A
BM	1	132.0000	19.0000	0.94	A	A
BU	1	128.4000	6.4000	0.91	A	A
BX	1	137.0000	7.0000	0.97	W	A
CH	1	123.0000	5.4000	0.87	A	A
CL	1	124.0000	29.7000	0.88	A	A
CW	1	146.2000	2.9000	1.04		A
CW	3	143.0000	2.8000	1.02		A
CW	2	143.9000	3.7000	1.02		A
EG	1	147.0000	15.0000	1.04	A	A
GA	1	154.0000	13.0000	1.10	A	A
GE	1	135.7900	18.4470	0.96	A	A
GP	1	140.0000	28.0000	1.00		A
HT	1	145.0000	10.0000	1.03	N	A
ID	1	143.3330	8.2880	1.02		A
IN	1	147.0000	14.5000	1.04	A	A
IT	1	125.0000	3.0000	0.89	A	A
KO	1	139.7000	3.5000	0.99		A
LW	1	132.0000	9.1300	0.94	A	A
ML	1	136.0100	9.6200	0.97	A	A
NA	1	145.0000	8.0000	1.03	A	A
NL	1	140.0000	32.0000	1.00	A	A
NQ	1	141.1000	8.0000	1.00	A	A
OB	1	135.0000	33.2000	0.96		A
OK	1	128.0000		0.91		A
RA	1	134.0000	15.0000	0.95	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U234

EML Value: 140.6670
EML Error: 1.1550

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
RE	1	136.0000	14.0000	0.97	A	A
TE	1	132.9000	6.9000	0.94		A
TN	1	136.0000	4.7060	0.97	A	A
TO	1	110.2600	0.1600	0.78	A	A
TX	1	138.7130	1.4060	0.99	A	A
UP	1	152.0000	20.1000	1.08		A
UY	1	127.0000	14.0000	0.90		A
WA	1	142.0000	7.0000	1.01	A	A
YA	1	142.7700	7.8300	1.01	A	A

Total Number Reported: 43

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U238

EML Value: 145.0000
EML Error: 1.7320

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	150.2000	18.9000	1.04		A
AG	1	155.0000	19.0000	1.07	A	A
AM	1	138.7300	13.8000	0.96	W	A
AN	1	132.0000	2.7000	0.91	N	A
AR	1	135.0000	20.0000	0.93		A
AU	1	145.0000	16.0000	1.00	A	A
BC	1	161.0000	8.2900	1.11	A	W
BE	1	135.3000	8.5000	0.93	A	A
BL	1	147.0000		1.01	A	A
BM	1	136.9000	19.6000	0.94	A	A
BU	1	134.6000	6.7000	0.93	A	A
BX	1	142.0000	7.0000	0.98	A	A
CH	1	130.0000	5.6000	0.90	A	A
CL	1	125.0000	29.9000	0.86	A	A
CS	1	201.7000	5.5400	1.39	A	W
CW	3	149.8000	3.0000	1.03		A
CW	2	149.8000	3.9000	1.03		A
CW	1	153.6000	3.1000	1.06		A
EG	1	144.0000	17.0000	0.99	A	A
FL	1	100.0000	5.0000	0.69	W	A
GA	1	153.0000	4.6000	1.05	A	A
GE	1	138.7500	18.8409	0.96	A	A
GP	1	145.0000	28.0000	1.00		A
GT	1	141.0000	37.0000	0.97	A	A
HT	1	148.0000	10.0000	1.02	N	A
ID	1	151.0000	7.7460	1.04	A	A
IN	1	146.5000	17.9000	1.01	A	A
IT	1	130.0000	3.0000	0.90	A	A
KO	1	144.9000	3.6000	1.00		A
LW	1	140.0000	9.6600	0.97	A	A
ML	1	142.5500	10.0700	0.98	A	A
NA	1	134.0000	8.0000	0.92	A	A
NL	1	142.0000	33.0000	0.98	A	A
NQ	1	143.2000	8.2000	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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: U238

EML Value: 145.0000
EML Error: 1.7320

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
OB	1	133.0000	33.0000	0.92		A
OK	1	136.0000		0.94		A
RA	1	135.0000	8.0000	0.93	A	A
RE	1	148.0000	15.0000	1.02	A	A
TE	1	139.4000	7.0000	0.96		A
TN	1	141.4000	9.6340	0.98	A	A
TO	1	120.8600	10.4800	0.83	A	A
TX	1	144.3000	1.5170	1.00	A	A
UP	1	144.0000	19.1000	0.99		A
UY	1	137.0000	15.0000	0.94		A
WA	1	143.0000	7.0000	0.99	A	A
WE	1	325.0000	280.0000	2.24		N
WS	1	142.8200	29.4900	0.99	A	A
YA	1	151.0300	8.2700	1.04	A	A

Total Number Reported: 48

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 50 Results by Nuclide

Matrix: SO Soil Bq / kg
Radionuclide: µg U

EML Value: 11.8000
EML Error: 0.3000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	11.8000	2.8000	1.00	A	A
AR	1	10.0000	1.0000	0.85		A
BE	1	11.9000		1.01	A	A
BL	1	12.0000		1.02	A	A
BQ	1	13.4000	0.2000	1.14	W	W
CH	1	11.0000	0.4400	0.93	A	A
GA	1	12.1000		1.02	A	A
GE	1	9.7650	0.1838	0.83		A
HT	1	12.0000	1.0000	1.02	N	A
ID	1	10.8330	0.5800	0.92		A
IT	1	10.9000	0.1600	0.92	A	A
KO	1	11.7000	0.3000	0.99		A
LA	1	11.3400	1.1300	0.96		A
LA	3	11.8500	1.1900	1.00		A
LA	2	11.5800	1.1600	0.98		A
LL	1	11.8350	5.1100	1.00		A
NL	1	11.5000	2.6000	0.98	A	A
RA	1	10.9000	0.6000	0.92	A	A
SW	1	11.8000		1.00	A	A
TI	1	11.2000	2.0000	0.95	A	A
TM	1	11.8000	0.6060	1.00	A	A
TM	2	11.8000	0.6060	1.00	A	A
TM	3	11.8000	0.6060	1.00	A	A
TN	1	10.0800	0.6400	0.85	A	A
TO	1	10.2000	0.7600	0.86		A
UP	1	10.3500	1.0000	0.88	A	A
YP	1	11.5000	0.8950	0.98	A	A

Total Number Reported: 27

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: AM241

EML Value: 3.5220
EML Error: 0.5898

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	4.1000	1.1000	1.16	W	A
AG	1	3.4000	0.5000	0.96	A	A
AM	1	2.3300	0.3500	0.66	W	N
AR	1	2.5200	1.3000	0.72		W
AT	1	2.9600	0.8800	0.84	A	W
AU	1	3.1600	0.3700	0.90	A	A
BE	1	3.4500	0.4700	0.98	A	A
BL	1	3.5800	0.2400	1.02	A	A
BM	1	2.6800	1.0500	0.76	A	W
BU	1	3.7300	0.3700	1.06	A	A
BX	1	2.3100	0.9000	0.66	A	N
CH	1	2.8900	0.1900	0.82	A	W
CL	1	2.6100	1.2000	0.74	W	W
CN	1	4.5700	0.5800	1.30	A	A
CS	1	2.0850	0.6450	0.59	A	N
CW	2	3.3900	0.0900	0.96		A
CW	3	3.1400	0.0800	0.89		A
CW	1	3.1900	0.0800	0.91		A
EG	1	3.2200	0.2300	0.91	A	A
EL	2	6.2000		1.76		W
EL	1	5.3000		1.50		A
EP	1	3.2900	0.2950	0.93	A	A
FL	1	4.0000	0.7000	1.14	A	A
GA	1	3.8000	0.2500	1.08	A	A
GE	1	3.6760	1.1493	1.04	A	A
GP	1	3.5000	1.0000	0.99	A	A
GT	1	3.3000	0.7000	0.94	W	A
IS	2	3.6500	1.0100	1.04	A	A
IS	3	5.2800	1.3300	1.50	A	A
IS	1	3.4000	0.8800	0.96	A	A
IT	1	2.9700	0.0700	0.84	A	W
KO	1	3.2900	0.0400	0.93		A
LL	1	3.2000	0.5820	0.91	A	A
LV	1	3.0600	0.7900	0.87	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: AM241

EML Value: 3.5220
EML Error: 0.5898

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
MA	1	48.0000	7.4000	13.63	N	N
ME	2	3.8800	1.2400	1.10	W	A
ME	3	1.7600	1.1900	0.50	W	N
ME	1	1.2700	0.4200	0.36	W	N
MH	1	2.7200	0.5400	0.77	W	W
OT	1	3.4000	0.6000	0.96	A	A
PO	1	3.7000	0.7000	1.05	W	A
RE	1	3.1800	0.3600	0.90	A	A
SK	1	3.2000	0.2000	0.91		A
SN	1	3.6860	1.3080	1.05	A	A
SR	1	3.3400	0.4300	0.95	A	A
SW	1	9.3000	0.9400	2.64	N	W
TE	1	3.3500	0.8500	0.95		A
TI	1	3.2000	0.7000	0.91	A	A
TM	1	3.3300	0.5370	0.94	A	A
TN	1	3.5110	0.5343	1.00	A	A
TO	1	3.2800	0.4990	0.93	A	A
TX	1	3.8000	0.2600	1.08	A	A
UY	1	3.1300	0.4000	0.89	A	W
WA	1	4.7000	0.5200	1.33	W	A
WC	1	4.4000	1.7000	1.25	W	A
WE	1	4.9900	0.5900	1.42		A
WN	2	4.5000	1.7000	1.28		A
WN	1	5.0000	1.7000	1.42		A
YA	1	3.1700	0.1100	0.90	A	A

Total Number Reported: 59

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CM244

EML Value: 1.6707
EML Error: 0.5415

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	2.2200	0.2600	1.33	A	A
BE	1	2.1200	0.3300	1.27	A	A
BL	1	1.6000	0.1200	0.96	W	A
BU	1	2.5500	0.2600	1.53	A	W
BX	1	4.2200	0.8800	2.53	A	N
CH	1	1.8600	0.1400	1.11	A	A
CL	1	2.4400	1.2800	1.46	W	W
CW	3	1.8800	0.0700	1.13		A
CW	2	2.0300	0.0700	1.22		A
CW	1	2.1500	0.0800	1.29		A
EG	1	1.8000	0.1900	1.08	A	A
EP	1	2.0400	0.1532	1.22	A	A
GA	1	2.1000	0.2400	1.26	A	A
GE	1	2.3551	0.8570	1.41	A	W
GP	1	1.9000	0.6000	1.14	A	A
IS	1	3.0900	0.8200	1.85		N
IS	3	2.9000	0.8400	1.74		W
IS	2	3.4000	0.9800	2.04		N
IT	1	1.6500	0.0300	0.99	A	A
KO	1	1.7400	0.1200	1.04		A
OT	1	2.2000	0.4000	1.32	A	A
RE	1	2.2400	0.2700	1.34	A	A
SN	1	1.8780	0.9470	1.12	A	A
SR	1	1.7100	0.3100	1.02	A	A
SW	1	1.9200	0.5000	1.15	W	A
TE	1	0.5600	0.4100	0.34		N
TI	1	2.1000	0.5000	1.26	A	A
TM	1	1.1470	0.2590	0.69	W	W
TN	1	1.9245	0.4192	1.15	A	A
TO	1	1.3800	0.3000	0.83		A
UY	1	2.1000	0.3000	1.26	W	A
WA	1	2.2900	0.3700	1.37	W	W
WC	1	2.2000	1.1000	1.32	A	A
YA	1	2.0400	0.0900	1.22	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CM244

EML Value: 1.6707
EML Error: 0.5415

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
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Total Number Reported: 34

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 21.4500
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	22.2000	14.8000	1.03	N	A
AG	1	23.1000	4.1000	1.08	A	A
AM	1	21.0800	1.4800	0.98	A	A
AR	1	27.5000	3.5000	1.28		W
AT	1	23.0200	2.8300	1.07	A	A
AU	1	25.0000	3.0000	1.17	A	A
BA	1	24.0000	8.0000	1.12	A	A
BC	1	23.1000	1.8000	1.08	A	A
BE	1	25.0000	3.0000	1.17	A	A
BL	1	21.4000	1.7000	1.00	A	A
BM	1	22.3000	1.7300	1.04	A	A
BN	3	19.7600	1.2600	0.92	A	A
BN	1	19.3500	1.5800	0.90	A	A
BN	2	18.6100	1.1800	0.87	A	A
BQ	1	73.0000	11.0000	3.40	N	N
BU	1	21.0000	2.0000	0.98	A	A
BX	1	24.3000	2.0000	1.13	A	A
CD	1	24.0000	2.0000	1.12	A	A
CH	1	26.2000	1.3000	1.22	A	A
CL	1	37.0000	6.4000	1.73	A	N
CN	1	21.0100	1.5200	0.98	A	A
CO	2	24.0000	2.0000	1.12	A	A
CO	1	24.0000	3.0000	1.12	A	A
CO	3	22.0000	3.0000	1.03	A	A
CR	1	26.6000	1.5000	1.24	W	A
CS	1	24.0600	1.2590	1.12	A	A
EG	1	23.0000	3.0000	1.07	A	A
EL	1	32.0000		1.49		N
EL	2	41.0000		1.91		N
FL	1	21.6000	0.5000	1.01	A	A
FN	1	22.8000	1.8000	1.06	A	A
GA	1	25.0000	9.2000	1.17	W	A
GC	3	20.7100	1.7500	0.97	A	A
GC	1	23.3000	2.2600	1.09	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 21.4500
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GC	2	21.7000	2.7000	1.01	A	A
GE	1	20.9069	3.9104	0.98	A	A
GP	1	24.0000	3.0000	1.12	A	A
GT	1	25.0000	2.0000	1.17	W	A
HU	1	21.9000	0.6000	1.02	A	A
ID	1	23.6330	1.9850	1.10	A	A
IE	1	35.1400	2.3900	1.64	W	N
IL	1	21.8000	1.5000	1.02	A	A
IN	1	25.1000	3.3000	1.17	A	A
IS	1	18.9000	4.0000	0.88	A	A
IS	3	20.5000	4.0000	0.96	A	A
IS	2	26.3000	5.3000	1.23	A	A
IT	1	26.6000	2.3000	1.24	A	A
KO	1	22.8000	0.6000	1.06		A
LA	1	34.0000	2.0000	1.59	W	N
LA	3	33.0000	2.0000	1.54	W	N
LA	2	29.0000	2.0000	1.35	W	W
LB	1	22.0000	4.0000	1.03	N	A
LL	1	21.5000	1.7200	1.00	A	A
LV	1	22.0000	1.8000	1.03	A	A
MA	1	29.0000	2.2000	1.35	A	W
ME	3	28.0000	0.9100	1.30	A	W
ME	2	29.8000	0.9400	1.39	A	W
ME	1	15.2000	0.7900	0.71	A	W
MH	1	25.0200	0.8500	1.17	A	A
NA	1	25.2000	1.0000	1.17	A	A
NR	1	22.1000	4.4000	1.03	A	A
OB	1	22.3000	4.7700	1.04	N	A
OC	3	20.0000	2.0000	0.93	W	A
OC	2	17.0000	2.0000	0.79	W	W
OC	1	17.0000	2.0000	0.79	W	W
OL	1	24.8000	0.6000	1.16	A	A
OT	1	21.0000	3.0000	0.98	A	A
PK	1	38.9700	11.2000	1.82		N
PO	1	23.3000	1.2000	1.09	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CO60

EML Value: 21.4500
EML Error: 1.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RA	1	24.0000	2.0000	1.12	A	A
RE	1	22.8000	3.1000	1.06	A	A
RI	1	33.4000	8.9100	1.56	N	N
SB	1	35.6000	3.1900	1.66	A	N
SK	1	21.4000	0.2000	1.00		A
SR	1	24.1000	4.2000	1.12	A	A
SW	1	34.4000	1.5700	1.60	W	N
TE	1	21.0000	1.9000	0.98	A	A
TI	1	25.0000	3.0000	1.17	A	A
TM	1	26.2000	2.6300	1.22	A	A
TN	1	19.6200	3.0500	0.92	N	A
TO	1	17.0500	2.9600	0.80	N	W
TP	1	20.7500	1.0600	0.97	A	A
TQ	1	27.0000	1.0000	1.26		W
TR	1	9.0340	0.8180	0.42		N
TW	1	24.0000	1.0000	1.12	A	A
TX	1	24.6000	1.1000	1.15	A	A
UC	1	24.2100	2.5600	1.13	N	A
UY	1	28.4000	7.0000	1.32	W	W
WA	1	24.2000	1.1000	1.13	A	A
WC	1	16.0000	2.0000	0.75	A	W
WE	1	24.1000	1.4000	1.12	A	A
WN	3	28.1000	1.0000	1.31		W
WN	2	28.0000	1.4000	1.30		W
WN	1	28.6000	1.0000	1.33		W
WO	2	23.0000	4.0000	1.07		A
WO	1	22.0000	5.0000	1.03		A
YA	1	22.9000	0.9200	1.07	A	A

Total Number Reported: 97

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 467.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	381.1000	40.7000	0.82	A	W
AG	1	556.0000	92.0000	1.19	A	A
AM	1	504.6200	10.8300	1.08	A	A
AR	1	629.0000	36.0000	1.35		W
AT	1	482.1000	42.8000	1.03	A	A
AU	1	536.0000	26.0000	1.15	A	A
BA	1	499.0000	35.0000	1.07	A	A
BC	1	559.0000	43.0000	1.20	A	A
BE	1	522.0000	88.0000	1.12	A	A
BL	1	496.0000	35.0000	1.06	A	A
BM	1	492.0000	4.6400	1.05	A	A
BN	3	503.2000	42.4700	1.08	A	A
BN	2	499.5000	43.0600	1.07	A	A
BN	1	518.0000	58.0200	1.11	A	A
BQ	1	537.0000	11.0000	1.15	A	A
BU	1	430.0000	30.0000	0.92	A	A
BX	1	581.0000	38.0000	1.24	A	A
CD	1	480.0000	50.0000	1.03	A	A
CH	1	580.0000	3.8000	1.24	A	A
CL	1	545.0000	14.6000	1.17	A	A
CN	1	577.2000	33.8000	1.24	A	A
CO	3	557.0000	21.0000	1.19	A	A
CO	2	556.0000	20.0000	1.19	A	A
CO	1	556.0000	21.0000	1.19	A	A
CR	1	536.9000	38.5000	1.15	A	A
CS	1	507.4000	16.8200	1.09	A	A
EG	1	480.0000	40.0000	1.03	A	A
EL	1	475.0000		1.02		A
EL	2	559.0000		1.20		A
FL	1	472.0000	2.0000	1.01	A	A
FN	1	464.0000	46.0000	0.99	A	A
GA	1	554.0000	158.0000	1.19	A	A
GC	3	459.5000	27.9700	0.98	A	A
GC	2	446.4000	27.0000	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 467.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
GC	1	451.3000	18.2000	0.97	A	A
GE	1	462.6850	76.1969	0.99	A	A
GP	1	505.0000	50.0000	1.08	A	A
GT	1	560.0000	50.0000	1.20	W	A
HU	1	492.7000	13.1000	1.05	A	A
ID	1	51.3000	2.5790	0.11	A	N
IE	1	805.6000	8.2000	1.73	N	N
IL	1	483.5000	8.6000	1.03	A	A
IN	1	522.5000	27.6000	1.12	A	A
IS	1	542.0000	61.0000	1.16	A	A
IS	2	549.0000	57.0000	1.18	A	A
IS	3	541.0000	61.0000	1.16	A	A
IT	1	572.0000	11.0000	1.23	A	A
KO	1	496.0000	2.0000	1.06		A
LA	3	664.0000	31.0000	1.42	A	N
LA	1	611.0000	28.0000	1.31	A	W
LA	2	582.0000	27.0000	1.25	A	A
LB	1	516.0000	46.0000	1.11	N	A
LL	1	500.0000	10.0000	1.07	A	A
LV	1	485.0000	10.0000	1.04	A	A
MA	1	703.0000	30.0000	1.50	A	N
ME	2	603.0000	26.8000	1.29	A	W
ME	3	610.0000	27.0000	1.31	A	W
ME	1	322.0000	16.0000	0.69	A	N
MH	1	571.1000	28.0000	1.22	A	A
NA	1	594.0000	20.0000	1.27	A	W
NR	1	488.0000	98.0000	1.04	A	A
OB	1	461.0000	87.5000	0.99	N	A
OC	3	410.0000	20.0000	0.88	A	W
OC	2	410.0000	20.0000	0.88	A	W
OC	1	410.0000	20.0000	0.88	A	W
OL	1	546.4000	10.1000	1.17	A	A
OT	1	475.0000	10.0000	1.02	A	A
PK	1	572.0700	27.3800	1.23	A	A
PO	1	521.0000	26.0000	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: CS137

EML Value: 467.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
RA	1	535.0000	20.0000	1.15	A	A
RE	1	481.0000	39.0000	1.03	A	A
RI	1	616.0000	30.8000	1.32	A	W
SB	1	791.0000	86.0000	1.69	A	N
SK	1	496.0000	1.0000	1.06		A
SR	1	529.0000	55.0000	1.13	A	A
SW	1	691.0000	2.9500	1.48	W	N
TE	1	453.9000	5.7000	0.97	W	A
TI	1	5800.0000	600.0000	12.42	W	N
TM	1	530.0000	15.8000	1.13	A	A
TN	1	426.2000	7.8000	0.91	N	A
TO	1	387.4600	40.5000	0.83	N	W
TP	1	427.8700	3.2100	0.92	A	A
TQ	1	560.0000	10.0000	1.20		A
TR	1	1357.2000	71.5300	2.91		N
TW	1	529.0000	5.0000	1.13	A	A
TX	1	537.0000	4.0000	1.15	A	A
UC	1	535.1100	64.5800	1.15	N	A
UY	1	567.0000	54.0000	1.21	A	A
WA	1	503.0000	7.0000	1.08	A	A
WC	1	523.0000	73.0000	1.12	A	A
WE	1	547.0000	26.5000	1.17	A	A
WN	3	612.0000	8.0000	1.31		W
WN	2	619.0000	9.0000	1.33		W
WN	1	621.0000	8.0000	1.33		W
WO	1	460.0000	70.0000	0.99		A
WO	2	450.0000	40.0000	0.96		A
YA	1	517.8200	4.0700	1.11	A	A

Total Number Reported: 97

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: K40

EML Value: 656.5000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	728.8000	210.9000	1.11	N	A
AG	1	710.0000	120.0000	1.08	A	A
AM	1	597.2900	27.0300	0.91	A	A
AR	1	885.0000	69.0000	1.35		W
AT	1	641.5000	68.3000	0.98	A	A
AU	1	677.0000	41.0000	1.03	A	A
BC	1	707.0000	40.0000	1.08	A	A
BE	1	697.0000	104.0000	1.06	W	A
BL	1	642.0000	47.0000	0.98	A	A
BN	2	573.5000	45.5900	0.87	A	W
BN	1	573.5000	60.1600	0.87	A	W
BN	3	603.1000	47.7100	0.92	A	A
BQ	1	916.0000	120.0000	1.39	N	W
BU	1	600.0000	50.0000	0.91	A	A
BX	1	733.0000	42.0000	1.12	W	A
CD	1	660.0000	70.0000	1.00	A	A
CH	1	817.0000	22.0000	1.24	W	W
CL	1	98.3000	8.2600	0.15	A	N
CN	1	703.2000	43.4000	1.07	A	A
CR	1	743.0000	163.0000	1.13	A	A
CS	1	716.1000	30.7400	1.09	A	A
EG	1	720.0000	90.0000	1.10	A	A
EL	2	954.0000		1.45		N
EL	1	893.0000		1.36		W
FL	1	657.0000	10.0000	1.00	A	A
FN	1	644.0000	66.0000	0.98	A	A
GA	1	581.0000	39.0000	0.88	W	W
GC	2	663.9600	55.9500	1.01	A	A
GC	3	713.5000	50.6900	1.09	A	A
GC	1	684.3000	47.3000	1.04	A	A
GE	1	687.6450	109.2315	1.05	A	A
GP	1	730.0000	70.0000	1.11	A	A
GT	1	760.0000	74.0000	1.16	W	A
HU	1	748.4000	51.3000	1.14	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: K40

EML Value: 656.5000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ID	1	854.9670	58.8920	1.30	W	W
IE	1	1083.0000	43.0000	1.65	N	N
IL	1	747.3000	50.0000	1.14	W	A
IN	1	623.5000	131.0000	0.95	A	A
IS	3	681.0000	84.0000	1.04	A	A
IS	1	744.0000	87.0000	1.13	A	A
IS	2	710.0000	92.0000	1.08	A	A
IT	1	807.0000	18.0000	1.23	A	A
KO	1	722.0000	11.0000	1.10		A
LA	1	968.0000	48.0000	1.47	W	N
LA	2	790.0000	40.0000	1.20	W	A
LA	3	912.0000	45.0000	1.39	W	W
LB	1	883.0000	168.0000	1.35	N	W
LL	1	643.0000	46.3000	0.98	A	A
LV	1	643.0000	14.0000	0.98	A	A
MA	1	888.0000	74.0000	1.35	A	W
ME	3	744.0000	35.7000	1.13	A	A
ME	1	551.0000	32.8000	0.84	A	W
ME	2	788.0000	37.4000	1.20	A	A
MH	1	819.1000	38.2000	1.25	A	W
NA	1	795.0000	30.0000	1.21	A	A
OB	1	640.0000	131.0000	0.98	N	A
OC	3	610.0000	30.0000	0.93	W	A
OC	2	650.0000	30.0000	0.99	W	A
OC	1	610.0000	30.0000	0.93	W	A
OL	1	766.0000	27.4000	1.17	A	A
OT	1	685.0000	45.0000	1.04	A	A
PK	1	625.8400	86.6800	0.95	A	A
PO	1	675.0000	34.0000	1.03	A	A
RA	1	805.0000	70.0000	1.23	A	A
RE	1	886.0000	90.0000	1.35	W	W
SB	1	1086.0000	105.0000	1.65	A	N
SK	1	600.0000	4.0000	0.91		A
SR	1	718.0000	108.0000	1.09	A	A
SW	1	912.0000	15.7000	1.39	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: K40

EML Value: 656.5000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TE	1	667.6000	33.7000	1.02	A	A
TI	1	7400.0000	700.0000	11.27	A	N
TM	1	681.0000	40.7000	1.04	W	A
TN	1	576.6000	41.0000	0.88	N	W
TO	1	503.0600	76.0000	0.77	N	N
TP	1	631.5500	6.5600	0.96	A	A
TQ	1	770.0000	30.0000	1.17		A
TR	1	809.8600	26.7880	1.23		A
TW	1	676.0000	20.0000	1.03	A	A
TX	1	737.0000	19.0000	1.12	A	A
UC	1	744.4400	80.6900	1.13	N	A
UY	1	773.0000	164.0000	1.18	W	A
WA	1	825.0000	22.0000	1.26	A	W
WC	1	864.0000	104.0000	1.32	W	W
WE	1	837.0000	45.0000	1.27	A	W
WN	1	781.9000	30.6000	1.19		A
WN	3	757.0000	38.8000	1.15		A
WN	2	770.7000	30.4000	1.17		A
WO	1	650.0000	140.0000	0.99		A
WO	2	620.0000	90.0000	0.94		A
YA	1	726.3100	20.9000	1.11	A	A

Total Number Reported: 90

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: PU238

EML Value: 0.4185
EML Error: 0.0105

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
CW	2	0.3660	0.0280	0.88		A
CW	3	0.4120	0.0300	0.98		A
CW	1	0.3980	0.0350	0.95		A
EG	1	0.3300	0.0700	0.79	A	W
RA	1	0.3900	0.1200	0.93	A	A
WE	1	234.8000	30.3000	**.**		N

Total Number Reported: 6

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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: PU239

EML Value: 5.2043
EML Error: 0.4278

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	4.4000	0.0700	0.85	A	W
AG	1	4.9700	0.6700	0.95	A	A
AM	1	4.1100	0.2800	0.79	N	W
AR	1	4.2900	1.2200	0.82		W
AU	1	5.0800	0.4700	0.98	A	A
BE	1	4.8300	0.5700	0.93	A	A
BL	2	5.0500	0.3200	0.97	A	A
BL	1	4.6500	0.2300	0.89	A	A
BM	1	5.7800	0.9400	1.11	A	A
BU	1	4.4200	0.4400	0.85	A	W
BX	1	2.8600	0.4300	0.55	N	N
CH	1	4.6300	0.2200	0.89	A	A
CL	1	2.9600	1.4000	0.57	A	N
CO	2	4.3000	0.4000	0.83		W
CO	3	4.5000	0.4000	0.87		A
CO	1	4.7000	0.4000	0.90		A
CW	2	5.6000	0.1500	1.08		A
CW	3	5.2400	0.1400	1.01		A
CW	1	5.4200	0.1600	1.04		A
EG	1	5.0200	0.4900	0.96	A	A
EP	1	5.1100	0.4220	0.98	A	A
GA	1	5.0000	1.2000	0.96	A	A
GE	1	5.4020	0.7844	1.04	W	A
GP	1	5.1000	1.1000	0.98	A	A
GT	1	5.2000	1.0000	1.00	A	A
ID	1	4.8470	0.6960	0.93	A	A
IE	1	4.8100	2.7100	0.92		A
IS	1	4.9100	1.2300	0.94	N	A
IS	2	5.3700	1.3400	1.03	N	A
IS	3	5.5200	1.2700	1.06	N	A
IT	1	4.5300	0.1500	0.87	A	A
KO	1	4.2600	0.0700	0.82		W
LL	1	5.0100	0.3710	0.96	A	A
ML	1	5.9600	0.4700	1.14	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: PU239

EML Value: 5.2043
EML Error: 0.4278

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
NA	1	4.6300	0.3000	0.89	W	A
OT	1	4.8000	0.4000	0.92	A	A
RA	1	5.4200	1.0800	1.04	A	A
RE	1	4.3000	0.4900	0.83	A	W
RI	1	5.5200	0.4030	1.06		A
SN	1	5.7900	1.6860	1.11	A	A
SR	1	4.7800	0.8000	0.92	A	A
SW	1	4.6900	0.6600	0.90	W	A
TI	1	5.6000	1.0000	1.08	A	A
TM	1	5.0320	0.6290	0.97	A	A
TN	1	5.1680	0.5236	0.99	A	A
TO	1	6.9600	3.7600	1.34		W
TX	1	5.0000	0.2700	0.96	A	A
UY	1	5.2000	0.6000	1.00	A	A
WA	1	3.3200	0.4500	0.64	A	N
WC	1	5.2000	1.8000	1.00	A	A
WE	1	221.0000	29.0000	42.47		N
YA	1	5.5100	0.1500	1.06	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: SR90

EML Value: 736.1000
EML Error: 7.7000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	584.5000	29.6000	0.79	A	A
AG	1	636.0000	118.0000	0.86	A	A
AM	1	713.6500	12.9400	0.97	W	A
AR	1	696.0000	74.0000	0.95		A
AU	1	740.0000	23.0000	1.00	A	A
BC	1	562.0000	42.0000	0.76	W	A
BE	1	782.7000	35.5000	1.06	A	A
BL	2	639.0000	7.0000	0.87	W	A
BL	1	624.0000	5.0000	0.85	W	A
BM	1	718.0000	18.2000	0.98	A	A
BU	1	859.0100	40.0000	1.17	A	W
BX	1	577.0000	49.0000	0.78	W	A
CH	1	675.0000	8.8000	0.92	A	A
CL	1	534.0000	29.9000	0.73	A	W
EG	1	816.0000	24.0000	1.11	W	A
GE	1	576.4119	16.9822	0.78	A	A
GP	1	700.0000	70.0000	0.95	A	A
GT	1	590.0000	2.0000	0.80	W	A
ID	1	818.0000	43.4030	1.11	A	A
IS	1	612.0000	120.0000	0.83	W	A
IS	2	622.0000	122.0000	0.85	W	A
IT	1	577.0000	43.0000	0.78		A
KO	1	742.5000	16.3000	1.01		A
NA	1	720.0000	14.0000	0.98	A	A
OC	1	650.0000	50.0000	0.88	A	A
OC	3	630.0000	50.0000	0.86	A	A
OC	2	620.0000	50.0000	0.84	A	A
OT	1	400.0000	10.0000	0.54	A	W
RA	1	660.0000	130.0000	0.90	A	A
RE	1	732.0000	7.0000	0.99	A	A
RI	1	728.0000	18.9000	0.99	N	A
SR	1	822.0000	99.0000	1.12	W	A
SW	1	637.0000	56.0000	0.87	N	A
TE	1	704.8000	27.8000	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 50 Results by Nuclide

Matrix: VE Vegetation Bq / kg
Radionuclide: SR90

EML Value: 736.1000
EML Error: 7.7000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TI	1	760.0000	10.0000	1.03	A	A
TM	1	752.0000	93.0000	1.02	N	A
TN	1	708.0800	21.9900	0.96	A	A
TO	1	528.9200	7.4000	0.72	A	W
TP	1	780.0600	5.0900	1.06	A	A
TQ	1	600.0000	60.0000	0.81		A
TW	1	716.0000	9.0000	0.97		A
TX	1	690.0000	25.0000	0.94	A	A
UY	1	560.0000	10.0000	0.76	A	A
WA	1	855.0000	15.0000	1.16	W	W
WC	1	901.0000	128.0000	1.22	A	W
WE	1	800.0000	6.5000	1.09	W	A
YA	1	718.1700	9.8000	0.98	A	A

Total Number Reported: 47

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: AM241

EML Value: 1.1460
EML Error: 0.0505

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	1.2500	0.1200	1.09		A
AF	1	1.2000	0.2000	1.05	W	A
AG	1	1.2100	0.1700	1.06	A	A
AM	1	1.3800	0.3500	1.20	N	A
AN	1	1.2300	0.0900	1.07	A	A
AR	1	0.9750	0.1810	0.85		W
AS	1	1.1010	0.6340	0.96		A
AT	1	1.0700	0.1900	0.93	A	A
AU	1	1.1600	0.1300	1.01	A	A
BE	1	1.1300	0.1100	0.99	A	A
BL	1	1.5400	0.2300	1.34	A	W
BL	2	1.2600	0.1500	1.10	A	A
BM	1	1.2100	0.1800	1.06	A	A
BU	1	1.1100	0.0550	0.97	A	A
BX	1	1.2100	0.1200	1.06	A	A
CA	1	2.1000	0.4000	1.83		N
CB	1	1.2300	0.1600	1.07		A
CB	3	1.2200	0.1600	1.07		A
CB	2	1.2100	0.1600	1.06		A
CH	1	1.0520	0.0530	0.92	A	A
CL	1	1.6700	0.3300	1.46	A	W
CS	1	0.7569	0.1979	0.66	A	N
CW	2	1.2190	0.0270	1.06		A
CW	1	1.2200	0.0250	1.07		A
EG	1	1.1500	0.0800	1.00	A	A
EL	2	2.3000		2.01		N
EL	1	2.2000		1.92		N
EP	1	1.1800	0.0986	1.03	A	A
FL	1	1.6000	0.4000	1.40	W	W
FM	1	1.2000	0.1000	1.05	A	A
GA	1	1.2000	0.1600	1.05	A	A
GE	1	1.1775	0.1816	1.03	A	A
GP	1	1.2000	0.2000	1.05	A	A
GT	1	1.2500	0.3000	1.09	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: AM241

EML Value: 1.1460
EML Error: 0.0505

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
HT	1	0.1800	0.0200	0.16	N	N
IN	1	1.1100	0.1200	0.97	A	A
IS	3	1.2300	0.2700	1.07	W	A
IS	2	1.2200	0.2700	1.07	W	A
IS	1	1.2900	0.2700	1.13	W	A
IT	1	1.0300	0.1200	0.90	A	W
LA	1	1.2200	0.0400	1.07	A	A
LA	3	1.1000	0.0300	0.96	A	A
LA	2	1.1700	0.0400	1.02	A	A
LB	1	1.1900	0.2400	1.04		A
LL	1	1.2100	0.1090	1.06	A	A
LV	1	1.3800	0.1400	1.20	A	A
ME	3	1.3600	0.2500	1.19	A	A
ME	2	1.0100	0.1500	0.88	A	W
ME	1	1.0700	0.1400	0.93	A	A
MH	1	1.1400	0.2600	1.00		A
MS	1	1.0700	0.1100	0.93	A	A
NJ	1	1.4200	0.5800	1.24		A
NM	1	1.0600	0.0300	0.93	A	A
NQ	1	1.0940	0.0780	0.95	W	A
OD	2	1.2080	0.1480	1.05	A	A
OD	1	1.1460	0.1530	1.00	A	A
OT	1	1.1000	0.1000	0.96	A	A
RE	1	1.1100	0.1300	0.97	A	A
RI	1	0.8180	0.0982	0.71	A	N
SK	1	1.1800	0.2300	1.03	A	A
SN	1	1.1650	0.1790	1.02	A	A
SR	1	1.3300	0.1500	1.16	W	A
SW	1	1.6200	0.2200	1.41	W	W
TE	1	1.2200	0.1600	1.07		A
TI	1	1.1000	0.2000	0.96	A	A
TM	1	1.1240	0.1390	0.98		A
TN	1	1.1475	0.0417	1.00	A	A
TO	1	0.9000	0.0330	0.79	A	W
TW	1	1.1200	0.0500	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: AM241

EML Value: 1.1460
EML Error: 0.0505

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TX	1	1.0530	0.0570	0.92	A	A
UP	1	1.2800	0.1510	1.12	A	A
UY	1	1.1700	0.1100	1.02	A	A
WA	1	1.1900	0.1400	1.04	W	A
WC	1	1.2100	0.3800	1.06	A	A
WN	3	0.5000	0.4000	0.44		N
WN	2	0.8000	0.5000	0.70		N
WN	1	1.2000	0.4000	1.05		A
YA	1	1.1300	0.0500	0.99	A	A

Total Number Reported: 78

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: Bq U

EML Value: 0.5410
EML Error: 0.0246

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.6300	0.0760	1.16	A	A
AM	1	0.6300	0.0200	1.16	A	A
BL	1	0.5000	0.0750	0.92		A
BU	1	0.6100	0.0600	1.13	A	A
CH	1	0.5950	0.0370	1.10	A	A
CL	1	0.5290	0.1100	0.98	A	A
FG	1	0.5440	0.1000	1.01	A	A
GP	1	0.5700		1.05	A	A
HT	1	0.4700	0.0500	0.87	N	W
ID	1	0.5580	0.0280	1.03	A	A
IS	3	0.5990	0.0780	1.11		A
IS	2	0.6590	0.0860	1.22		A
IS	1	0.6140	0.0800	1.13		A
KO	1	0.5780	0.0100	1.07		A
NL	1	0.5830	0.0700	1.08	A	A
NS	1	0.7270	0.1760	1.34	W	W
OT	1	0.6400	0.0800	1.18	W	A
SK	1	0.5480	0.0260	1.01		A
SN	1	0.6070	0.1350	1.12		A
UY	1	0.5700	0.0600	1.05	A	A
WA	1	0.6000	0.0700	1.11	A	A
WO	1	0.7200	0.1900	1.33		W
WO	2	0.7700	0.2000	1.42		N
YA	1	0.6600	0.0300	1.22		A

Total Number Reported: 24

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 51.1000
EML Error: 3.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	57.0000	1.1000	1.12		A
AF	1	55.5000	3.7000	1.09	N	A
AG	1	51.4000	8.6000	1.01	A	A
AM	1	54.1300	0.4700	1.06	A	A
AN	1	54.8000	2.9000	1.07	A	A
AR	1	82.8000	6.0000	1.62		N
AS	1	58.4600	2.0920	1.14		W
AT	1	51.6300	4.6900	1.01	A	A
AU	1	54.3000	1.5000	1.06	A	A
AW	1	52.0000	2.0000	1.02		A
BA	1	54.0000	2.9000	1.06	A	A
BC	1	54.0000	2.7000	1.06	A	A
BE	1	55.0000	4.0000	1.08	A	A
BL	1	52.9000	2.1000	1.03	A	A
BM	1	51.4000	2.8600	1.01	A	A
BN	3	54.0200	2.1600	1.06	A	A
BN	2	54.3900	2.0500	1.06	A	A
BN	1	54.7600	2.1100	1.07	A	A
BQ	1	59.0000	1.0000	1.15	A	W
BU	1	56.0000	6.0000	1.10	W	A
BX	1	55.1000	1.8000	1.08	A	A
CA	1	54.4000	0.6000	1.07	A	A
CB	3	55.6600	2.2800	1.09		A
CB	2	54.5200	2.1300	1.07		A
CB	1	50.5900	1.9600	0.99		A
CD	1	48.0000	5.0000	0.94	A	A
CH	1	56.0000	0.5400	1.10	A	A
CL	1	53.3000	1.9200	1.04	A	A
CM	1	48.3000	3.2000	0.94	A	A
CS	1	54.2300	1.4750	1.06	A	A
CW	1	52.2300	0.9700	1.02		A
DC	1	66.3000	15.0000	1.30		N
DH	1	58.2000	0.7000	1.14	A	A
EC	1	56.7000	1.5000	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 51.1000
EML Error: 3.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EG	1	52.0000	4.0000	1.02	A	A
EL	1	67.0000		1.31		N
EL	2	76.0000		1.49		N
EP	1	54.3300	3.5300	1.06	A	A
FG	1	54.0000	2.5180	1.06	A	A
FL	1	53.3000	0.5000	1.04	A	A
FM	1	51.8000	0.3000	1.01	A	A
FN	1	52.6000	3.8000	1.03	A	A
GA	1	58.0000	5.2000	1.13	A	A
GC	3	57.6400	1.4300	1.13	A	A
GC	1	53.8800	1.9200	1.05	A	A
GC	2	54.0300	3.5000	1.06	A	A
GE	1	56.2955	8.5496	1.10	A	A
GP	1	55.0000	5.0000	1.08	A	A
GT	1	53.0000	0.6000	1.04	A	A
ID	1	56.3000	2.9550	1.10	A	A
IE	1	68.8700	0.7500	1.35	A	N
IL	1	56.8000	0.6000	1.11	A	A
IN	1	51.3000	7.9000	1.00	A	A
IS	3	57.2000	4.3000	1.12	A	A
IS	1	58.5000	5.6000	1.14	A	W
IS	2	50.9000	4.9000	1.00	A	A
IT	1	59.0000	2.0000	1.15	A	W
JE	1	55.1000	2.0000	1.08	N	A
JL	3	56.6000	2.8000	1.11	A	A
JL	4	55.5000	3.2500	1.09	A	A
KA	1	48.9000	2.4000	0.96	A	A
KO	1	52.3000	0.7000	1.02		A
LA	1	51.7000	2.7000	1.01	W	A
LA	2	56.0000	2.9000	1.10	W	A
LA	3	57.3000	2.9000	1.12	W	A
LB	1	55.0000	4.0000	1.08	A	A
LL	1	54.4000	3.9200	1.07	A	A
LN	1	58.3000	7.3500	1.14	A	W
LV	1	54.9000	0.8000	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 51.1000
EML Error: 3.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ME	2	45.9000	1.1800	0.90	A	W
ME	1	46.2000	1.1900	0.90	A	A
ME	3	57.7000	1.4900	1.13	A	A
MH	1	52.6000	1.6000	1.03	A	A
MS	1	53.4000	5.3000	1.04	A	A
NA	1	52.6000	1.8000	1.03	A	A
NJ	3	53.2000	1.4000	1.04		A
NJ	2	52.6000	1.5000	1.03		A
NJ	1	53.0000	3.5000	1.04		A
NL	1	56.7000	5.4000	1.11	A	A
NP	1	52.6000	0.9000	1.03	A	A
NQ	1	54.5000	6.0000	1.07	N	A
NR	1	53.3000	10.7000	1.04		A
NS	1	57.6300	0.3640	1.13	A	A
OB	1	63.9000	11.1000	1.25	A	N
OC	3	56.0000	6.0000	1.10	A	A
OC	2	57.0000	6.0000	1.12	A	A
OC	1	58.0000	6.0000	1.13	A	A
OD	2	56.0900	2.3200	1.10	A	A
OD	1	51.6100	2.4200	1.01	A	A
OL	1	51.9000	2.2000	1.02	A	A
OS	1	59.4200	0.5680	1.16		W
OS	2	59.1600	0.5570	1.16		W
OS	3	59.7200	0.5570	1.17		W
OT	1	54.0000	2.0000	1.06	A	A
OU	1	42.5000	2.5000	0.83	A	W
RC	1	51.1000	2.6000	1.00	A	A
RE	1	54.7000	5.5000	1.07	A	A
RI	1	54.3000	1.5200	1.06	A	A
RL	1	51.8000	8.8800	1.01		A
SA	1	54.1000	7.6000	1.06	A	A
SB	1	54.0000	4.8200	1.06	W	A
SK	1	53.9000	4.5000	1.05	A	A
SL	1	52.0000	4.0000	1.02	A	A
SR	1	55.0000	4.0000	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CO60

EML Value: 51.1000
EML Error: 3.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SW	1	56.2600	0.1500	1.10	A	A
TE	1	54.4000	2.0000	1.07	A	A
TI	1	53.0000	5.0000	1.04	A	A
TM	1	55.8000	1.7700	1.09	A	A
TN	3	51.8500	0.1450	1.01	N	A
TO	1	52.6300	3.8300	1.03	A	A
TP	1	52.5200	0.5600	1.03	A	A
TQ	1	52.3000	1.2000	1.02		A
TT	1	58.0000	1.8000	1.13	A	A
TW	1	54.0000	0.5000	1.06	A	A
TX	1	52.6900	0.4900	1.03	A	A
UC	1	54.2600	5.4800	1.06	A	A
UP	1	54.0000	1.3300	1.06	A	A
UY	1	52.9000	4.1000	1.03	A	A
WA	1	54.4000	1.1000	1.07	A	A
WC	1	55.0000	4.3000	1.08	W	A
WE	1	54.9000	1.4000	1.07	A	A
WI	2	55.8000	3.3600	1.09	A	A
WI	1	55.6200	3.3400	1.09	A	A
WN	1	56.8000	1.2000	1.11		A
WN	3	55.1000	1.2000	1.08		A
WN	2	56.3000	1.3000	1.10		A
WO	2	58.0000	10.0000	1.13		A
WO	1	58.0000	4.0000	1.13		A
WV	1	53.9000	1.0900	1.05	A	A
YA	1	51.8900	0.7900	1.01	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 39.3750
EML Error: 2.4047

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	38.1000	1.1000	0.97		A
AF	1	40.7000	3.7000	1.03	N	A
AG	1	42.0000	7.2000	1.07	A	A
AM	1	43.2100	0.6200	1.10	A	A
AN	1	39.5000	1.1000	1.00	A	A
AR	1	65.4000	5.1000	1.66		N
AS	1	43.5490	1.6830	1.11		A
AT	1	40.2600	3.5800	1.02	A	A
AU	1	42.0000	2.0000	1.07	A	A
AW	1	40.0000	2.0000	1.02		A
BA	1	41.5000	7.0000	1.05	A	A
BC	1	44.0000	3.0000	1.12	A	A
BE	1	40.0000	4.0000	1.02	A	A
BL	1	41.0000	1.7000	1.04	A	A
BM	1	41.1000	2.6900	1.04	A	A
BN	2	40.7000	2.1200	1.03	W	A
BN	1	40.7000	2.1900	1.03	W	A
BN	3	42.5500	2.4000	1.08	W	A
BQ	1	41.0000	6.0000	1.04	A	A
BU	1	41.0000	5.0000	1.04	A	A
BX	1	42.9000	1.4000	1.09	A	A
CA	1	41.8000	0.8000	1.06	A	A
CB	1	40.5900	2.1400	1.03		A
CB	2	42.2900	2.2600	1.07		A
CB	3	40.4900	2.5500	1.03		A
CD	1	37.0000	4.0000	0.94	A	A
CH	1	42.5000	0.4100	1.08	A	A
CL	1	42.6000	1.8300	1.08	A	A
CM	1	38.1000	3.8000	0.97	A	A
CS	1	42.7800	1.4620	1.09	A	A
CW	1	40.2200	1.0800	1.02		A
DC	1	46.5000	10.9000	1.18		W
DH	1	44.2000	0.3000	1.12	A	A
EC	1	43.2000	1.4000	1.10		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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 39.3750
EML Error: 2.4047

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
EG	1	40.0000	3.0000	1.02	A	A
EL	1	59.0000		1.50		N
EL	2	52.0000		1.32		N
EM	1	40.6300	3.0500	1.03		A
EP	1	41.0300	2.7200	1.04	A	A
FG	1	36.4000	1.6000	0.92	A	A
FL	1	42.3000	0.6000	1.07	A	A
FM	1	40.6000	0.3000	1.03	A	A
FN	1	39.3000	4.0000	1.00	A	A
GA	1	42.0000	5.3000	1.07	A	A
GC	1	40.5000	1.8700	1.03	A	A
GC	2	42.1000	3.0200	1.07	A	A
GC	3	36.9300	0.9000	0.94	A	A
GE	1	41.2735	5.7930	1.05	A	A
GP	1	42.0000	4.0000	1.07	A	A
GT	1	41.0000	0.6000	1.04	A	A
ID	1	42.7670	2.1970	1.09	A	A
IE	1	54.7000	0.8400	1.39	A	N
IL	1	43.6000	0.5000	1.11	A	A
IN	1	41.2000	4.7000	1.05	A	A
IS	3	43.7000	4.5000	1.11	A	A
IS	2	40.5000	4.3000	1.03	A	A
IS	1	45.7000	4.9000	1.16	A	A
IT	1	47.0000	2.0000	1.19	A	W
JE	1	42.3000	1.5000	1.07	N	A
JL	3	41.4400	2.9600	1.05	A	A
JL	4	43.2900	3.7400	1.10	A	A
KA	1	43.2000	1.6000	1.10	A	A
KO	1	41.8000	0.5000	1.06		A
LA	3	44.9000	2.4000	1.14	W	A
LA	1	39.9000	2.1000	1.01	W	A
LA	2	45.7000	2.4000	1.16	W	A
LB	1	43.0000	3.0000	1.09	A	A
LL	1	39.4000	3.2300	1.00	A	A
LN	1	30.5000	2.4000	0.77	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 39.3750
EML Error: 2.4047

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LV	1	42.5000	0.5600	1.08	A	A
ME	3	45.9000	2.2300	1.17	A	A
ME	2	35.1000	1.7500	0.89	A	W
ME	1	35.2000	1.7600	0.89	A	W
MH	1	40.5000	2.0000	1.03	A	A
MS	1	41.1000	4.1000	1.04	A	A
NA	1	42.4000	1.5000	1.08	A	A
NJ	3	40.7000	2.7000	1.03		A
NJ	2	40.9000	2.4000	1.04		A
NJ	1	39.3000	3.7000	1.00		A
NL	1	43.4000	7.9000	1.10	A	A
NM	1	44.9000	3.6000	1.14	A	A
NP	1	36.8000	0.9000	0.94	A	A
NQ	1	44.4000	5.1000	1.13	W	A
NR	1	41.1000	8.2000	1.04		A
NS	1	42.7040	0.3140	1.09	A	A
OB	1	52.4000	10.1000	1.33	A	N
OC	1	44.0000	5.0000	1.12	A	A
OC	3	44.0000	5.0000	1.12	A	A
OC	2	44.0000	5.0000	1.12	A	A
OD	1	43.4900	3.0500	1.11	A	A
OD	2	44.2800	3.0700	1.13	A	A
OL	1	39.8000	1.2200	1.01	A	A
OS	3	46.8400	1.0100	1.19		W
OS	2	45.4400	1.0100	1.15		A
OS	1	45.9400	1.0100	1.17		A
OT	1	42.0000	1.0000	1.07	A	A
OU	1	34.6000	2.6000	0.88	W	W
RC	1	38.8000	1.8000	0.99	A	A
RE	1	42.0000	4.2000	1.07	A	A
RI	1	40.4000	1.7800	1.03	W	A
RL	1	42.2000	7.4000	1.07		A
SA	1	41.6000	6.6000	1.06	A	A
SB	1	40.9000	4.5100	1.04	W	A
SK	1	41.7000	2.6000	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: CS137

EML Value: 39.3750
EML Error: 2.4047

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
SL	1	40.0000	3.0000	1.02	A	A
SR	1	41.5000	2.7000	1.05	A	A
SW	1	44.6800	0.1500	1.13	A	A
TE	1	43.5000	2.0000	1.11	A	A
TI	1	41.0000	4.0000	1.04	A	A
TM	1	44.7000	1.4200	1.13	A	A
TN	3	41.6400	0.1130	1.06	N	A
TO	1	39.4600	3.8900	1.00	A	A
TP	1	41.8100	0.4700	1.06	A	A
TQ	1	43.5000	1.2000	1.11		A
TT	1	45.3000	3.1000	1.15	A	A
TW	1	42.0000	0.8000	1.07	A	A
TX	1	42.0100	0.3200	1.07	A	A
UC	1	42.3400	4.9000	1.08	A	A
UY	1	42.4000	5.8000	1.08	A	A
WA	1	42.0000	1.3000	1.07	A	A
WC	1	43.0000	5.8000	1.09	W	A
WE	1	43.7000	2.3000	1.11	A	A
WI	2	43.6200	2.8700	1.11	A	A
WI	1	43.2300	2.8400	1.10	A	A
WN	2	43.0000	1.6000	1.09		A
WN	3	43.6000	1.6000	1.11		A
WN	1	42.5000	1.6000	1.08		A
WO	2	42.0000	6.0000	1.07		A
WO	1	42.0000	3.0000	1.07		A
WV	1	41.0000	0.7600	1.04	A	A
YA	1	41.0000	0.8900	1.04	A	A

Total Number Reported: 131

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: FE55

EML Value: 97.4000
EML Error: 1.6500

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
BE	1	89.4600	4.3000	0.92	A	A
BL	1	90.2000	9.2000	0.93	A	A
BU	1	93.6000	4.7000	0.96		A
BX	1	91.4000	7.7000	0.94	A	A
CH	1	83.3000	1.6000	0.86	A	A
CL	1	119.0000	7.6000	1.22	A	A
EG	1	73.0000	23.0000	0.75	A	A
GC	1	81.7700	1.3900	0.84	A	A
GC	2	79.9200	1.3500	0.82	A	A
GE	1	89.3402	82.5125	0.92	A	A
GP	1	96.0000	10.0000	0.99	A	A
HT	1	32.5000	3.0000	0.33		N
KA	1	84.5000	4.1000	0.87	A	A
TE	1	81.5000	19.5000	0.84	A	A
TI	1	84.0000	21.0000	0.86	A	A
TN	3	94.3800	1.9640	0.97	A	A
TO	1	89.5800	2.6700	0.92	A	A
YA	1	101.5300	8.5000	1.04	A	A

Total Number Reported: 18

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS ALPHA

EML Value:1090.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	890.0000	40.0000	0.82		W
AF	1	1058.1000	37.0000	0.97	A	A
AM	1	755.4100	19.4300	0.69	A	W
AR	1	1080.0000	203.0000	0.99		A
AS	1	1096.7170	34.1930	1.01		A
AT	1	1225.0000	119.0000	1.12		A
AU	1	1129.0000	408.0000	1.04	A	A
BC	1	1180.0000	30.0000	1.08	A	A
BE	1	1135.0000	84.0000	1.04	A	A
BL	1	1137.0000	16.0000	1.04	A	A
BN	1	1042.4800	33.9600	0.96	N	A
BN	2	1192.4301	36.2900	1.09	N	A
BN	3	1167.8101	35.9300	1.07	N	A
BQ	1	1090.0000	21.0000	1.00	A	A
BU	1	1160.0000	50.0000	1.06	A	A
BX	1	1170.0000	30.0000	1.07	A	A
CA	1	650.0000	60.0000	0.60	N	N
CH	1	1030.0000	17.0000	0.94	W	A
CM	1	848.0000	22.0000	0.78	A	W
DC	1	1130.0000	222.0000	1.04		A
DH	1	2474.0000	492.0000	2.27	W	N
EG	1	880.0000	50.0000	0.81	A	W
FG	1	1154.4000	52.0000	1.06	A	A
FL	1	1253.2000	9.4000	1.15	A	A
GE	1	1198.5200	23.6252	1.10	A	A
GP	1	1100.0000	100.0000	1.01	A	A
GT	1	1100.0000	74.0000	1.01	A	A
HC	1	1095.0000	43.8000	1.00	A	A
IE	1	1118.7800	44.8400	1.03	A	A
IL	1	1140.4000	18.8000	1.05	A	A
IS	1	873.0000	89.0000	0.80	A	W
IT	1	692.0000	88.0000	0.63	A	W
JE	1	1003.9000	60.4000	0.92	A	A
KA	1	1137.0000	60.0000	1.04	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS ALPHA

EML Value:1090.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
KO	1	1026.2000	12.4500	0.94		A
LA	2	1450.4000	249.0000	1.33	W	N
LA	1	1435.6000	264.4000	1.32	W	W
LA	3	1524.4000	262.0000	1.40	W	N
LB	1	596.0000	107.0000	0.55		N
LL	1	1600.0000	22.6000	1.47	W	N
LV	1	1100.0000	62.0000	1.01	A	A
LW	2	1189.7000	55.0000	1.09	A	A
MH	1	842.4000	3.9000	0.77	A	W
MS	1	1150.0000	115.0000	1.05	A	A
NJ	1	1025.0000	19.0000	0.94		A
NJ	2	960.0000	42.0000	0.88		A
NJ	3	982.0000	43.0000	0.90		A
NQ	1	1086.0000	67.0000	1.00	W	A
NS	1	1048.4650	31.7960	0.96	A	A
OB	1	1490.0000	133.0000	1.37	A	N
OC	3	1020.0000	100.0000	0.94	A	A
OC	1	1000.0000	100.0000	0.92	A	A
OC	2	1010.0000	100.0000	0.93	A	A
OK	1	834.0000	34.0000	0.76		W
OT	1	1100.0000	100.0000	1.01	A	A
RE	1	1050.0000	36.0000	0.96	A	A
RG	1	1096.6200	54.3400	1.01	A	A
RL	1	1045.0000	162.0000	0.96		A
SR	1	940.0000	103.0000	0.86	W	A
SW	1	1262.0000	21.6700	1.16	W	A
TE	1	1169.1000	37.0000	1.07	A	A
TI	1	1600.0000	100.0000	1.47	A	N
TM	1	1560.0000	182.0000	1.43	N	N
TN	5	985.5000	17.6300	0.90	W	A
TO	1	991.0000	28.4600	0.91	A	A
TP	1	1074.6000	31.0000	0.99	A	A
TQ	1	840.0000	20.0000	0.77		W
TW	1	1121.0000	50.0000	1.03	W	A
TX	1	1258.0000	33.0000	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS ALPHA

EML Value:1090.0000
EML Error: 20.0000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
UC	1	1095.1000	69.9700	1.00	A	A
UP	1	1132.0000	114.0000	1.04	A	A
UY	1	1185.0000	100.0000	1.09	A	A
WA	1	874.0000	81.0000	0.80	A	W
WC	1	1158.0000	119.0000	1.06	A	A
WO	1	1280.0000	60.0000	1.17		W
WO	2	1220.0000	60.0000	1.12		A
WV	1	829.0000	67.0000	0.76	W	W

Total Number Reported: 77

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 50 Results by Nuclide

Matrix: WA Water Bq/L
Radionuclide: GROSS BETA

EML Value: 1100.0000
EML Error: 40.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	1120.0000	40.0000	1.02		A
AF	1	987.8000	29.6000	0.90	A	A
AM	1	1104.0100	12.4300	1.00	A	A
AR	1	1038.0000	182.0000	0.94		A
AS	1	980.6850	33.1670	0.89		A
AT	1	1208.0000	97.0000	1.10		A
AU	1	1173.0000	430.0000	1.07	A	A
BC	1	1010.0000	20.0000	0.92	A	A
BE	1	1025.0000	55.0000	0.93	A	A
BL	1	968.0000	16.0000	0.88	A	A
BN	1	966.4100	27.7000	0.88	N	A
BN	2	953.5500	27.5300	0.87	N	A
BN	3	1087.4301	29.2100	0.99	N	A
BQ	1	939.0000	12.0000	0.85	A	A
BU	1	980.0000	70.0000	0.89	A	A
BX	1	1030.0000	20.0000	0.94	A	A
CA	1	470.0000	50.0000	0.43	W	N
CD	1	1200.0000	200.0000	1.09	A	A
CH	1	1030.0000	23.0000	0.94	A	A
CM	1	906.0000	21.0000	0.82	A	A
DC	1	941.0000	184.0000	0.86		A
DH	1	2684.0000	460.0000	2.44	A	N
EG	1	1240.0000	30.0000	1.13	A	A
FG	1	1103.3000	59.0000	1.00	A	A
FL	1	1233.5000	7.5000	1.12	A	A
GE	1	1048.5699	18.1584	0.95	A	A
GP	1	1400.0000	100.0000	1.27	A	A
GT	1	1100.0000	74.0000	1.00	A	A
HC	1	1188.0000	35.6000	1.08	A	A
IE	1	1023.5400	33.1100	0.93	W	A
IL	1	550.5000	9.3000	0.50	A	N
IS	1	992.0000	100.0000	0.90	A	A
IT	1	754.0000	150.0000	0.69	A	W
JE	1	1273.1000	40.4000	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 50 Results by Nuclide

Matrix: WA Water Bq/L
Radionuclide: GROSS BETA

EML Value: 1100.0000

EML Error: 40.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
KA	1	1166.0000	57.0000	1.06	A	A
KO	1	1043.9000	22.3200	0.95		A
LA	3	1106.3000	62.9000	1.01	A	A
LA	2	1110.0000	62.9000	1.01	A	A
LA	1	1058.2000	60.2000	0.96	A	A
LB	1	735.0000	41.0000	0.67		W
LL	1	1530.0000	16.6000	1.39	A	W
LV	1	673.0000	42.0000	0.61	A	W
LW	2	1207.9000	42.0000	1.10	A	A
MH	1	1176.2000	8.8000	1.07	A	A
MS	1	1180.0000	118.0000	1.07	A	A
NJ	3	1272.0000	41.0000	1.16		A
NJ	1	1283.0000	19.0000	1.17		A
NJ	2	1303.0000	41.0000	1.18		A
NP	1	1132.9000	14.2000	1.03	A	A
NQ	1	1110.0000	95.0000	1.01	A	A
NS	1	1093.9580	23.7600	1.00	A	A
OB	1	1080.0000	115.0000	0.98	A	A
OC	1	1060.0000	100.0000	0.96	A	A
OC	3	1060.0000	100.0000	0.96	A	A
OC	2	1040.0000	100.0000	0.94	A	A
OK	1	1045.0000	31.0000	0.95		A
OT	1	1200.0000	100.0000	1.09	A	A
RE	1	1040.0000	27.0000	0.94	A	A
RG	1	1048.3900	40.7300	0.95	A	A
RL	1	1294.0000	114.0000	1.18		A
SR	1	1130.0000	100.0000	1.03	A	A
SW	1	1290.0000	19.5300	1.17	A	A
TE	1	1274.6000	33.3000	1.16	A	A
TI	1	1100.0000	100.0000	1.00	A	A
TM	1	1130.0000	91.1000	1.03	A	A
TN	3	1023.5000	11.3000	0.93	A	A
TO	1	1188.0000	19.7700	1.08	A	A
TP	1	1235.7000	11.8000	1.12	A	A
TQ	1	1100.0000	10.0000	1.00		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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: GROSS BETA

EML Value: 1100.0000
EML Error: 40.0000

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
TW	1	1021.0000	43.0000	0.93	A	A
TX	1	1016.0000	33.0000	0.92	A	A
UC	1	985.5700	43.5400	0.90	A	A
UP	1	1204.0000	99.3000	1.10	A	A
UY	1	1165.0000	75.0000	1.06	A	A
WA	1	1130.0000	70.0000	1.03	A	A
WC	1	530.0000	107.0000	0.48	A	N
WO	2	1150.0000	40.0000	1.04		A
WO	1	1150.0000	40.0000	1.04		A
WV	1	1035.0000	57.0000	0.94	A	A

Total Number Reported: 79

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: H3

EML Value: 121.0800
EML Error: 6.7800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	344.1000	3.7000	2.84	N	N
AG	1	124.0000	19.0000	1.02	A	A
AM	1	344.4300	0.4200	2.85	N	N
AN	1	129.0000	1.2000	1.07	A	A
AR	1	83.5000	22.2000	0.69		N
AS	1	120.6080	6.5320	1.00		A
AU	1	131.0000	14.0000	1.08	W	A
BE	1	142.4000	12.4000	1.18	A	A
BL	1	149.0000	12.0000	1.23	A	W
BN	3	187.3600	8.0100	1.55	N	W
BN	2	167.7100	8.0700	1.38	N	W
BN	1	158.5200	8.0000	1.31	N	W
BQ	1	135.0000	56.0000	1.12		A
BU	1	115.8000	1.2000	0.96	A	A
BX	1	146.0000	15.0000	1.21	W	A
CA	1	149.0000	20.0000	1.23		W
CD	1	110.0000	10.0000	0.91		A
CH	1	125.0000	4.9000	1.03	A	A
CL	1	277.0000	13.4000	2.29	W	N
CM	1	117.8000	1.9000	0.97	A	A
DC	1	203.0000	30.8000	1.68		W
EP	1	139.3580	7.2270	1.15	A	A
FG	1	205.0000	14.0000	1.69	N	W
FL	1	134.5000	3.7300	1.11	A	A
FN	1	131.0000	7.0000	1.08	A	A
GC	3	117.2000	8.5500	0.97	A	A
GC	1	118.4000	8.5800	0.98	A	A
GC	2	119.1000	8.6200	0.98	A	A
GE	1	116.3872	12.2248	0.96	A	A
GP	1	130.0000	30.0000	1.07		A
GT	1	120.0000	7.0000	0.99	A	A
HC	1	111.0000	7.8000	0.92	A	A
ID	1	111.0500	16.3480	0.92	W	A
IE	1	112.6000	6.7100	0.93	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: H3

EML Value: 121.0800
EML Error: 6.7800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IS	1	130.0000	15.0000	1.07	W	A
IS	2	127.0000	15.0000	1.05	W	A
IS	3	126.0000	15.0000	1.04	W	A
IT	1	126.0000	3.0000	1.04	A	A
KA	1	129.0000	7.0000	1.07	W	A
KO	1	134.0000	1.4000	1.11		A
LA	1	127.6000	33.3000	1.05	W	A
LA	3	115.4000	32.9000	0.95	W	A
LA	2	125.1000	33.3000	1.03	W	A
LL	1	141.0000	5.9500	1.16	A	A
LV	1	193.0000	19.3000	1.59	A	W
LW	1	137.0000	14.0000	1.13	A	A
ME	3	161.0000	5.1000	1.33	W	W
ME	1	159.0000	5.1000	1.31	W	W
ME	2	162.0000	5.1000	1.34	W	W
MH	1	95.0900	5.2900	0.79	A	W
ML	1	122.5000	8.2100	1.01	A	A
NA	1	126.8000	3.6000	1.05	A	A
NJ	3	125.0000	8.0000	1.03		A
NJ	2	137.0000	8.0000	1.13		A
NJ	1	138.0000	8.0000	1.14		A
NP	1	140.6000	29.6000	1.16	N	A
OD	1	157.8500	8.6700	1.30	A	W
OK	1	175.0000	20.0000	1.45		W
OT	1	125.0000	10.0000	1.03	N	A
PR	1	125.5000	2.5000	1.04	A	A
RC	1	120.0000	8.0000	0.99	A	A
RE	1	130.0000	20.0000	1.07	A	A
RI	1	106.0000	5.8600	0.88		A
SA	1	123.0000	22.0000	1.02		A
SB	1	131.0000	8.0000	1.08	A	A
SK	1	121.0000	8.0000	1.00		A
SL	1	127.0000	7.0000	1.05		A
SR	1	128.0000	18.0000	1.06	A	A
ST	1	119.2000	6.9000	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: H3

EML Value: 121.0800
EML Error: 6.7800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
TE	1	90.3000	24.8000	0.75	W	W
TI	1	130.0000	10.0000	1.07	N	A
TM	1	113.0000	8.2800	0.93		A
TN	3	133.3200	5.8800	1.10	A	A
TO	1	147.5800	5.8800	1.22	A	A
TP	1	93.7900	3.9400	0.77	W	W
TQ	1	140.0000	10.0000	1.16		A
TT	1	120.0000	4.9000	0.99	A	A
TW	1	127.0000	2.0000	1.05		A
TX	1	129.0000	8.0000	1.07	A	A
UP	1	119.0000	16.0000	0.98	A	A
UY	1	132.0000	23.0000	1.09	A	A
WA	1	123.0000	4.0000	1.02	A	A
WC	1	103.0000	22.0000	0.85	A	A
WE	1	98.1000	12.0000	0.81		W
WO	1	133.0000	7.0000	1.10		A
WO	2	126.0000	7.0000	1.04		A
WV	1	126.0000	5.6000	1.04	A	A
YA	1	132.3200	3.3700	1.09	A	A

Total Number Reported: 88

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 50 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	Reported EML	QAP49 Evaluation	Evaluation
AG	1	106.0000	14.0000	0.93		A
AR	1	112.0000	62.0000	0.98		A
BE	1	96.6000	10.6000	0.85	A	A
BL	1	90.9000	10.3000	0.80	A	A
BX	1	88.4000	7.4000	0.77	A	A
CH	1	116.0000	1.9000	1.02		A
CL	1	94.7000	2.0000	0.83	A	A
EG	1	93.0000	6.0000	0.82	A	A
FL	1	91.7200	1.0400	0.81	A	A
GE	1	118.7874	4.0581	1.04	A	A
IT	1	115.0000	3.0000	1.01		A
TE	1	125.8000	6.3000	1.10		A
TI	1	120.0000	10.0000	1.05	A	A
TN	3	105.9800	1.1130	0.93	A	A
TO	1	94.7200	11.5900	0.83	A	A
WA	1	110.0000	6.0000	0.96	A	A
YA	1	113.6000	9.3300	1.00	A	A

Total Number Reported: 17

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU238

EML Value: 0.7716
EML Error: 0.0366

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.7230	0.0740	0.94		A
AF	1	0.7000	0.1000	0.91	W	A
AG	1	0.7300	0.1100	0.95	A	A
AM	1	0.7800	0.0900	1.01	N	A
AN	1	0.7900	0.0600	1.02	A	A
AR	1	0.7390	0.1580	0.96		A
AU	1	2.3800	0.3200	3.08	A	N
BA	1	0.5410	0.1100	0.70	W	N
BE	1	0.8000	0.0900	1.04	A	A
BL	2	0.8740	0.0840	1.13	N	W
BL	1	0.8340	0.0740	1.08	N	A
BM	1	0.9000	0.1000	1.17	A	W
BU	1	0.7700	0.0800	1.00	W	A
BX	1	0.8140	0.0400	1.05	W	A
CH	1	0.8020	0.0420	1.04	A	A
CL	1	0.7400	0.1700	0.96	N	A
CW	2	0.8360	0.0210	1.08		A
CW	1	0.7880	0.0230	1.02		A
EG	1	0.8160	0.0790	1.06	A	A
EP	1	0.7660	0.0724	0.99	A	A
GA	1	0.7700	0.0260	1.00	A	A
GE	1	0.7520	0.1473	0.98	A	A
GP	1	0.7800	0.1400	1.01	A	A
GT	1	0.8000	0.2000	1.04	W	A
HT	1	0.2000	0.0200	0.26	W	N
ID	1	0.8030	0.0680	1.04		A
IE	1	0.7500	0.0700	0.97		A
IN	1	0.7600	0.0500	0.99	A	A
IS	3	0.8130	0.1740	1.05	W	A
IS	1	0.8620	0.1820	1.12	W	W
IS	2	0.8140	0.1720	1.05	W	A
IT	1	0.8000	0.0600	1.04	W	A
KO	1	0.6900	0.0110	0.89		W
LA	3	0.8250	0.0330	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU238

EML Value: 0.7716
EML Error: 0.0366

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LA	1	0.8180	0.0370	1.06	A	A
LA	2	0.7770	0.0370	1.01	A	A
LB	1	0.2300	0.0600	0.30		N
LL	1	0.8150	0.1280	1.06	W	A
LV	1	0.5200	0.0200	0.67	N	N
ML	1	0.8400	0.0600	1.09	A	A
NA	1	0.7400	0.0800	0.96		A
NF	1	0.9430	0.0490	1.22		W
NL	1	0.7970	0.1830	1.03	A	A
NM	1	0.7510	0.0180	0.97	A	A
NQ	1	0.6330	0.0430	0.82	A	W
OD	1	0.9140	0.1200	1.18	A	W
OD	2	0.7690	0.0980	1.00	A	A
OT	1	0.7600	0.0500	0.99	W	A
RE	1	0.8200	0.1000	1.06	A	A
RI	1	1.1600	0.0996	1.50	N	N
SK	1	0.6750	0.0380	0.88	N	W
SN	1	0.8130	0.1340	1.05	A	A
SR	1	0.8580	0.1200	1.11	W	W
SW	1	0.4100	0.1200	0.53	N	N
TE	1	0.8000	0.0100	1.04		A
TI	1	0.7000	0.2000	0.91	A	A
TM	1	0.7960	0.1200	1.03	A	A
TN	3	0.8236	0.0323	1.07	A	A
TO	1	0.7110	0.1870	0.92	W	A
TW	1	0.8100	0.0200	1.05		A
TX	1	0.7470	0.0150	0.97	A	A
UP	1	0.8580	0.1240	1.11	A	W
UY	1	0.8200	0.0900	1.06	A	A
WA	1	0.7000	0.1300	0.91	A	A
WC	1	0.8200	0.2600	1.06	A	A
WE	1	0.9710	0.1000	1.26		N
YA	1	0.8400	0.0200	1.09	A	A

Total Number Reported: 67

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU239

EML Value: 1.0093
EML Error: 0.0579

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AC	1	0.9110	0.0870	0.90		A
AF	1	1.0000	0.1000	0.99	A	A
AG	1	0.9900	0.1400	0.98	A	A
AM	1	1.0300	0.1200	1.02	N	A
AN	1	0.9900	0.0600	0.98	A	A
AR	1	0.8700	0.1770	0.86		W
AU	1	3.1500	0.3800	3.12	A	N
BA	1	0.6460	0.1300	0.64	W	N
BE	1	1.0500	0.1100	1.04	A	A
BL	2	0.9640	0.0850	0.95	W	A
BL	1	0.9620	0.0760	0.95	W	A
BM	1	1.1100	0.1200	1.10	A	A
BU	1	1.0000	0.0700	0.99	A	A
BX	1	1.0100	0.0400	1.00	A	A
CH	1	1.0380	0.0500	1.03	A	A
CL	1	0.9600	0.1600	0.95	A	A
CW	2	1.1100	0.0300	1.10		A
CW	1	1.0300	0.0300	1.02		A
EG	1	1.0100	0.0910	1.00	A	A
EP	1	1.0200	0.0919	1.01	A	A
GA	1	1.0000	0.0870	0.99	A	A
GE	1	0.9740	0.1876	0.96	A	A
GP	1	1.0000	0.2000	0.99	A	A
GT	1	1.0000	0.2000	0.99	W	A
HT	1	0.2060	0.0200	0.20	N	N
ID	1	0.9400	0.1240	0.93	N	A
IE	1	1.0000	0.1000	0.99		A
IN	1	0.9800	0.0600	0.97	A	A
IS	3	0.9080	0.1950	0.90	W	A
IS	2	1.0140	0.2110	1.00	W	A
IS	1	1.0980	0.2270	1.09	W	A
IT	1	0.9900	0.0300	0.98	A	A
KA	1	1.1500	0.0100	1.14	W	A
KO	1	0.8910	0.0140	0.88		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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU239

EML Value: 1.0093
EML Error: 0.0579

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
LA	3	1.0500	0.0400	1.04	A	A
LA	1	0.9770	0.0440	0.97	A	A
LA	2	0.9770	0.0440	0.97	A	A
LB	1	0.2500	0.0600	0.25		N
LL	1	0.9540	0.1420	0.94	A	A
LV	1	0.5900	0.0500	0.58	N	N
ML	1	1.0300	0.0700	1.02	A	A
NA	1	0.9600	0.0800	0.95		A
NF	1	0.9930	0.0410	0.98		A
NL	1	0.9980	0.2280	0.99	A	A
NM	1	1.0000	0.0200	0.99	A	A
NQ	1	0.8670	0.0560	0.86	A	W
OD	2	1.2300	0.1590	1.22	A	W
OD	1	1.0090	0.1260	1.00	A	A
OT	1	0.9900	0.0700	0.98	A	A
RE	1	1.0300	0.1100	1.02	A	A
RI	1	0.1960	0.0325	0.19	W	N
SK	1	0.8770	0.0410	0.87	N	W
SN	1	0.9810	0.1540	0.97	A	A
SR	1	1.1060	0.1300	1.10	W	A
SW	1	0.7000	0.0900	0.69	W	N
TE	1	1.0300	0.0700	1.02		A
TI	1	0.9400	0.2000	0.93	A	A
TM	1	1.0420	0.1470	1.03	A	A
TN	3	1.0460	0.0390	1.04	A	A
TO	1	0.9340	0.2300	0.93	W	A
TW	1	1.0300	0.0300	1.02		A
TX	1	0.9620	0.0190	0.95	A	A
UP	1	1.0300	0.1420	1.02	A	A
UY	1	1.0900	0.1000	1.08	A	A
WA	1	0.9700	0.1400	0.96	W	A
WC	1	0.9900	0.3100	0.98	A	A
WE	1	1.1900	0.1200	1.18		W
YA	1	1.0100	0.0200	1.00	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: PU239

EML Value: 1.0093
EML Error: 0.0579

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP49 Evaluation	Evaluation
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Total Number Reported: 68

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: SR90

EML Value: 4.1040
EML Error: 0.0453

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	3.1000	0.4000	0.75	A	W
AG	1	3.3100	0.6300	0.81	A	W
AM	1	6.9800	0.1400	1.70	W	N
AN	1	3.6600	0.1300	0.89	A	A
AR	1	3.9900	0.8500	0.97		A
AS	1	3.4490	0.1460	0.84		W
AU	1	3.5800	0.2400	0.87	A	W
BA	1	3.4800	0.4800	0.85	A	W
BC	1	3.6400	0.7600	0.89	N	W
BE	1	3.9200	0.3200	0.95	A	A
BL	2	3.0800	0.6000	0.75	A	N
BL	1	3.9200	0.5000	0.95	A	A
BM	1	3.4800	0.4800	0.85	A	W
BN	2	2.4370	0.0790	0.59	N	N
BN	3	2.3700	0.1020	0.58	N	N
BN	1	2.3380	0.0930	0.57	N	N
BQ	1	3.5000	0.1000	0.85		W
BX	1	5.1800	1.1000	1.26	A	W
CB	2	4.1300	0.3000	1.01	A	A
CB	1	4.8200	0.3000	1.17	A	A
CH	1	3.6400	0.2300	0.89	W	W
CL	1	4.2600	0.3300	1.04	W	A
EG	1	4.2000	0.3000	1.02	A	A
EM	1	3.9000		0.95		A
EP	1	4.1520	0.2613	1.01	A	A
FL	1	0.4220	0.0050	0.10		N
GA	1	2.4000	0.1200	0.58	W	N
GC	2	3.3900	0.0400	0.83	W	W
GC	1	3.5200	0.0400	0.86	W	W
GE	1	3.4476	0.2803	0.84	N	W
GP	1	2.6000	0.6000	0.63	N	N
GT	1	3.0000	0.3000	0.73	A	N
ID	1	4.2270	0.3260	1.03	A	A
IN	1	4.0400	0.4000	0.98	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: SR90

EML Value: 4.1040
EML Error: 0.0453

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
IS	1	4.6800	0.9530	1.14	W	A
IS	3	4.1700	0.8520	1.02	W	A
IS	2	4.2800	0.8720	1.04	W	A
IT	1	3.7100	0.0900	0.90	A	A
KA	1	3.5000	0.2800	0.85	A	W
KO	1	3.5900	0.2200	0.88		W
LA	1	4.0340	0.3290	0.98	W	A
LA	2	4.0270	0.3190	0.98	W	A
LA	3	3.4890	0.2910	0.85	W	W
MH	1	3.8400	0.3400	0.94		A
NA	1	2.9000	0.8000	0.71	N	N
NJ	2	3.8000	0.5000	0.93		A
NJ	1	3.7000	0.5000	0.90		A
NJ	3	4.2000	0.5000	1.02		A
NM	1	3.2400	0.4100	0.79	W	W
NS	1	2.8600	0.7880	0.70		N
OC	2	2.3000	0.2000	0.56	A	N
OC	1	2.4000	0.2000	0.58	A	N
OC	3	2.3000	0.2000	0.56	A	N
OD	2	4.0700	0.5900	0.99	A	A
OD	1	3.7600	0.4800	0.92	A	A
OT	1	3.8000	0.4000	0.93	A	A
RE	1	3.1600	0.2900	0.77	A	W
RI	1	3.8800	0.2170	0.94	A	A
SR	1	2.8300	0.5500	0.69	A	N
SW	1	6.0100	0.4300	1.46	N	W
TE	1	3.6300	1.2000	0.88	W	W
TI	1	3.8000	0.4000	0.93	A	A
TM	1	3.3300	0.3230	0.81	A	W
TN	1	3.6635	0.0994	0.89	A	A
TO	1	4.5000	0.3800	1.10	A	A
TP	1	4.0700	0.2400	0.99	A	A
TQ	1	3.3000	0.2000	0.80		W
TW	1	3.2000	0.2000	0.78		W
TX	1	4.2700	0.6900	1.04	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: SR90

EML Value: 4.1040
EML Error: 0.0453

Labcode	Test Number	Reported Value	Reported Error	<u>Reported EML</u>	QAP49 Evaluation	Evaluation
UP	1	3.4000	0.5100	0.83	A	W
UY	1	3.5000	0.2000	0.85	A	W
WA	1	4.0000	0.6000	0.98	A	A
WC	1	3.5000	0.4600	0.85	A	W
WE	1	2.9000	0.5500	0.71	N	N
WO	1	3.9000	0.6000	0.95		A
WO	2	3.9000	0.6000	0.95		A
WV	1	3.8100	0.2400	0.93	A	A
YA	1	4.1200	0.2300	1.00	N	A

Total Number Reported: 78

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U234

EML Value: 0.2685
EML Error: 0.0155

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	0.4000	0.1000	1.49		N
AG	1	0.3100	0.0590	1.15	A	A
AM	1	0.2800	0.0200	1.04	A	A
AN	1	0.2600	0.0200	0.97	A	A
AR	1	0.3450	0.1020	1.28		W
AU	1	0.2790	0.0650	1.04	A	A
BA	1	0.2650	0.0800	0.99	A	A
BC	1	0.3350	0.0480	1.25	W	W
BE	1	0.2800	0.0400	1.04	A	A
BL	1	0.2450	0.0370	0.91	A	A
BM	1	0.2800	0.0580	1.04	A	A
BU	1	0.2700	0.0300	1.01	A	A
BX	1	0.3250	0.0480	1.21	W	A
CH	1	0.2840	0.0170	1.06	A	A
CL	1	0.2620	0.0800	0.98	A	A
CW	2	0.2910	0.0070	1.08		A
CW	1	0.3010	0.0080	1.12		A
EG	1	0.2910	0.0500	1.08	A	A
EP	1	0.3100	0.0340	1.15		A
FG	1	0.2130	0.0100	0.79	N	N
GA	1	0.3100	0.0120	1.15	N	A
GE	1	0.3152	0.0508	1.17	A	A
GP	1	0.2900	0.0700	1.08	A	A
HT	1	0.2250	0.0200	0.84	N	W
IE	1	0.3000	0.0300	1.12		A
IN	1	0.2830	0.0500	1.05	A	A
IT	1	0.2600	0.0400	0.97	A	A
KO	1	0.2860	0.0070	1.07		A
LB	1	0.2700	0.0300	1.01		A
LL	1	0.2560	0.0559	0.95	A	A
LV	1	0.1800	0.0800	0.67		N
MH	1	0.2750	0.0290	1.02	A	A
ML	1	0.2700	0.0200	1.01	A	A
NA	1	0.3300	0.0700	1.23	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U234

EML Value: 0.2685
EML Error: 0.0155

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
NF	1	0.5220	0.0300	1.94		N
NJ	3	0.3200	0.0300	1.19		A
NJ	2	0.3100	0.0300	1.15		A
NJ	1	0.2900	0.0300	1.08		A
NL	1	0.3060	0.0730	1.14	A	A
NQ	1	0.2820	0.0190	1.05	A	A
OB	1	0.2470	0.4140	0.92		A
OD	2	0.2440	0.0280	0.91	A	A
OD	1	0.2640	0.0280	0.98	A	A
OU	1	0.3790	0.0100	1.41	N	N
RE	1	0.2900	0.0500	1.08	A	A
SK	1	0.2630	0.0110	0.98		A
SR	1	0.2820	0.0520	1.05	A	A
TE	1	0.3300	0.0800	1.23		W
TN	3	0.2703	0.0103	1.01	A	A
TO	1	0.2800	0.0400	1.04	A	A
TW	1	0.3310	0.0080	1.23		W
TX	1	0.2880	0.0090	1.07	A	A
UY	1	0.2800	0.0300	1.04		A
WA	1	0.3000	0.0500	1.12	A	A
WC	1	0.1400	0.0500	0.52	A	N
YA	1	0.3200	0.0200	1.19		A

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U238

EML Value: 0.2619
EML Error: 0.0163

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AF	1	0.3000	0.1000	1.14		A
AG	1	0.2850	0.0510	1.09	A	A
AM	1	0.3500	0.0300	1.34	A	N
AN	1	0.2800	0.0200	1.07	A	A
AR	1	0.2270	0.0790	0.87		W
AU	1	0.2540	0.0610	0.97	A	A
BA	1	0.2850	0.0900	1.09	A	A
BC	1	0.3490	0.0490	1.33	A	N
BE	1	0.2800	0.0400	1.07	A	A
BL	1	0.2450	0.0370	0.94	A	A
BM	1	0.2800	0.0580	1.07	A	A
BU	1	0.2800	0.0300	1.07	A	A
BX	1	0.3340	0.0480	1.27	N	N
CH	1	0.2980	0.0170	1.14	A	A
CL	1	0.2650	0.0700	1.01	A	A
CW	1	0.2950	0.0070	1.13		A
CW	2	0.2900	0.0080	1.11		A
EG	1	0.3110	0.0600	1.19	A	W
EP	1	0.3400	0.0366	1.30		N
FG	1	0.2700	0.0100	1.03	N	A
GA	1	0.3100	0.0040	1.18	N	W
GE	1	0.3057	0.0488	1.17	A	A
GP	1	0.2700	0.0600	1.03	A	A
GT	1	0.3000	0.1000	1.14	N	A
HT	1	0.2360	0.0200	0.90	N	A
ID	1	0.2870	0.0140	1.10	A	A
IE	1	0.2900	0.0300	1.11		A
IN	1	0.2690	0.0500	1.03	A	A
IT	1	0.3400	0.0800	1.30	A	N
KO	1	0.2800	0.0070	1.07		A
LB	1	0.2900	0.1000	1.11		A
LL	1	0.2770	0.0582	1.06	A	A
LV	1	0.3500	0.1100	1.34		N
MH	1	0.2720	0.0280	1.04	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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: U238

EML Value: 0.2619
EML Error: 0.0163

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
ML	1	0.2500	0.0200	0.95	A	A
NA	1	0.2600	0.0600	0.99	N	A
NF	1	0.3570	0.0240	1.36		N
NJ	3	0.3000	0.0300	1.14		A
NJ	2	0.3000	0.0300	1.14		A
NJ	1	0.2600	0.0200	0.99		A
NL	1	0.2770	0.0660	1.06	A	A
NQ	1	0.2790	0.0190	1.07	A	A
OB	1	0.2670	0.4180	1.02		A
OD	1	0.2450	0.0270	0.94	A	A
OD	2	0.2670	0.0300	1.02	A	A
OU	1	0.3810	0.0100	1.46	N	N
RE	1	0.3100	0.0500	1.18	A	W
SK	1	0.2750	0.0120	1.05		A
SR	1	0.2790	0.0530	1.07	W	A
TE	1	0.3300	0.0800	1.26		W
TN	3	0.2816	0.0105	1.08	A	A
TO	1	0.2800	0.0300	1.07	A	A
TW	1	0.3120	0.0080	1.19		W
TX	1	0.2830	0.0090	1.08	A	A
UP	1	0.3240	0.0650	1.24		W
UY	1	0.2800	0.0300	1.07		A
WA	1	0.2700	0.0500	1.03	A	A
WC	1	0.1300	0.0500	0.50	A	N
YA	1	0.3200	0.0200	1.22		W

Total Number Reported: 59

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 50 Results by Nuclide

Matrix: WA Water Bq / L
Radionuclide: µg U

EML Value: 0.0212
EML Error: 0.0010

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP49 Evaluation	Evaluation
AG	1	0.0242	0.0057	1.14	A	A
AR	1	11.6000	1.2000	** **		N
BE	1	0.0230		1.09	A	A
BL	1	0.0200	0.0030	0.94	N	A
BP	3	0.0240	0.0024	1.13		A
BP	2	0.0240	0.0024	1.13		A
BP	1	0.0240	0.0024	1.13		A
BQ	1	0.0220	0.0070	1.04	W	A
CA	1	0.0265	0.0030	1.25	A	W
CH	1	0.0219		1.03	A	A
GA	1	0.0250	0.0010	1.18	N	A
GE	1	23.2900	0.2671	** **	A	N
HT	1	0.0191	0.0020	0.90	N	A
IT	1	0.0223	0.0001	1.05	A	A
KA	1	0.0224	0.0001	1.06	A	A
KO	1	0.0227	0.0006	1.07		A
LA	2	24.5700	2.4600	** **		N
LA	1	24.4800	2.4500	** **		N
LA	3	23.5500	2.3600	** **		N
OU	1	0.0210	0.0010	0.99	W	A
SW	1	0.0233		1.10		A
TI	1	0.0250	0.0040	1.18	A	A
TM	1	0.0230	0.0012	1.09	A	A
TN	3	0.0234	0.0015	1.10	A	A
TO	1	0.0224	0.0015	1.06		A
UC	1	0.0230		1.09	A	A
UP	1	0.0230	0.0020	1.09	A	A
YA	1	0.0220	0.0003	1.04	A	A
YP	1	0.0201	0.0019	0.95	A	A

Total Number Reported: 29

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 QAP50

Laboratories Reporting Data

Code	Laboratory Name
AF	Air Force Analytical Lab, Brooks AFB
AG	Paragon Analytics, Inc, Fort Collins, CO
AL	Ames Laboratory, Ames, IA
AM	American Radiation Services, Inc., Baton Rouge
AN	Argonne National Laboratory
AP	Aberdeen Proving Ground, Aberdeen, MD
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
AW	Argonne West National Lab
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
CO	Bedford Institute of Oceanography, Dartmouth. Nova Scotia, Canada
CR	Laboratorio de Fisica Nuclear Aplicada, Costa Rica
CS	Boeing North American, 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
EL	Energy Laboratories, Inc., Casper, WY
EM	3M, Empore Disks, St. Paul, MN
EP	US EPA, Las Vegas
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
FS	Florida State University, Tallahassee
GA	Lockheed Martin, Pikton, OH
GC	Georgia Power Company Environmental Lab
GE	Environmental Physics, Inc., Charleston, SC
GP	GPU Nuclear, Inc., Harrisburg, PA
GT	Georgia Institute of Technology
HC	Lawrence Livermore Laboratory, California

Participating Laboratories in EML QAP50

Laboratories Reporting Data

Code	Laboratory Name
HO	Rontgen Technische Dienst bv, The Netherlands
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
JE	Jacobs Engineering, Oak Ridge, TN
JL	Jefferson Lab, Newport News, VA
KA	Knolls Atomic Power Lab, Schenectady
KO	Korea Institute of Nuclear Safety
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
ML	Babcock & Wilcox of Ohio, Mound, Miamisburg, Ohio
MS	Manufacturing Sciences Corporation, Oak Ridge
NA	US EPA NAREL, Montgomery, AL
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
OB	OBG Laboratories, East Syracuse, NY
OC	Radiation Protection Service Laboratory, Ontario, Canada
OD	ORNL, Radiobioassay Lab
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 QAP50**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)
SK	Savannah River Plant
SL	Stanford Linear Accelerator Center
SN	Sanford Cohen Associates, Inc., Montgomery, AL
SR	Savannah River Environmental Laboratory
ST	SC DHEC, Aiken, South Carolina
SW	Southwest Research Institute, San Antonio, TX
TE	Teledyne Isotopes Midwest Lab, Northbrook, IL
TI	Teledyne Brown Engineering Environmental Services, Westwood, NJ
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
TT	Tracer Technologies International, Inc., Cleveland
TW	Taiwan Radiation Monitoring Center
TX	Texas Dept. of Health/Laboratories, Austin
UC	Lockheed Martin, Paducah, KY
UP	Lockheed Martin Energy Systems, Y-12 Plant, Oak Ridge
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
WI	WIPP Site, Westinghouse Electric Corp.
WN	State Health Radiation Protection Section, Madison, WI
WO	Wisconsin State Lab of Hygiene
WS	Weldon Springs Site, St Charles, MO
WT	Waste Stream Technology, Buffalo, NY
WV	West Valley Nuclear Services Co, Inc, NY
XZ	Pacific Northwest National Laboratory
YA	Duke Engineering & Sciences Environmental Lab, Westboro, MA
YP	US Army Proving Ground, Yuma, AZ
AC	Analytical Chemistry Laboratory, Argonne National Lab

Total Reporting Labs: 139

Participating Laboratories in EML QAP50

Laboratories NOT Reporting Data

Code	Laboratory Name
AL	Ames Laboratory, Ames, IA
AP	Aberdeen Proving Ground, Aberdeen, MD
AY	Analytics, Inc. Atlanta, GA
BR	US Army Research Laboratory, Aberdeen Proving Grou
BS	B&W Nuclear Envir. Services, Leechburg, PA
DP	Duke Power Company, Huntersville, NC
FJ	The University of the South Pacific, Fiji Islands
FR	CEA/DAM - SPR/B3
FT	USACECOM-DSRM, Fort Monmouth, NJ
GD	GTS Duratek, Oak Ridge, TN
GS	USGS/NWQL, Arvada, CO
IA	Bhabha Atomic Research Centre, India
KR	Korea Atomic Energy Research Institute
LE	Lyle Environmental Management, Columbus, Ohio
MI	Massachusetts Institute of Technology
ND	Dept. of Environmental Health and Safety, NC State University
NW	Naval Reasearch LAb, Washington,DC
NZ	National Radiation Laboratory, New Zealand
SH	Savannah River Ecology Lab
SY	Syrian Arab Republic Atomic Energy Commission
TU	Texas A&M University, Dept of Nuclear Engineering
TY	Scientific Production Association, Russia
UK	Lockheed Martin Energy Systems, Oak Ridge
WP	Washington Public Power Supply System, Richland
WW	West Valley Radiation Protection
YU	Institute of Occupational and Radiological Health, Serbia
AI	Nuclear Technology Services, Inc., Roswell, GA

Total Non-Reporting Labs: 27