

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

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**June 2002**

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# ABSTRACT

This report presents the results from the analysis of the 56th set of environmental quality assessment samples that were received on or before June 3, 2002.

# ACKNOWLEDGEMENT

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

# INTRODUCTION

This Quality Assessment Program (QAP) is designed to test the quality of the environmental measurements being reported to the Department of Energy by its contractors. Since 1976, real or synthetic environmental samples that have been prepared and thoroughly analyzed at the Environmental Measurements Laboratory (EML) have been distributed at first quarterly and then semi-annually to these contractors. Their results, which are returned to EML within 90 days, are compiled with EML's results and are reported back to the participating contractors 30 days later. A summary of the reported results is available to the participants 4 days after the reporting deadline via the Internet at [www.eml.doe.gov](http://www.eml.doe.gov).

This is the 62nd report of this program. Preceding reports in this series are:

HASL-317	(February 1, 1977)	EML-477	(October 1, 1986)
HASL-319	(May 2, 1977)	EML-478	(March 1, 1987)
HASL-323	(August 1, 1977)	EML-498	(September 1, 1987)
HASL-331	(November 1, 1977)	EML-518	(January 2, 1989)
EML-336	(January 1, 1978)	EML-525*	(August 1, 1989)
EML-337	(February 1, 1978)	EML-526	(January 2, 1990)
EML-340	(May 1, 1978)	EML-530	(July 2, 1990)
EML-343	(August 1, 1978)	EML-535	(January 1, 1991)
EML-346	(November 1, 1978)	EML-539	(July 1, 1991)
EML-350	(February 1, 1979)	EML-543	(January 2, 1992)
EML-351	(February 1, 1979)	EML-546	(July 1, 1992)
EML-354	(May 1, 1979)	EML-551	(January 4, 1993)
EML-358	(August 1, 1979)	EML-556	(July 1, 1993)
EML-364	(November 1, 1979)	EML-559	(January 5, 1994)
EML-368	(February 1, 1980)	EML-561	(July 1, 1994)
EML-377	(August 1, 1980)	EML-565	(January 5, 1995)
EML-387	(February 1, 1981)	EML-569	(July 3, 1995)
EML-388	(February 1, 1981)	EML-576	(February 1, 1996, Revised)
EML-393	(August 3, 1981)	EML-581	(July 1, 1996)
EML-402	(February 1, 1982)	EML-587	(January 1997)
EML-414	(April 1, 1983)	EML-591	(July 1997)
EML-417	(September 1, 1983)	EML-594	(January 1998)
EML-426	(March 1, 1984)	EML-596	(July 1998)
PNL-5079	(April 1, 1984)	EML-600	(December 1998)
EML-431	(September 1, 1984)	EML-604	(June 1999)
EML-432	(November 1, 1984)	EML-605	(December 1999)
EML-438	(March 1, 1985)	EML-608	(June 2000)
EML-439	(March 1, 1985)	EML-609	(December 2000)
EML-448	(October 1, 1985)	EML-613	(June 2001)
EML-453	(March 1, 1986)	EML-615	(December 2001)
EML-454	(March 1, 1986)		

\*Please note this is a corrected report number.

# RESULTS

The results from the analysis of QAP-56 samples (results from 151 laboratories) received on or before June 3, 2002 are listed in the TABLE OF CONTENTS. The data for the different kinds of samples are given in the following units:

Air Filters	Bq filter <sup>-1</sup>
Soil	Bq kg <sup>-1</sup>
Vegetation	Bq kg <sup>-1</sup>
Water	Bq L <sup>-1</sup>

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

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

The control limit concept was established from percentiles of historic data distributions (1982-1992). The evaluation of this historic data and the development of the control limits are presented in DOE report EML-564. The control limits for QAP-56 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 15<sup>th</sup> and 85<sup>th</sup> 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 5<sup>th</sup> and 15<sup>th</sup> percentile and between the 85<sup>th</sup> and 95<sup>th</sup> percentile. In other words, the middle 90% of all reported values are acceptable, while the outer 5<sup>th</sup>-15<sup>th</sup> (10%) and 85<sup>th</sup>-95<sup>th</sup> percentiles (10%) are in the warning area. The not acceptable criteria, "N", is established at less than the 5<sup>th</sup> percentile and greater than the 95<sup>th</sup> 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 and Performance Criteria (p. 4).

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

# TABLE OF CONTENTS

Abstract .....	<i>i</i>
Acknowledgment .....	<i>ii</i>
Introduction .....	<i>iii</i>
Results .....	<i>iv</i>
Summary of Results Figure .....	1
Table of Statistical Summary .....	2
Table of Control Limits and Performance Criteria .....	4
Summary of Matrix Evaluations by Laboratory .....	6
Summary of Laboratory Evaluations by Matrix .....	30
Summary of Matrix Evaluations by Radionuclide .....	41
Results Ordered by Laboratory	
AA (EML) .....	45
AC .....	49
AF .....	51
AG .....	52
AI .....	54
AM .....	56
AN .....	58
AP .....	59
AS .....	60
AT .....	61
AU .....	63
AW .....	65
BA .....	66
BE .....	67
BM .....	69
BN .....	70
BP .....	71
BQ .....	72
BU .....	73

BX . . . . .	75
CA . . . . .	77
CB . . . . .	78
CD . . . . .	79
CE . . . . .	80
CF . . . . .	81
CG . . . . .	82
CH . . . . .	83
CL . . . . .	85
CM . . . . .	87
CN . . . . .	88
CP . . . . .	89
CR . . . . .	90
CS . . . . .	91
CU . . . . .	92
CW . . . . .	93
CZ . . . . .	95
EC . . . . .	96
EG . . . . .	99
EI . . . . .	101
EP . . . . .	102
FE . . . . .	103
FG . . . . .	104
FL . . . . .	105
FM . . . . .	106
FN . . . . .	107
FR . . . . .	108
FS . . . . .	109
FU . . . . .	110
GA . . . . .	112
GC . . . . .	113
GE . . . . .	114
GS . . . . .	116
GT . . . . .	117
HC . . . . .	118
HT . . . . .	119
HU . . . . .	120
IL . . . . .	121
IN . . . . .	122
IO . . . . .	123
IS . . . . .	124
IT . . . . .	126
KA . . . . .	128
KE . . . . .	129
KG . . . . .	130
KO . . . . .	131
KR . . . . .	133

KS .....	135
LA .....	136
LI .....	138
LL .....	139
LM .....	140
LN .....	141
LV .....	142
LW .....	143
ME .....	144
MH .....	146
MI .....	147
ML .....	148
MS .....	149
MX .....	150
MY .....	151
MZ .....	152
NA .....	153
ND .....	154
NJ .....	155
NL .....	158
NM .....	159
NP .....	160
NQ .....	161
NR .....	162
NS .....	163
NZ .....	164
OB .....	165
OD .....	166
OH .....	167
OK .....	168
OT .....	169
OU .....	171
PA .....	172
PC .....	173
PK .....	174
PO .....	175
PR .....	176
PS .....	177
RA .....	178
RB .....	179
RC .....	180
RG .....	181
RI .....	182
RK .....	183
RM .....	184
RS .....	185
RU .....	186

SA .....	187
SB .....	188
SD .....	189
SE .....	191
SI .....	193
SK .....	194
SL .....	195
SN .....	196
SR .....	198
ST .....	200
SX .....	201
SY .....	202
TE .....	203
TI .....	205
TM .....	207
TN .....	209
TO .....	211
TP .....	213
TQ .....	214
TW .....	215
TX .....	216
TY .....	218
UC .....	219
UG .....	220
UP .....	221
US .....	222
UY .....	223
WA .....	224
WC .....	226
WE .....	227
WI .....	230
WN .....	233
WO .....	235
WT .....	237
WV .....	238
WW .....	239
YA .....	240
YP .....	241
YU .....	242

## Results Ordered by Matrix/Nuclide

Air .....	
$^{241}\text{Am}$ .....	243
Bq U .....	245
$^{60}\text{Co}$ .....	246
$^{137}\text{Cs}$ .....	250

Gross Alpha (GA) .....	254
Gross Beta (GB) .....	257
<sup>54</sup> Mn .....	260
<sup>238</sup> Pu .....	264
<sup>239</sup> Pu .....	266
<sup>90</sup> Sr .....	268
<sup>234</sup> U .....	270
<sup>238</sup> U .....	272
$\mu\text{g}$ U .....	274
 Soil	
<sup>228</sup> Ac .....	275
<sup>241</sup> Am .....	279
<sup>212</sup> Bi .....	282
<sup>214</sup> Bi .....	285
Bq U .....	289
<sup>137</sup> Cs .....	290
<sup>40</sup> K .....	295
<sup>212</sup> Pb .....	300
<sup>214</sup> Pb .....	304
<sup>238</sup> Pu .....	308
<sup>239</sup> Pu .....	309
<sup>90</sup> Sr .....	311
<sup>234</sup> Th .....	313
<sup>234</sup> U .....	315
<sup>238</sup> U .....	317
$\mu\text{g}$ U .....	319
 Vegetation	
<sup>241</sup> Am .....	320
<sup>244</sup> Cm .....	322
<sup>60</sup> Co .....	324
<sup>137</sup> Cs .....	328
<sup>40</sup> K .....	332
<sup>238</sup> Pu .....	336
<sup>239</sup> Pu .....	337
<sup>90</sup> Sr .....	339
 Water	
<sup>241</sup> Am .....	341
Bq U .....	344
<sup>60</sup> Co .....	345
<sup>134</sup> Cs .....	350
<sup>137</sup> Cs .....	354
Gross Alpha (GA) .....	359
Gross Beta (GB) .....	362
<sup>3</sup> H .....	365

<sup>238</sup> Pu	.....	369
<sup>239</sup> Pu	.....	371
<sup>90</sup> Sr	.....	373
<sup>234</sup> U	.....	376
<sup>238</sup> U	.....	378
μg U	.....	380

## List of Labcodes of Participating\* Laboratories for EML QAP-LV

Laboratories Reporting Data	.....	382
Laboratories Not Reporting Data	.....	385

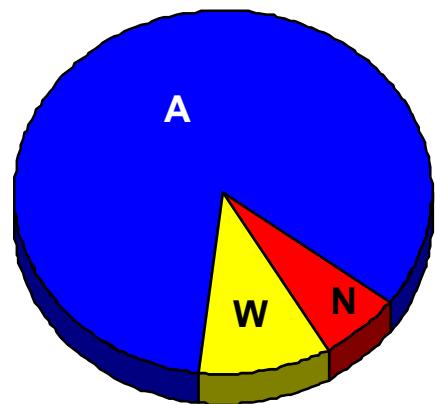
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\*Participating Laboratories are those laboratories that were sent samples.

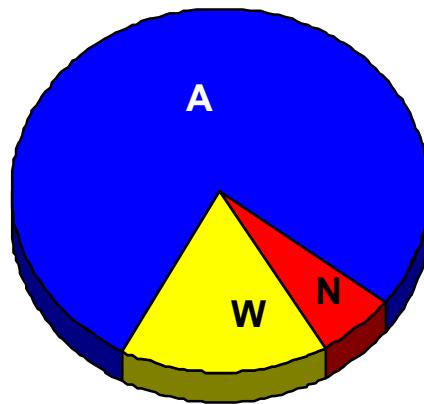
# QAP 56 Summary of Evaluations of 3957 Reported Analyses

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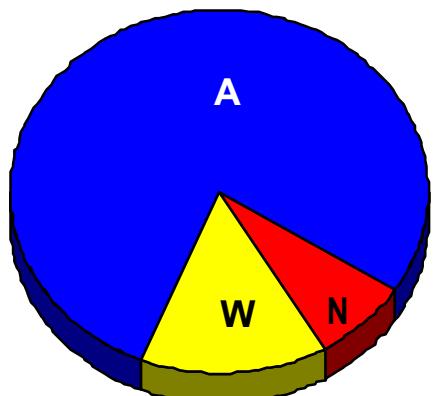
Air Filter: 941 Analyses



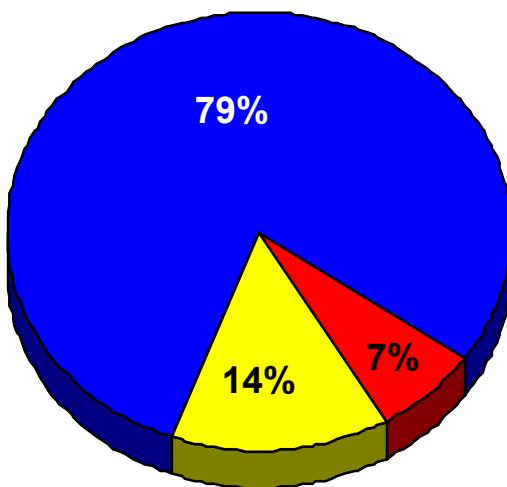
Soil: 1289 Analyses



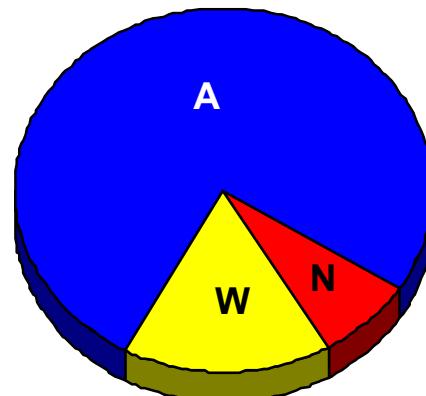
Vegetation: 552 Analyses



Summary:  
All Analyses



Water: 1175 Analyses



■ Acceptable

■ Warning

■ Not Acceptable

**QAP 56 Statistical Summary**

<b>Nuclide</b>	<b>EML Value</b>	<b>EML Error</b>	<b><u>Reported Values</u></b>			<b>No.* of Reported Values</b>
			<b>Mean</b>	<b>Median</b>	<b>Std. Dev.</b>	
<b>Matrix: AI</b>						
AM241	0.088	0.005	1.189	1.110	0.302	65
Bq U	0.608	0.005	1.004	0.978	0.127	15
CO60	30.520	0.652	1.010	1.016	0.054	132
CS137	28.230	0.701	1.051	1.041	0.073	132
GROSS ALPHA	0.534	0.053	1.054	1.030	0.134	89
GROSS BETA	1.300	0.130	0.977	0.956	0.102	88
MN54	38.530	0.867	1.044	1.036	0.074	127
PU238	0.057	0.001	1.008	1.028	0.106	40
PU239	0.187	0.003	1.000	0.998	0.088	47
SR90	4.832	0.184	0.932	0.917	0.134	43
U	24.105	0.103	0.962	0.986	0.073	18
U234	0.297	0.004	1.004	0.975	0.088	37
U238	0.298	0.004	0.995	0.982	0.094	38

<b>Matrix: SO</b>						
AC228	51.167	1.941	1.007	0.992	0.103	104
AM241	10.927	0.373	1.101	1.087	0.241	92
BI212	53.430	5.215	0.908	0.921	0.186	89
BI214	53.933	2.249	0.962	0.935	0.125	100
Bq U	194.769	15.642	0.935	0.931	0.110	21
CS137	1326.670	66.510	0.991	0.996	0.076	146
K40	621.670	33.860	0.971	0.969	0.079	135
PB212	51.100	2.753	1.008	0.995	0.108	104
PB214	54.367	2.249	1.004	0.969	0.144	107
PU238	0.691	0.105	1.231	1.086	0.461	11
PU239	19.098	0.706	1.049	1.063	0.093	61
SR90	53.756	1.446	0.956	0.926	0.196	50
TH234	89.300	6.837	1.139	1.141	0.206	58
U234	93.885	7.767	0.911	0.914	0.078	44
U238	96.778	8.410	0.924	0.943	0.088	49
ug U	7.829	0.755	0.874	0.901	0.111	28

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

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**QAP 56 Statistical Summary**

Nuclide	EML Value	EML Error	Reported Values			No.* of Reported Values
			Mean	Median	Std. Dev.	
<b>Matrix: VE</b>						
AM241	2.228	0.216	1.121	1.084	0.195	50
CM244	1.320	0.164	0.988	1.045	0.143	32
CO60	11.230	0.677	1.079	1.064	0.141	107
CS137	313.667	15.910	1.051	1.053	0.096	110
K40	864.330	47.220	1.064	1.076	0.101	106
PU238	0.257	0.046	0.951	0.974	0.117	7
PU239	3.543	0.377	0.938	0.934	0.092	41
SR90	586.280	11.140	0.914	0.928	0.106	51

<b>Matrix:</b>	<b>WA</b>
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AM241	1.474	0.021	1.041	1.038	0.094	77
Bq U	2.836	0.121	0.944	0.938	0.066	24
CO60	347.330	12.400	1.016	1.014	0.047	140
CS134	3.357	0.200	0.967	0.965	0.091	98
CS137	56.067	2.929	1.024	1.020	0.065	142
GROSS ALPHA	375.000	37.500	0.979	0.975	0.143	82
GROSS BETA	1030.000	103.000	0.957	0.940	0.118	96
H3	283.700	3.380	1.055	1.017	0.194	95
PU238	0.490	0.032	1.004	1.013	0.075	57
PU239	4.219	0.172	1.008	1.016	0.066	62
SR90	7.579	0.176	0.922	0.914	0.111	71
U	0.112	0.007	0.943	0.949	0.063	37
U234	1.402	0.056	0.938	0.926	0.084	48
U238	1.381	0.079	0.951	0.948	0.060	47

Units for matrices:

Air filter: AI=Bq/filter      Vegetation: VE=Bq/kg      Soil: SO=Bq/kg      Water: WA=Bq/L.  
 Values for elemental uranium in  $\mu\text{g}/\text{filter}$ , 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

**QAP 56 Control Limits\* by Matrix**

<b>Nuclide</b>	<b>Lower Limit</b>	<b>Lower Middle Limit</b>	<b>Upper Middle Limit</b>	<b>Upper Limit</b>
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**Matrix: AI**

AM241	0.70	0.87	1.34	2.34
Bq U	0.79	0.90	1.30	2.10
CO60	0.80	0.90	1.11	1.26
CS137	0.80	0.90	1.17	1.32
GROSS ALPHA	0.73	0.84	1.21	1.43
GROSS BETA	0.76	0.85	1.21	1.36
MN54	0.80	0.90	1.19	1.35
PU238	0.67	0.88	1.12	1.33
PU239	0.73	0.88	1.12	1.26
SR90	0.53	0.76	1.20	1.84
U	0.74	0.90	1.20	1.44
U234	0.80	0.90	1.31	1.90
U238	0.80	0.90	1.22	1.53

**Matrix: SO**

AC228	0.80	0.87	1.19	1.38
AM241	0.65	0.88	1.47	2.28
BI212	0.50	0.59	1.16	1.34
BI214	0.78	0.87	1.23	1.42
Bq U	0.71	0.80	1.10	1.32
CS137	0.80	0.90	1.16	1.25
K40	0.80	0.90	1.19	1.32
PB212	0.78	0.89	1.19	1.32
PB214	0.76	0.88	1.27	1.46
PU238	0.59	0.87	1.49	2.88
PU239	0.71	0.87	1.13	1.30
SR90	0.67	0.82	1.35	2.90
TH234	0.63	0.82	1.59	2.35
U234	0.74	0.84	1.10	1.20
U238	0.68	0.82	1.10	1.22
ug U	0.46	0.64	1.10	1.20

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

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**QAP 56 Control Limits\* by Matrix**

<b>Nuclide</b>	<b>Lower Limit</b>	<b>Lower Middle Limit</b>	<b>Upper Middle Limit</b>	<b>Upper Limit</b>
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**Matrix: VE**

AM241	0.73	0.88	1.42	2.02
CM244	0.61	0.81	1.28	1.59
CO60	0.80	0.90	1.22	1.44
CS137	0.80	0.90	1.19	1.31
K40	0.79	0.90	1.22	1.39
PU238	0.58	0.77	1.24	1.70
PU239	0.69	0.84	1.14	1.31
SR90	0.55	0.74	1.10	1.21

**Matrix: WA**

AM241	0.79	0.90	1.19	1.41
Bq U	0.75	0.87	1.18	1.33
CO60	0.80	0.90	1.10	1.20
CS134	0.80	0.90	1.14	1.30
CS137	0.80	0.90	1.12	1.22
GROSS ALPHA	0.58	0.79	1.13	1.29
GROSS BETA	0.61	0.81	1.29	1.43
H3	0.78	0.90	1.32	2.45
PU238	0.74	0.90	1.10	1.20
PU239	0.79	0.90	1.10	1.20
SR90	0.69	0.84	1.15	1.34
U	0.80	0.90	1.11	1.24
U234	0.80	0.90	1.17	1.34
U238	0.80	0.90	1.16	1.28

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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

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

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**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: AC Analytical Chemistry Laboratory, Argonne, IL</u></b>							
SO	6	4	2	12	50	33	17
WA	6	6	0	12	50	50	0
AI	9	0	0	9	100	0	0
VE	5	1	1	7	71	14	14
<b>Totals:</b>	<b>26</b>	<b>11</b>	<b>3</b>	<b>40</b>	<b>65%</b>	<b>28%</b>	<b>8%</b>
<b><u>Lab: AF Air Force Analytical Lab (AFIERA/SDRR), Brooks AFB</u></b>							
SO	3	6	0	9	33	67	0
WA	4	1	3	8	50	13	38
<b>Totals:</b>	<b>7</b>	<b>7</b>	<b>3</b>	<b>17</b>	<b>41%</b>	<b>41%</b>	<b>18%</b>
<b><u>Lab: AG Paragon Analytics, Inc, Fort Collins, CO</u></b>							
WA	10	1	0	11	91	9	0
AI	8	0	0	8	100	0	0
SO	12	1	0	13	92	8	0
VE	8	0	0	8	100	0	0
<b>Totals:</b>	<b>38</b>	<b>2</b>	<b>0</b>	<b>40</b>	<b>95%</b>	<b>5%</b>	<b>0%</b>
<b><u>Lab: AI Nuclear Technology Services, Inc., Roswell, GA</u></b>							
SO	12	3	0	15	80	20	0
WA	5	6	3	14	36	43	21
AI	10	3	0	13	77	23	0
VE	4	2	1	7	57	29	14
<b>Totals:</b>	<b>31</b>	<b>14</b>	<b>4</b>	<b>49</b>	<b>63%</b>	<b>29%</b>	<b>8%</b>
<b><u>Lab: AM American Radiation Services, Inc., Baton Rouge</u></b>							
SO	12	0	1	13	92	0	8
WA	6	6	0	12	50	50	0
VE	4	1	1	6	67	17	17
AI	10	2	0	12	83	17	0
<b>Totals:</b>	<b>32</b>	<b>9</b>	<b>2</b>	<b>43</b>	<b>74%</b>	<b>21%</b>	<b>5%</b>
<b><u>Lab: AN Argonne National Laboratory</u></b>							
SO	5	0	2	7	71	0	29
WA	9	0	1	10	90	0	10
AI	8	1	0	9	89	11	0
<b>Totals:</b>	<b>22</b>	<b>1</b>	<b>3</b>	<b>26</b>	<b>85%</b>	<b>4%</b>	<b>12%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: AP Aberdeen Proving Ground, Aberdeen, MD</u></b>							
WA	0	1	1	2	0	50	50
<b>Totals:</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0%</b>	<b>50%</b>	<b>50%</b>
<b><u>Lab: AS USACHPPM, Aberdeen Proving Ground, MD</u></b>							
SO	8	1	0	9	89	11	0
WA	2	1	0	3	67	33	0
AI	5	0	0	5	100	0	0
<b>Totals:</b>	<b>15</b>	<b>2</b>	<b>0</b>	<b>17</b>	<b>88%</b>	<b>12%</b>	<b>0%</b>
<b><u>Lab: AT ATL International inc., Germantown, MD</u></b>							
VE	6	0	0	6	100	0	0
SO	12	0	0	12	100	0	0
WA	12	0	1	13	92	0	8
AI	12	0	0	12	100	0	0
<b>Totals:</b>	<b>42</b>	<b>0</b>	<b>1</b>	<b>43</b>	<b>98%</b>	<b>0%</b>	<b>2%</b>
<b><u>Lab: AU ORISE RSAT/ESSAP, Oak Ridge</u></b>							
WA	11	1	0	12	92	8	0
AI	6	0	1	7	86	0	14
SO	13	0	0	13	100	0	0
VE	6	1	0	7	86	14	0
<b>Totals:</b>	<b>36</b>	<b>2</b>	<b>1</b>	<b>39</b>	<b>92%</b>	<b>5%</b>	<b>3%</b>
<b><u>Lab: AW Argonne West National Lab</u></b>							
AI	2	0	1	3	67	0	33
WA	3	0	0	3	100	0	0
<b>Totals:</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>83%</b>	<b>0%</b>	<b>17%</b>
<b><u>Lab: BA Bettis Atomic Power Lab, West Mifflin, PA</u></b>							
VE	1	0	0	1	100	0	0
SO	1	0	0	1	100	0	0
WA	2	0	0	2	100	0	0
AI	3	0	0	3	100	0	0
<b>Totals:</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: BE Grand Junction Office Analytical Laboratory</u></b>							
SO	10	1	1	12	83	8	8
WA	10	2	1	13	77	15	8
VE	7	0	0	7	100	0	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
AI	11	1	0	12	92	8	0
<b>Totals:</b>	<b>38</b>	<b>4</b>	<b>2</b>	<b>44</b>	<b>86%</b>	<b>9%</b>	<b>5%</b>
<b>Lab: BM Battelle Memorial Institute, Columbus, OH</b>							
VE	4	0	0	4	100	0	0
SO	5	1	0	6	83	17	0
WA	8	0	0	8	100	0	0
AI	8	0	0	8	100	0	0
<b>Totals:</b>	<b>25</b>	<b>1</b>	<b>0</b>	<b>26</b>	<b>96%</b>	<b>4%</b>	<b>0%</b>
<b>Lab: BN U.S. Department of Energy</b>							
VE	1	2	0	3	33	67	0
AI	5	0	0	5	100	0	0
SO	5	2	0	7	71	29	0
WA	5	2	0	7	71	29	0
<b>Totals:</b>	<b>16</b>	<b>6</b>	<b>0</b>	<b>22</b>	<b>73%</b>	<b>27%</b>	<b>0%</b>
<b>Lab: BP Battelle Pacific Northwest National Laboratory</b>							
WA	10	1	0	11	91	9	0
AI	9	0	0	9	100	0	0
<b>Totals:</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>20</b>	<b>95%</b>	<b>5%</b>	<b>0%</b>
<b>Lab: BQ Becquerel Laboratories Inc., Mississauga, Ontario, Canada</b>							
VE	3	0	1	4	75	0	25
SO	10	0	1	11	91	0	9
WA	4	3	3	10	40	30	30
AI	6	1	2	9	67	11	22
<b>Totals:</b>	<b>23</b>	<b>4</b>	<b>7</b>	<b>34</b>	<b>68%</b>	<b>12%</b>	<b>21%</b>
<b>Lab: BU Autoridad Regulatoria, Buenos Aires, Argentina</b>							
AI	8	1	0	9	89	11	0
VE	8	0	0	8	100	0	0
SO	8	4	0	12	67	33	0
WA	10	0	1	11	91	0	9
<b>Totals:</b>	<b>34</b>	<b>5</b>	<b>1</b>	<b>40</b>	<b>85%</b>	<b>13%</b>	<b>3%</b>
<b>Lab: BX BWX Technologies, Inc., Lynchburg, VA</b>							
WA	9	3	0	12	75	25	0
AI	11	0	0	11	100	0	0
VE	6	0	1	7	86	0	14
SO	10	3	0	13	77	23	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
Totals:	<b>36</b>	<b>6</b>	<b>1</b>	<b>43</b>	<b>84%</b>	<b>14%</b>	<b>2%</b>
<u>Lab: CA Canadian Nuclear Safety Commission, Ottawa, Canada</u>							
SO	1	0	0	1	100	0	0
WA	3	2	0	5	60	40	0
AI	5	0	0	5	100	0	0
Totals:	<b>9</b>	<b>2</b>	<b>0</b>	<b>11</b>	<b>82%</b>	<b>18%</b>	<b>0%</b>
<u>Lab: CB Radiation Protection Bureau, Ontario, Canada</u>							
WA	10	1	0	11	91	9	0
AI	4	0	0	4	100	0	0
Totals:	<b>14</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>93%</b>	<b>7%</b>	<b>0%</b>
<u>Lab: CD Centrale nucleaire Gentilly-2</u>							
SO	5	2	0	7	71	29	0
WA	5	0	0	5	100	0	0
VE	3	0	0	3	100	0	0
AI	4	0	0	4	100	0	0
Totals:	<b>17</b>	<b>2</b>	<b>0</b>	<b>19</b>	<b>89%</b>	<b>11%</b>	<b>0%</b>
<u>Lab: CE Environmental Monitoring Laboratory, New Brunswick, Canada</u>							
VE	2	1	0	3	67	33	0
SO	1	1	0	2	50	50	0
WA	5	1	0	6	83	17	0
AI	5	1	0	6	83	17	0
Totals:	<b>13</b>	<b>4</b>	<b>0</b>	<b>17</b>	<b>76%</b>	<b>24%</b>	<b>0%</b>
<u>Lab: CF Freshwater Institute Radiochemistry Winnipeg, Manitoba, Canada</u>							
VE	3	0	3	6	50	0	50
SO	9	3	0	12	75	25	0
WA	8	2	5	15	53	13	33
Totals:	<b>20</b>	<b>5</b>	<b>8</b>	<b>33</b>	<b>61%</b>	<b>15%</b>	<b>24%</b>
<u>Lab: CG AECL WL Environmental Monitoring Group, Canada</u>							
VE	2	1	0	3	67	33	0
SO	2	0	0	2	100	0	0
WA	3	1	3	7	43	14	43
AI	3	2	0	5	60	40	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
Totals:	<b>10</b>	<b>4</b>	<b>3</b>	<b>17</b>	<b>59%</b>	<b>24%</b>	<b>18%</b>
<u>Lab: CH California State Dept. Health Serv., Sanitation &amp; Radiation Laboratory</u>							
VE	6	0	1	7	86	0	14
SO	14	0	0	14	100	0	0
WA	13	0	0	13	100	0	0
AI	5	0	6	11	45	0	55
Totals:	<b>38</b>	<b>0</b>	<b>7</b>	<b>45</b>	<b>84%</b>	<b>0%</b>	<b>16%</b>
<u>Lab: CL Enviro-Test Laboratories, Casper, WY</u>							
AI	8	2	2	12	67	17	17
VE	3	3	0	6	50	50	0
SO	9	2	3	14	64	14	21
WA	7	5	1	13	54	38	8
Totals:	<b>27</b>	<b>12</b>	<b>6</b>	<b>45</b>	<b>60%</b>	<b>27%</b>	<b>13%</b>
<u>Lab: CM Metropolitan Water Reclamation District of Greater Chicago</u>							
SO	11	3	0	14	79	21	0
WA	9	2	1	12	75	17	8
Totals:	<b>20</b>	<b>5</b>	<b>1</b>	<b>26</b>	<b>77%</b>	<b>19%</b>	<b>4%</b>
<u>Lab: CN China Institute for Radiation Protection</u>							
VE	3	0	0	3	100	0	0
SO	5	2	0	7	71	29	0
AI	3	0	0	3	100	0	0
Totals:	<b>11</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>85%</b>	<b>15%</b>	<b>0%</b>
<u>Lab: CP CoPhysics Corporation, Monroe, NY</u>							
SO	3	1	3	7	43	14	43
WA	4	1	0	5	80	20	0
AI	1	1	0	2	50	50	0
Totals:	<b>8</b>	<b>3</b>	<b>3</b>	<b>14</b>	<b>57%</b>	<b>21%</b>	<b>21%</b>
<u>Lab: CR Atomic Energy of Canada, Chalk River Laboratories, Canada</u>							
VE	3	0	0	3	100	0	0
SO	5	1	2	8	63	13	25
WA	6	4	0	10	60	40	0
Totals:	<b>14</b>	<b>5</b>	<b>2</b>	<b>21</b>	<b>67%</b>	<b>24%</b>	<b>10%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: CS Rocketdyne Propulsion &amp; Power, Canoga Park, CA</u></b>							
VE	2	0	0	2	100	0	0
SO	2	4	2	8	25	50	25
WA	2	0	1	3	67	0	33
<b>Totals:</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>13</b>	<b>46%</b>	<b>31%</b>	<b>23%</b>
<b><u>Lab: CU Universite Laval, Quebec Canada</u></b>							
VE	3	0	0	3	100	0	0
AI	4	0	0	4	100	0	0
SO	6	1	0	7	86	14	0
WA	4	1	0	5	80	20	0
<b>Totals:</b>	<b>17</b>	<b>2</b>	<b>0</b>	<b>19</b>	<b>89%</b>	<b>11%</b>	<b>0%</b>
<b><u>Lab: CW Carlsbad Environmental Monitoring Research Center, NM</u></b>							
VE	8	0	0	8	100	0	0
SO	12	1	0	13	92	8	0
WA	11	0	0	11	100	0	0
AI	10	0	0	10	100	0	0
<b>Totals:</b>	<b>41</b>	<b>1</b>	<b>0</b>	<b>42</b>	<b>98%</b>	<b>2%</b>	<b>0%</b>
<b><u>Lab: CZ ACZ Laboratories, Inc. Steamboat Springs, CO</u></b>							
WA	5	1	0	6	83	17	0
<b>Totals:</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>83%</b>	<b>17%</b>	<b>0%</b>
<b><u>Lab: EC Envirocare of Utah</u></b>							
SO	40	5	0	45	89	11	0
WA	19	1	0	20	95	5	0
AI	16	8	6	30	53	27	20
<b>Totals:</b>	<b>75</b>	<b>14</b>	<b>6</b>	<b>95</b>	<b>79%</b>	<b>15%</b>	<b>6%</b>
<b><u>Lab: EG INEEL TRA Radioanalytical Laboratory, Scoville</u></b>							
WA	10	1	0	11	91	9	0
AI	9	0	0	9	100	0	0
VE	6	2	0	8	75	25	0
SO	9	2	2	13	69	15	15
<b>Totals:</b>	<b>34</b>	<b>5</b>	<b>2</b>	<b>41</b>	<b>83%</b>	<b>12%</b>	<b>5%</b>
<b><u>Lab: EI Eichrom Technologies, IL</u></b>							
SO	4	0	0	4	100	0	0
AI	2	1	1	4	50	25	25

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>75%</b>	<b>13%</b>	<b>13%</b>
<b><u>Lab: EP US EPA, Las Vegas</u></b>							
WA	4	0	0	4	100	0	0
AI	3	0	0	3	100	0	0
<b>Totals:</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: FE Fernald WPRAP Field Office, Ohio</u></b>							
SO	6	2	0	8	75	25	0
WA	4	1	0	5	80	20	0
AI	2	0	0	2	100	0	0
<b>Totals:</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>80%</b>	<b>20%</b>	<b>0%</b>
<b><u>Lab: FG FGL Environmental, Santa Paula, CA</u></b>							
SO	7	0	0	7	100	0	0
WA	6	0	3	9	67	0	33
<b>Totals:</b>	<b>13</b>	<b>0</b>	<b>3</b>	<b>16</b>	<b>81%</b>	<b>0%</b>	<b>19%</b>
<b><u>Lab: FL Florida Dept of Health &amp; Rehab. Serv., Orlando</u></b>							
SO	7	0	3	10	70	0	30
WA	6	1	1	8	75	13	13
AI	3	2	1	6	50	33	17
VE	0	0	4	4	0	0	100
<b>Totals:</b>	<b>16</b>	<b>3</b>	<b>9</b>	<b>28</b>	<b>57%</b>	<b>11%</b>	<b>32%</b>
<b><u>Lab: FM Florida Mobile Emergency Radiological Laboratory, Orlando</u></b>							
AI	9	3	0	12	75	25	0
WA	10	2	0	12	83	17	0
<b>Totals:</b>	<b>19</b>	<b>5</b>	<b>0</b>	<b>24</b>	<b>79%</b>	<b>21%</b>	<b>0%</b>
<b><u>Lab: FN Fermi Lab, Batavia, IL</u></b>							
AI	5	0	0	5	100	0	0
WA	6	0	0	6	100	0	0
VE	3	0	0	3	100	0	0
SO	6	1	0	7	86	14	0
<b>Totals:</b>	<b>20</b>	<b>1</b>	<b>0</b>	<b>21</b>	<b>95%</b>	<b>5%</b>	<b>0%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: FR CEA/SACLAY - SPR/SRSE, France</u></b>							
VE	4	0	0	4	100	0	0
SO	9	0	0	9	100	0	0
WA	3	1	0	4	75	25	0
<b>Totals:</b>	<b>16</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>94%</b>	<b>6%</b>	<b>0%</b>
<b><u>Lab: FS Florida State University, Tallahassee</u></b>							
SO	6	0	0	6	100	0	0
<b>Totals:</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: FU FUSRAP Laboratory, Missouri</u></b>							
VE	15	0	0	15	100	0	0
SO	39	9	1	49	80	18	2
<b>Totals:</b>	<b>54</b>	<b>9</b>	<b>1</b>	<b>64</b>	<b>84%</b>	<b>14%</b>	<b>2%</b>
<b><u>Lab: GA Lockheed Martin, Pikton, OH</u></b>							
AI	9	1	0	10	90	10	0
VE	6	0	0	6	100	0	0
SO	10	3	0	13	77	23	0
<b>Totals:</b>	<b>25</b>	<b>4</b>	<b>0</b>	<b>29</b>	<b>86%</b>	<b>14%</b>	<b>0%</b>
<b><u>Lab: GC Georgia Power Company Environmental Lab</u></b>							
AI	6	0	0	6	100	0	0
WA	8	0	0	8	100	0	0
SO	3	3	0	6	50	50	0
VE	6	3	0	9	67	33	0
<b>Totals:</b>	<b>23</b>	<b>6</b>	<b>0</b>	<b>29</b>	<b>79%</b>	<b>21%</b>	<b>0%</b>
<b><u>Lab: GE General Engineering Labs, Charleston, SC</u></b>							
VE	7	0	0	7	100	0	0
SO	13	1	0	14	93	7	0
WA	8	5	0	13	62	38	0
AI	11	1	0	12	92	8	0
<b>Totals:</b>	<b>39</b>	<b>7</b>	<b>0</b>	<b>46</b>	<b>85%</b>	<b>15%</b>	<b>0%</b>
<b><u>Lab: GS USGS/NWQL, Arvada, CO</u></b>							
WA	3	0	3	6	50	0	50

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>50%</b>	<b>0%</b>	<b>50%</b>
<b><u>Lab: GT Georgia Institute of Technology</u></b>							
VE	4	2	0	6	67	33	0
SO	5	1	0	6	83	17	0
WA	10	1	0	11	91	9	0
AI	7	0	0	7	100	0	0
<b>Totals:</b>	<b>26</b>	<b>4</b>	<b>0</b>	<b>30</b>	<b>87%</b>	<b>13%</b>	<b>0%</b>
<b><u>Lab: HC Lawrence Livermore Laboratory, California</u></b>							
WA	3	0	0	3	100	0	0
AI	1	1	0	2	50	50	0
<b>Totals:</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>80%</b>	<b>20%</b>	<b>0%</b>
<b><u>Lab: HT Technical University, Budapest, Hungary</u></b>							
SO	4	0	0	4	100	0	0
WA	3	0	1	4	75	0	25
<b>Totals:</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>88%</b>	<b>0%</b>	<b>13%</b>
<b><u>Lab: HU Water Resources Research Centre (VITUKI), Hungary</u></b>							
SO	8	1	0	9	89	11	0
WA	7	1	0	8	88	13	0
AI	3	0	0	3	100	0	0
VE	3	1	0	4	75	25	0
<b>Totals:</b>	<b>21</b>	<b>3</b>	<b>0</b>	<b>24</b>	<b>88%</b>	<b>13%</b>	<b>0%</b>
<b><u>Lab: IL ISU Environmental Assessment Laboratory, Pocatello, ID</u></b>							
WA	5	0	0	5	100	0	0
AI	5	0	0	5	100	0	0
<b>Totals:</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: IN INEEL INTECH Radioanalytical Laboratory</u></b>							
VE	2	1	0	3	67	33	0
SO	6	1	1	8	75	13	13
WA	8	1	0	9	89	11	0
AI	2	1	0	3	67	33	0
<b>Totals:</b>	<b>18</b>	<b>4</b>	<b>1</b>	<b>23</b>	<b>78%</b>	<b>17%</b>	<b>4%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: IO Illinois Department of Nuclear Safety</u></b>							
VE	3	1	0	4	75	25	0
AI	6	0	0	6	100	0	0
SO	6	1	0	7	86	14	0
WA	8	1	0	9	89	11	0
<b>Totals:</b>	<b>23</b>	<b>3</b>	<b>0</b>	<b>26</b>	<b>88%</b>	<b>12%</b>	<b>0%</b>
<b><u>Lab: IS Severn Trent Laboratories - St. Louis</u></b>							
VE	7	0	0	7	100	0	0
SO	12	2	0	14	86	14	0
WA	9	4	0	13	69	31	0
AI	10	2	0	12	83	17	0
<b>Totals:</b>	<b>38</b>	<b>8</b>	<b>0</b>	<b>46</b>	<b>83%</b>	<b>17%</b>	<b>0%</b>
<b><u>Lab: IT Severn Trent Laboratories - Richland</u></b>							
WA	8	2	1	11	73	18	9
AI	10	0	0	10	100	0	0
WA	8	2	1	11	73	18	9
SO	9	1	1	11	82	9	9
AI	10	0	0	10	100	0	0
SO	9	1	1	11	82	9	9
VE	5	1	0	6	83	17	0
VE	5	1	0	6	83	17	0
<b>Totals:</b>	<b>64</b>	<b>8</b>	<b>4</b>	<b>76</b>	<b>84%</b>	<b>11%</b>	<b>5%</b>
<b><u>Lab: KA Knolls Atomic Power Lab, Schenectady</u></b>							
AI	2	0	0	2	100	0	0
WA	9	0	0	9	100	0	0
SO	4	0	0	4	100	0	0
<b>Totals:</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: KE Uljin NPP Environmental Radiation Laboratory, South Korea</u></b>							
SO	1	1	5	7	14	14	71
AI	3	1	0	4	75	25	0
VE	2	2	0	4	50	50	0
<b>Totals:</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>15</b>	<b>40%</b>	<b>27%</b>	<b>33%</b>
<b><u>Lab: KG Korea Institute of Geoscience And Mineral Resources (KIGAM)</u></b>							
WA	0	0	1	1	0	0	100
<b>Totals:</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: KO Korea Institute of Nuclear Safety</u></b>							
VE	6	0	0	6	100	0	0
SO	15	0	0	15	100	0	0
WA	12	2	0	14	86	14	0
AI	12	1	0	13	92	8	0
Totals:	<b>45</b>	<b>3</b>	<b>0</b>	<b>48</b>	<b>94%</b>	<b>6%</b>	<b>0%</b>
<b><u>Lab: KR Korea Atomic Energy Research Institute</u></b>							
VE	13	2	0	15	87	13	0
SO	16	0	0	16	100	0	0
AI	22	0	0	22	100	0	0
Totals:	<b>51</b>	<b>2</b>	<b>0</b>	<b>53</b>	<b>96%</b>	<b>4%</b>	<b>0%</b>
<b><u>Lab: KS Radiochemistry Laboratory, DHEL, KDHE, Kansas</u></b>							
VE	3	0	0	3	100	0	0
AI	4	0	0	4	100	0	0
SO	3	0	0	3	100	0	0
WA	7	0	0	7	100	0	0
Totals:	<b>17</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: LA Los Alamos National Laboratory, NM</u></b>							
VE	15	3	0	18	83	17	0
SO	16	11	6	33	48	33	18
WA	19	8	0	27	70	30	0
Totals:	<b>50</b>	<b>22</b>	<b>6</b>	<b>78</b>	<b>64%</b>	<b>28%</b>	<b>8%</b>
<b><u>Lab: LI Lionville Laboratory, Inc., PA</u></b>							
WA	10	0	0	10	100	0	0
Totals:	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: LL LLNL Chemistry and Material Science/Environmental</u></b>							
SO	2	1	2	5	40	20	40
WA	3	0	1	4	75	0	25
Totals:	<b>5</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>56%</b>	<b>11%</b>	<b>33%</b>
<b><u>Lab: LM American Radiation Services of New Mexico, Los Alamos</u></b>							
VE	4	0	0	4	100	0	0
AI	3	1	0	4	75	25	0
SO	7	2	0	9	78	22	0
WA	4	1	1	6	67	17	17

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
Totals:	<b>18</b>	<b>4</b>	<b>1</b>	<b>23</b>	<b>78%</b>	<b>17%</b>	<b>4%</b>
<u>Lab: LN Los Alamos National Lab, ES&amp;H</u>							
AI	4	1	0	5			
WA	3	0	0	3	80 100	20 0	0 0
Totals:	<b>7</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>88%</b>	<b>13%</b>	<b>0%</b>
<u>Lab: LV UNLV, Dept of Health Physics</u>							
AI	4	1	1	6			
WA	5	1	1	7	67 71	17 14	17 14
VE	2	2	0	4	50	50	0
SO	4	4	1	9	44	44	11
Totals:	<b>15</b>	<b>8</b>	<b>3</b>	<b>26</b>	<b>58%</b>	<b>31%</b>	<b>12%</b>
<u>Lab: LW Lawrence Livermore National Lab, Waste</u>							
SO	6	0	0	6			
WA	8	1	0	9	100 89	0 11	0 0
Totals:	<b>14</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>93%</b>	<b>7%</b>	<b>0%</b>
<u>Lab: ME Radiation Control Program, Jamaica Plain, MA</u>							
VE	3	7	0	10			
SO	23	4	0	27	30 85	70 15	0 0
WA	12	3	0	15	80	20	0
AI	11	2	2	15	73	13	13
Totals:	<b>49</b>	<b>16</b>	<b>2</b>	<b>67</b>	<b>73%</b>	<b>24%</b>	<b>3%</b>
<u>Lab: MH Maine Health &amp; Environmental Testing Laboratory</u>							
SO	5	2	2	9			
WA	2	0	2	4	56 50	22 0	22 50
AI	2	1	0	3	67	33	0
VE	3	0	1	4	75	0	25
Totals:	<b>12</b>	<b>3</b>	<b>5</b>	<b>20</b>	<b>60%</b>	<b>15%</b>	<b>25%</b>
<u>Lab: MI Massachusetts Institute of Technology</u>							
WA	9	3	2	14			
AI	4	1	0	5	64 80	21 20	14 0
Totals:	<b>13</b>	<b>4</b>	<b>2</b>	<b>19</b>	<b>68%</b>	<b>21%</b>	<b>11%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: ML BWXT of Ohio, Mound, Miamisburg, Ohio</u></b>							
VE	1	0	0	1	100	0	0
SO	3	0	0	3	100	0	0
WA	5	0	0	5	100	0	0
AI	4	0	0	4	100	0	0
<b>Totals:</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: MS Manufacturing Sciences Corporation, Oak Ridge</u></b>							
SO	6	0	0	6	100	0	0
WA	3	0	0	3	100	0	0
AI	4	0	1	5	80	0	20
<b>Totals:</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>14</b>	<b>93%</b>	<b>0%</b>	<b>7%</b>
<b><u>Lab: MX Laboratory of Radiochimica CREN-U of Zacatecas, Mexico</u></b>							
SO	0	1	1	2	0	50	50
<b>Totals:</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0%</b>	<b>50%</b>	<b>50%</b>
<b><u>Lab: MY FUSRAP Maywood Mobile Laboratory, NJ</u></b>							
SO	2	6	1	9	22	67	11
<b>Totals:</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>9</b>	<b>22%</b>	<b>67%</b>	<b>11%</b>
<b><u>Lab: MZ Comisi_n Nacional de Seguridad Nuclear y Salvaguardias, Mexico</u></b>							
SO	0	1	8	9	0	11	89
AI	0	0	12	12	0	0	100
<b>Totals:</b>	<b>0</b>	<b>1</b>	<b>20</b>	<b>21</b>	<b>0%</b>	<b>5%</b>	<b>95%</b>
<b><u>Lab: NA US EPA NAREL, Montgomery, AL</u></b>							
WA	9	0	0	9	100	0	0
SO	8	1	0	9	89	11	0
VE	5	0	0	5	100	0	0
AI	8	0	0	8	100	0	0
<b>Totals:</b>	<b>30</b>	<b>1</b>	<b>0</b>	<b>31</b>	<b>97%</b>	<b>3%</b>	<b>0%</b>
<b><u>Lab: ND Dept. of Environmental Health and Safety, NC State University</u></b>							
AI	5	0	0	5	100	0	0
<b>Totals:</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: NJ NJ Department of Health and Senior Services</u></b>							
VE	12	0	0	12	100	0	0
SO	25	2	0	27	93	7	0
WA	35	1	0	36	97	3	0
AI	9	3	0	12	75	25	0
<b>Totals:</b>	<b>81</b>	<b>6</b>	<b>0</b>	<b>87</b>	<b>93%</b>	<b>7%</b>	<b>0%</b>
<b><u>Lab: NL Fluor Daniel Fernald, Inc., Ohio</u></b>							
SO	10	0	0	10	100	0	0
WA	10	0	0	10	100	0	0
AI	6	2	0	8	75	25	0
<b>Totals:</b>	<b>26</b>	<b>2</b>	<b>0</b>	<b>28</b>	<b>93%</b>	<b>7%</b>	<b>0%</b>
<b><u>Lab: NM Environmental Evaluation Group, Carlsbad, NM</u></b>							
WA	1	4	0	5	20	80	0
AI	5	0	0	5	100	0	0
<b>Totals:</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>10</b>	<b>60%</b>	<b>40%</b>	<b>0%</b>
<b><u>Lab: NP JAF Environmental Laboratory, New York Power Authority</u></b>							
WA	4	0	1	5	80	0	20
AI	4	0	0	4	100	0	0
<b>Totals:</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>89%</b>	<b>0%</b>	<b>11%</b>
<b><u>Lab: NQ New Mexico Department of Health, Albuquerque</u></b>							
SO	11	1	0	12	92	8	0
AI	10	0	0	10	100	0	0
WA	7	1	2	10	70	10	20
<b>Totals:</b>	<b>28</b>	<b>2</b>	<b>2</b>	<b>32</b>	<b>88%</b>	<b>6%</b>	<b>6%</b>
<b><u>Lab: NR Naval Reactors Facility Chemistry, Scoville, ID</u></b>							
VE	1	0	0	1	100	0	0
SO	1	0	0	1	100	0	0
WA	2	0	0	2	100	0	0
AI	3	0	0	3	100	0	0
<b>Totals:</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: NS State Lab of Public Health, North Carolina</u></b>							
WA	3	0	9	12	25	0	75
AI	9	0	0	9	100	0	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>12</b>	<b>0</b>	<b>9</b>	<b>21</b>	<b>57%</b>	<b>0%</b>	<b>43%</b>
<b><u>Lab: NZ National Radiation Laboratory, New Zealand</u></b>							
VE	2	1	0	3	67	33	0
AI	3	0	0	3	100	0	0
SO	7	1	0	8	88	13	0
WA	2	2	1	5	40	40	20
<b>Totals:</b>	<b>14</b>	<b>4</b>	<b>1</b>	<b>19</b>	<b>74%</b>	<b>21%</b>	<b>5%</b>
<b><u>Lab: OB OBG Laboratories, East Syracuse, NY</u></b>							
AI	4	0	5	9	44	0	56
VE	3	1	2	6	50	17	33
SO	9	2	3	14	64	14	21
WA	2	4	2	8	25	50	25
<b>Totals:</b>	<b>18</b>	<b>7</b>	<b>12</b>	<b>37</b>	<b>49%</b>	<b>19%</b>	<b>32%</b>
<b><u>Lab: OD ORNL, Radiobioassay Lab</u></b>							
WA	6	3	0	9	67	33	0
AI	5	0	0	5	100	0	0
<b>Totals:</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>14</b>	<b>79%</b>	<b>21%</b>	<b>0%</b>
<b><u>Lab: OH Ohio Dept Of Health Laboratory, Columbus</u></b>							
VE	1	0	2	3	33	0	67
SO	4	3	0	7	57	43	0
WA	7	1	0	8	88	13	0
AI	2	3	0	5	40	60	0
<b>Totals:</b>	<b>14</b>	<b>7</b>	<b>2</b>	<b>23</b>	<b>61%</b>	<b>30%</b>	<b>9%</b>
<b><u>Lab: OK Southwest Laboratory of Oklahoma</u></b>							
SO	5	1	0	6	83	17	0
WA	7	0	1	8	88	0	13
AI	0	0	2	2	0	0	100
<b>Totals:</b>	<b>12</b>	<b>1</b>	<b>3</b>	<b>16</b>	<b>75%</b>	<b>6%</b>	<b>19%</b>
<b><u>Lab: OT ORNL Radioactive Material Analysis Lab</u></b>							
AI	5	1	4	10	50	10	40
VE	7	0	0	7	100	0	0
SO	10	1	0	11	91	9	0
WA	6	2	3	11	55	18	27

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>28</b>	<b>4</b>	<b>7</b>	<b>39</b>	<b>72%</b>	<b>10%</b>	<b>18%</b>
<u><b>Lab: OU Outreach Laboratory, Broken Arrow, OK</b></u>							
AI	4	1	0	5	80	20	0
WA	3	3	3	9	33	33	33
VE	1	1	0	2	50	50	0
SO	7	1	0	8	88	13	0
<b>Totals:</b>	<b>15</b>	<b>6</b>	<b>3</b>	<b>24</b>	<b>63%</b>	<b>25%</b>	<b>13%</b>
<u><b>Lab: PA BWXT Pantex, Amarillo, TX</b></u>							
AI	10	0	0	10	100	0	0
<b>Totals:</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<u><b>Lab: PC pCi/Labs, Inc., Orangeburg, NY</b></u>							
WA	1	1	0	2	50	50	0
AI	0	2	0	2	0	100	0
<b>Totals:</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>25%</b>	<b>75%</b>	<b>0%</b>
<u><b>Lab: PK Pakistan Institute of Nuclear Science &amp; Technology</b></u>							
SO	12	4	0	16	75	25	0
<b>Totals:</b>	<b>12</b>	<b>4</b>	<b>0</b>	<b>16</b>	<b>75%</b>	<b>25%</b>	<b>0%</b>
<u><b>Lab: PO Institute of Oceanology PAN, Poland</b></u>							
VE	3	0	1	4	75	0	25
SO	7	0	0	7	100	0	0
<b>Totals:</b>	<b>10</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>91%</b>	<b>0%</b>	<b>9%</b>
<u><b>Lab: PR Princeton Plasma Physics Lab</b></u>							
WA	3	1	0	4	75	25	0
AI	2	1	0	3	67	33	0
<b>Totals:</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>71%</b>	<b>29%</b>	<b>0%</b>
<u><b>Lab: PS PA-DEP Bureau of Radiation Protection, Harrisburg</b></u>							
SO	9	1	0	10	90	10	0
WA	8	1	1	10	80	10	10
AI	10	0	0	10	100	0	0
VE	2	0	3	5	40	0	60

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
Totals:	<b>29</b>	<b>2</b>	<b>4</b>	<b>35</b>	<b>83%</b>	<b>6%</b>	<b>11%</b>
<u>Lab: RA V. G. Khlopin Radium Institute, St. Petersburg, Russia</u>							
AI	6	1	0	7	86	14	0
SO	11	1	0	12	92	8	0
VE	6	0	0	6	100	0	0
Totals:	<b>23</b>	<b>2</b>	<b>0</b>	<b>25</b>	<b>92%</b>	<b>8%</b>	<b>0%</b>
<u>Lab: RB Research Department of a Radiative Metrology, Belarus</u>							
SO	6	2	0	8	75	25	0
WA	1	0	1	2	50	0	50
AI	5	0	0	5	100	0	0
VE	3	1	0	4	75	25	0
Totals:	<b>15</b>	<b>3</b>	<b>1</b>	<b>19</b>	<b>79%</b>	<b>16%</b>	<b>5%</b>
<u>Lab: RC US NRC Region I Laboratory, PA</u>							
SO	2	0	0	2	100	0	0
WA	4	0	0	4	100	0	0
AI	4	1	0	5	80	20	0
Totals:	<b>10</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>91%</b>	<b>9%</b>	<b>0%</b>
<u>Lab: RG Thermo Nutech Rocky Flats Plant, Golden</u>							
WA	2	0	0	2	100	0	0
Totals:	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<u>Lab: RI Fluor Hanford, Inc., 222S Lab.</u>							
VE	5	0	0	5	100	0	0
SO	10	0	0	10	100	0	0
WA	5	4	3	12	42	33	25
AI	7	1	1	9	78	11	11
Totals:	<b>27</b>	<b>5</b>	<b>4</b>	<b>36</b>	<b>75%</b>	<b>14%</b>	<b>11%</b>
<u>Lab: RK Rock Island Arsenal, Illinois</u>							
AI	2	0	0	2	100	0	0
Totals:	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<u>Lab: RM Earthline Technologies, Ashtabula, OH</u>							
AI	4	0	0	4	100	0	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
SO	7	0	0	7	100	0	0
WA	4	0	0	4	100	0	0
<b>Totals:</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>

Lab: RS RSA Laboratories, Hebron, CT

VE	0	0	4	4	0	0	100
SO	6	2	0	8	75	25	0
WA	2	1	4	7	29	14	57
AI	2	2	2	6	33	33	33
<b>Totals:</b>	<b>10</b>	<b>5</b>	<b>10</b>	<b>25</b>	<b>40%</b>	<b>20%</b>	<b>40%</b>

Lab: RU Research Institute of Radiology, Belarus

VE	3	1	0	4	75	25	0
SO	4	1	3	8	50	13	38
WA	1	3	0	4	25	75	0
AI	2	1	0	3	67	33	0
<b>Totals:</b>	<b>10</b>	<b>6</b>	<b>3</b>	<b>19</b>	<b>53%</b>	<b>32%</b>	<b>16%</b>

Lab: SA Sandia Labs Radioactive Sample Diag. Prog., NM

SO	2	0	0	2	100	0	0
WA	6	1	0	7	86	14	0
AI	6	1	0	7	86	14	0
<b>Totals:</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>16</b>	<b>88%</b>	<b>13%</b>	<b>0%</b>

Lab: SB SC Dept. of Health and Environment Control Radiological Lab

VE	2	1	0	3	67	33	0
AI	9	0	0	9	100	0	0
SO	2	1	0	3	67	33	0
WA	9	0	1	10	90	0	10
<b>Totals:</b>	<b>22</b>	<b>2</b>	<b>1</b>	<b>25</b>	<b>88%</b>	<b>8%</b>	<b>4%</b>

Lab: SD STL Denver

VE	4	2	0	6	67	33	0
SO	9	1	1	11	82	9	9
WA	10	3	0	13	77	23	0
AI	10	2	1	13	77	15	8
<b>Totals:</b>	<b>33</b>	<b>8</b>	<b>2</b>	<b>43</b>	<b>77%</b>	<b>19%</b>	<b>5%</b>

Lab: SE Swedish Defence Research Agency (FOI)

VE	9	0	2	11	82	0	18
SO	14	1	0	15	93	7	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
WA	8	3	4	15	53	20	27
AI	9	0	0	9	100	0	0
<b>Totals:</b>	<b>40</b>	<b>4</b>	<b>6</b>	<b>50</b>	<b>80%</b>	<b>8%</b>	<b>12%</b>
<u><b>Lab: SI Jozef Stefan Institute, Slovenia</b></u>							
VE	4	0	0	4	100	0	0
AI	4	0	0	4	100	0	0
SO	11	0	0	11	100	0	0
WA	4	2	0	6	67	33	0
<b>Totals:</b>	<b>23</b>	<b>2</b>	<b>0</b>	<b>25</b>	<b>92%</b>	<b>8%</b>	<b>0%</b>
<u><b>Lab: SK Savannah River Plant</b></u>							
VE	3	1	0	4	75	25	0
SO	13	0	0	13	100	0	0
WA	8	3	0	11	73	27	0
<b>Totals:</b>	<b>24</b>	<b>4</b>	<b>0</b>	<b>28</b>	<b>86%</b>	<b>14%</b>	<b>0%</b>
<u><b>Lab: SL Stanford Linear Accelerator Center</b></u>							
SO	0	0	1	1	0	0	100
WA	2	0	1	3	67	0	33
<b>Totals:</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>50%</b>	<b>0%</b>	<b>50%</b>
<u><b>Lab: SN Sanford Cohen Associates, Inc., Montgomery, AL</b></u>							
WA	10	1	2	13	77	8	15
AI	6	2	0	8	75	25	0
SO	11	2	0	13	85	15	0
VE	4	3	0	7	57	43	0
<b>Totals:</b>	<b>31</b>	<b>8</b>	<b>2</b>	<b>41</b>	<b>76%</b>	<b>20%</b>	<b>5%</b>
<u><b>Lab: SR Savannah River Environmental Laboratory</b></u>							
SO	6	2	5	13	46	15	38
WA	9	3	0	12	75	25	0
AI	11	0	0	11	100	0	0
VE	3	2	2	7	43	29	29
<b>Totals:</b>	<b>29</b>	<b>7</b>	<b>7</b>	<b>43</b>	<b>67%</b>	<b>16%</b>	<b>16%</b>
<u><b>Lab: ST SC DHEC, Aiken, South Carolina</b></u>							
WA	1	0	0	1	100	0	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<u><b>Lab: SX</b> Saxton Nuclear Experimental Corp., Saxton, PA</u>							
VE	3	2	1	6	50	33	17
AI	6	0	0	6	100	0	0
SO	0	3	1	4	0	75	25
WA	6	1	1	8	75	13	13
<b>Totals:</b>	<b>15</b>	<b>6</b>	<b>3</b>	<b>24</b>	<b>63%</b>	<b>25%</b>	<b>13%</b>
<u><b>Lab: SY</b> Syrian Arab Republic Atomic Energy Commission</u>							
VE	3	0	0	3	100	0	0
SO	10	0	0	10	100	0	0
WA	4	1	0	5	80	20	0
<b>Totals:</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>18</b>	<b>94%</b>	<b>6%</b>	<b>0%</b>
<u><b>Lab: TE</b> Environmental Inc., Northbrook, IL</u>							
VE	5	1	1	7	71	14	14
SO	8	4	0	12	67	33	0
WA	9	2	0	11	82	18	0
AI	5	5	0	10	50	50	0
<b>Totals:</b>	<b>27</b>	<b>12</b>	<b>1</b>	<b>40</b>	<b>68%</b>	<b>30%</b>	<b>3%</b>
<u><b>Lab: TI</b> Teledyne Brown Engineering Environmental Services, Knoxville, TN</u>							
AI	11	0	0	11	100	0	0
VE	6	0	1	7	86	0	14
SO	11	1	1	13	85	8	8
WA	7	5	0	12	58	42	0
<b>Totals:</b>	<b>35</b>	<b>6</b>	<b>2</b>	<b>43</b>	<b>81%</b>	<b>14%</b>	<b>5%</b>
<u><b>Lab: TM</b> Eberline Services Albuquerque Lab, NM</u>							
AI	9	1	2	12	75	8	17
WA	10	1	2	13	77	8	15
VE	2	2	3	7	29	29	43
SO	11	2	0	13	85	15	0
<b>Totals:</b>	<b>32</b>	<b>6</b>	<b>7</b>	<b>45</b>	<b>71%</b>	<b>13%</b>	<b>16%</b>
<u><b>Lab: TN</b> Eberline Services, Richmond, CA</u>							
VE	6	1	0	7	86	14	0
SO	6	5	1	12	50	42	8
WA	12	1	0	13	92	8	0
AI	4	6	2	12	33	50	17

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>28</b>	<b>13</b>	<b>3</b>	<b>44</b>	<b>64%</b>	<b>30%</b>	<b>7%</b>
<b><u>Lab: TO Eberline Services Oak Ridge Laboratory</u></b>							
WA	10	3	0	13	77	23	0
AI	9	2	1	12	75	17	8
SO	4	7	3	14	29	50	21
VE	3	3	1	7	43	43	14
<b>Totals:</b>	<b>26</b>	<b>15</b>	<b>5</b>	<b>46</b>	<b>57%</b>	<b>33%</b>	<b>11%</b>
<b><u>Lab: TP Taiwan Power Company, Taipei, Taiwan</u></b>							
AI	3	0	0	3	100	0	0
SO	6	1	0	7	86	14	0
WA	2	0	0	2	100	0	0
VE	3	0	0	3	100	0	0
<b>Totals:</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>93%</b>	<b>7%</b>	<b>0%</b>
<b><u>Lab: TQ Institute of Nuclear Energy Research, Taiwan</u></b>							
AI	5	0	0	5	100	0	0
WA	5	1	0	6	83	17	0
VE	4	0	0	4	100	0	0
SO	8	0	0	8	100	0	0
<b>Totals:</b>	<b>22</b>	<b>1</b>	<b>0</b>	<b>23</b>	<b>96%</b>	<b>4%</b>	<b>0%</b>
<b><u>Lab: TW Taiwan Radiation Monitoring Center</u></b>							
VE	3	0	0	3	100	0	0
SO	7	0	0	7	100	0	0
WA	4	1	0	5	80	20	0
AI	4	1	0	5	80	20	0
<b>Totals:</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>20</b>	<b>90%</b>	<b>10%</b>	<b>0%</b>
<b><u>Lab: TX Texas Dept. of Health/Laboratories, Austin</u></b>							
AI	9	1	0	10	90	10	0
VE	4	1	1	6	67	17	17
SO	10	3	0	13	77	23	0
WA	7	5	0	12	58	42	0
<b>Totals:</b>	<b>30</b>	<b>10</b>	<b>1</b>	<b>41</b>	<b>73%</b>	<b>24%</b>	<b>2%</b>
<b><u>Lab: TY Scientific Production Association, Russia</u></b>							
AI	4	0	1	5	80	0	20
SO	0	1	4	5	0	20	80
VE	1	2	1	4	25	50	25

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b>Totals:</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>14</b>	<b>36%</b>	<b>21%</b>	<b>43%</b>
<b><u>Lab: UC United States Enrichment Corporation, Paducah, KY</u></b>							
VE	2	1	0	3	67	33	0
SO	3	0	1	4	75	0	25
WA	7	0	0	7	100	0	0
AI	1	2	0	3	33	67	0
<b>Totals:</b>	<b>13</b>	<b>3</b>	<b>1</b>	<b>17</b>	<b>76%</b>	<b>18%</b>	<b>6%</b>
<b><u>Lab: UG USGS Menlo Park WRD sediment radioisotope laboratory</u></b>							
SO	2	0	0	2	100	0	0
<b>Totals:</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: UP BWXT Y-12, L.L.C. Analytical Chemistry Organization Oak Ridge</u></b>							
WA	1	0	0	1	100	0	0
SO	1	0	0	1	100	0	0
<b>Totals:</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
<b><u>Lab: US Unitech, Springfield, MA</u></b>							
WA	2	1	0	3	67	33	0
<b>Totals:</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>67%</b>	<b>33%</b>	<b>0%</b>
<b><u>Lab: UY BWXT Y-12, L.L.C. Analytical Chemistry Organization Oak Ridge</u></b>							
SO	4	3	0	7	57	43	0
WA	11	0	0	11	100	0	0
AI	10	0	0	10	100	0	0
VE	6	1	0	7	86	14	0
<b>Totals:</b>	<b>31</b>	<b>4</b>	<b>0</b>	<b>35</b>	<b>89%</b>	<b>11%</b>	<b>0%</b>
<b><u>Lab: WA Environmental Radiation Lab, Off. of Public Health Labs, Seattle</u></b>							
VE	6	0	1	7	86	0	14
AI	8	2	0	10	80	20	0
SO	12	1	1	14	86	7	7
WA	9	2	0	11	82	18	0
<b>Totals:</b>	<b>35</b>	<b>5</b>	<b>2</b>	<b>42</b>	<b>83%</b>	<b>12%</b>	<b>5%</b>
<b><u>Lab: WC Fluor Hanford WSCE, Waste Sampling and Characterization Facility</u></b>							
VE	6	1	0	7	86	14	0

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
SO	3	4	0	7	43	57	0
WA	10	2	0	12	83	17	0
AI	8	2	1	11	73	18	9
<b>Totals:</b>	<b>27</b>	<b>9</b>	<b>1</b>	<b>37</b>	<b>73%</b>	<b>24%</b>	<b>3%</b>
<b>Lab: WE</b> Antech Ltd.-Waltz Mill Site, PA							
VE	15	2	2	19	79	11	11
SO	29	6	1	36	81	17	3
WA	29	5	1	35	83	14	3
AI	28	3	2	33	85	9	6
<b>Totals:</b>	<b>101</b>	<b>16</b>	<b>6</b>	<b>123</b>	<b>82%</b>	<b>13%</b>	<b>5%</b>
<b>Lab: WI</b> WIPP Site, Westinghouse Electric Corp.							
WA	21	2	1	24	88	8	4
AI	25	0	0	25	100	0	0
VE	15	6	0	21	71	29	0
SO	19	11	0	30	63	37	0
<b>Totals:</b>	<b>80</b>	<b>19</b>	<b>1</b>	<b>100</b>	<b>80%</b>	<b>19%</b>	<b>1%</b>
<b>Lab: WN</b> State Health Radiation Protection Section, Madison, WI							
VE	8	1	0	9	89	11	0
SO	22	2	0	24	92	8	0
WA	7	2	0	9	78	22	0
AI	8	1	0	9	89	11	0
<b>Totals:</b>	<b>45</b>	<b>6</b>	<b>0</b>	<b>51</b>	<b>88%</b>	<b>12%</b>	<b>0%</b>
<b>Lab: WO</b> Wisconsin State Lab of Hygiene							
VE	6	0	0	6	100	0	0
SO	14	2	0	16	88	13	0
WA	13	1	1	15	87	7	7
AI	10	0	0	10	100	0	0
<b>Totals:</b>	<b>43</b>	<b>3</b>	<b>1</b>	<b>47</b>	<b>91%</b>	<b>6%</b>	<b>2%</b>
<b>Lab: WT</b> Waste Stream Technology, Buffalo, NY							
VE	2	1	0	3	67	33	0
SO	7	2	0	9	78	22	0
WA	5	0	0	5	100	0	0
AI	4	1	0	5	80	20	0
<b>Totals:</b>	<b>18</b>	<b>4</b>	<b>0</b>	<b>22</b>	<b>82%</b>	<b>18%</b>	<b>0%</b>

**QAP 56 Summary of Matrix Evaluations by Laboratory**

Matrix	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
<b><u>Lab: WV West Valley Nuclear Services, NY</u></b>							
WA	5	2	0	7			
AI	8	0	0	8	71 100	29 0	0 0
<b>Totals:</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>15</b>	<b>87%</b>	<b>13%</b>	<b>0%</b>
<b><u>Lab: WW West Valley Radiation Protection, NY</u></b>							
AI	8	0	0	8			
SO	3	4	2	9	100 33	0 44	0 22
<b>Totals:</b>	<b>11</b>	<b>4</b>	<b>2</b>	<b>17</b>	<b>65%</b>	<b>24%</b>	<b>12%</b>
<b><u>Lab: YA Duke Engineering &amp; Services Environmental Lab.</u></b>							
VE	7	0	0	7			
SO	8	0	0	8	100	0	0
WA	8	2	1	11	100	0	0
AI	10	0	0	10	73 100	18 0	9 0
<b>Totals:</b>	<b>33</b>	<b>2</b>	<b>1</b>	<b>36</b>	<b>92%</b>	<b>6%</b>	<b>3%</b>
<b><u>Lab: YP US Army Proving Ground, Yuma, AZ</u></b>							
SO	1	0	0	1			
WA	0	1	0	1	100	0	0
AI	0	1	0	1	0	100	0
<b>Totals:</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>33%</b>	<b>67%</b>	<b>0%</b>
<b><u>Lab: YU Institute of Occupational and Radiological Health, Serbia</u></b>							
AI	5	1	0	6			
VE	3	0	0	3	83 100	17 0	0 0
SO	6	0	0	6	100	0	0
WA	3	2	0	5	60	40	0
<b>Totals:</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>20</b>	<b>85%</b>	<b>15%</b>	<b>0%</b>

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
AC	9	0	0	9	100	0	0
AG	8	0	0	8	100	0	0
AI	10	3	0	13	77	23	0
AM	10	2	0	12	83	17	0
AN	8	1	0	9	89	11	0
AS	5	0	0	5	100	0	0
AT	12	0	0	12	100	0	0
AU	6	0	1	7	86	0	14
AW	2	0	1	3	67	0	33
BA	3	0	0	3	100	0	0
BE	11	1	0	12	92	8	0
BM	8	0	0	8	100	0	0
BN	5	0	0	5	100	0	0
BP	9	0	0	9	100	0	0
BQ	6	1	2	9	67	11	22
BU	8	1	0	9	89	11	0
BX	11	0	0	11	100	0	0
CA	5	0	0	5	100	0	0
CB	4	0	0	4	100	0	0
CD	4	0	0	4	100	0	0
CE	5	1	0	6	83	17	0
CG	3	2	0	5	60	40	0
CH	5	0	6	11	45	0	55
CL	8	2	2	12	67	17	17
CN	3	0	0	3	100	0	0
CP	1	1	0	2	50	50	0
CU	4	0	0	4	100	0	0
CW	10	0	0	10	100	0	0
EC	16	8	6	30	53	27	20
EG	9	0	0	9	100	0	0
EI	2	1	1	4	50	25	25
EP	3	0	0	3	100	0	0
FE	2	0	0	2	100	0	0
FL	3	2	1	6	50	33	17
FM	9	3	0	12	75	25	0
FN	5	0	0	5	100	0	0
GA	9	1	0	10	90	10	0
GC	6	0	0	6	100	0	0
GE	11	1	0	12	92	8	0
GT	7	0	0	7	100	0	0
HC	1	1	0	2	50	50	0
HU	3	0	0	3	100	0	0
IL	5	0	0	5	100	0	0
IN	2	1	0	3	67	33	0
IO	6	0	0	6	100	0	0
IS	10	2	0	12	83	17	0
IT	10	0	0	10	100	0	0
IT	10	0	0	10	100	0	0
KA	2	0	0	2	100	0	0
KE	3	1	0	4	75	25	0
KO	12	1	0	13	92	8	0
KR	22	0	0	22	100	0	0
KS	4	0	0	4	100	0	0
LM	3	1	0	4	75	25	0

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
LN	4	1	0	5	80	20	0
LV	4	1	1	6	67	17	17
ME	11	2	2	15	73	13	13
MH	2	1	0	3	67	33	0
MI	4	1	0	5	80	20	0
ML	4	0	0	4	100	0	0
MS	4	0	1	5	80	0	20
MZ	0	0	12	12	0	0	100
NA	8	0	0	8	100	0	0
ND	5	0	0	5	100	0	0
NJ	9	3	0	12	75	25	0
NL	6	2	0	8	75	25	0
NM	5	0	0	5	100	0	0
NP	4	0	0	4	100	0	0
NQ	10	0	0	10	100	0	0
NR	3	0	0	3	100	0	0
NS	9	0	0	9	100	0	0
NZ	3	0	0	3	100	0	0
OB	4	0	5	9	44	0	56
OD	5	0	0	5	100	0	0
OH	2	3	0	5	40	60	0
OK	0	0	2	2	0	0	100
OT	5	1	4	10	50	10	40
OU	4	1	0	5	80	20	0
PA	10	0	0	10	100	0	0
PC	0	2	0	2	0	100	0
PR	2	1	0	3	67	33	0
PS	10	0	0	10	100	0	0
RA	6	1	0	7	86	14	0
RB	5	0	0	5	100	0	0
RC	4	1	0	5	80	20	0
RI	7	1	1	9	78	11	11
RK	2	0	0	2	100	0	0
RM	4	0	0	4	100	0	0
RS	2	2	2	6	33	33	33
RU	2	1	0	3	67	33	0
SA	6	1	0	7	86	14	0
SB	9	0	0	9	100	0	0
SD	10	2	1	13	77	15	8
SE	9	0	0	9	100	0	0
SI	4	0	0	4	100	0	0
SN	6	2	0	8	75	25	0
SR	11	0	0	11	100	0	0
SX	6	0	0	6	100	0	0
TE	5	5	0	10	50	50	0
TI	11	0	0	11	100	0	0
TM	9	1	2	12	75	8	17
TN	4	6	2	12	33	50	17
TO	9	2	1	12	75	17	8
TP	3	0	0	3	100	0	0
TQ	5	0	0	5	100	0	0
TW	4	1	0	5	80	20	0
TX	9	1	0	10	90	10	0
TY	4	0	1	5	80	0	20

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: AI Air Filter**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
UC	1	2	0	3	33	67	0
UY	10	0	0	10	100	0	0
WA	8	2	0	10	80	20	0
WC	8	2	1	11	73	18	9
WE	28	3	2	33	85	9	6
WI	25	0	0	25	100	0	0
WN	8	1	0	9	89	11	0
WO	10	0	0	10	100	0	0
WT	4	1	0	5	80	20	0
WV	8	0	0	8	100	0	0
WW	8	0	0	8	100	0	0
YA	10	0	0	10	100	0	0
YP	0	1	0	1	0	100	0
YU	5	1	0	6	83	17	0

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<b>Totals</b>	<b>122</b>	<b>Labs:</b>	<b>784</b>	<b>97</b>	<b>60</b>	<b>941</b>	<b>83%</b>	<b>10%</b>	<b>6%</b>
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**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
AC	6	4	2	12	50	33	17
AF	3	6	0	9	33	67	0
AG	12	1	0	13	92	8	0
AI	12	3	0	15	80	20	0
AM	12	0	1	13	92	0	8
AN	5	0	2	7	71	0	29
AS	8	1	0	9	89	11	0
AT	12	0	0	12	100	0	0
AU	13	0	0	13	100	0	0
BA	1	0	0	1	100	0	0
BE	10	1	1	12	83	8	8
BM	5	1	0	6	83	17	0
BN	5	2	0	7	71	29	0
BQ	10	0	1	11	91	0	9
BU	8	4	0	12	67	33	0
BX	10	3	0	13	77	23	0
CA	1	0	0	1	100	0	0
CD	5	2	0	7	71	29	0
CE	1	1	0	2	50	50	0
CF	9	3	0	12	75	25	0
CG	2	0	0	2	100	0	0
CH	14	0	0	14	100	0	0
CL	9	2	3	14	64	14	21
CM	11	3	0	14	79	21	0
CN	5	2	0	7	71	29	0
CP	3	1	3	7	43	14	43
CR	5	1	2	8	63	13	25
CS	2	4	2	8	25	50	25
CU	6	1	0	7	86	14	0
CW	12	1	0	13	92	8	0
EC	40	5	0	45	89	11	0
EG	9	2	2	13	69	15	15
EI	4	0	0	4	100	0	0
FE	6	2	0	8	75	25	0
FG	7	0	0	7	100	0	0
FL	7	0	3	10	70	0	30
FN	6	1	0	7	86	14	0
FR	9	0	0	9	100	0	0
FS	6	0	0	6	100	0	0
FU	39	9	1	49	80	18	2
GA	10	3	0	13	77	23	0
GC	3	3	0	6	50	50	0
GE	13	1	0	14	93	7	0
GT	5	1	0	6	83	17	0
HT	4	0	0	4	100	0	0
HU	8	1	0	9	89	11	0
IN	6	1	1	8	75	13	13
IO	6	1	0	7	86	14	0
IS	12	2	0	14	86	14	0
IT	9	1	1	11	82	9	9
IT	9	1	1	11	82	9	9
KA	4	0	0	4	100	0	0
KE	1	1	5	7	14	14	71
KO	15	0	0	15	100	0	0

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
KR	16	0	0	16	100	0	0
KS	3	0	0	3	100	0	0
LA	16	11	6	33	48	33	18
LL	2	1	2	5	40	20	40
LM	7	2	0	9	78	22	0
LV	4	4	1	9	44	44	11
LW	6	0	0	6	100	0	0
ME	23	4	0	27	85	15	0
MH	5	2	2	9	56	22	22
ML	3	0	0	3	100	0	0
MS	6	0	0	6	100	0	0
MX	0	1	1	2	0	50	50
MY	2	6	1	9	22	67	11
MZ	0	1	8	9	0	11	89
NA	8	1	0	9	89	11	0
NJ	25	2	0	27	93	7	0
NL	10	0	0	10	100	0	0
NQ	11	1	0	12	92	8	0
NR	1	0	0	1	100	0	0
NZ	7	1	0	8	88	13	0
OB	9	2	3	14	64	14	21
OH	4	3	0	7	57	43	0
OK	5	1	0	6	83	17	0
OT	10	1	0	11	91	9	0
OU	7	1	0	8	88	13	0
PK	12	4	0	16	75	25	0
PO	7	0	0	7	100	0	0
PS	9	1	0	10	90	10	0
RA	11	1	0	12	92	8	0
RB	6	2	0	8	75	25	0
RC	2	0	0	2	100	0	0
RI	10	0	0	10	100	0	0
RM	7	0	0	7	100	0	0
RS	6	2	0	8	75	25	0
RU	4	1	3	8	50	13	38
SA	2	0	0	2	100	0	0
SB	2	1	0	3	67	33	0
SD	9	1	1	11	82	9	9
SE	14	1	0	15	93	7	0
SI	11	0	0	11	100	0	0
SK	13	0	0	13	100	0	0
SL	0	0	1	1	0	0	100
SN	11	2	0	13	85	15	0
SR	6	2	5	13	46	15	38
SX	0	3	1	4	0	75	25
SY	10	0	0	10	100	0	0
TE	8	4	0	12	67	33	0
TI	11	1	1	13	85	8	8
TM	11	2	0	13	85	15	0
TN	6	5	1	12	50	42	8
TO	4	7	3	14	29	50	21
TP	6	1	0	7	86	14	0
TQ	8	0	0	8	100	0	0
TW	7	0	0	7	100	0	0

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: SO Soil**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
TX	10	3	0	13	77	23	0
TY	0	1	4	5	0	20	80
UC	3	0	1	4	75	0	25
UG	2	0	0	2	100	0	0
UP	1	0	0	1	100	0	0
UY	4	3	0	7	57	43	0
WA	12	1	1	14	86	7	7
WC	3	4	0	7	43	57	0
WE	29	6	1	36	81	17	3
WI	19	11	0	30	63	37	0
WN	22	2	0	24	92	8	0
WO	14	2	0	16	88	13	0
WT	7	2	0	9	78	22	0
WW	3	4	2	9	33	44	22
YA	8	0	0	8	100	0	0
YP	1	0	0	1	100	0	0
YU	6	0	0	6	100	0	0
<b>Totals</b>		<b>125</b>	<b>Labs:</b>	<b>1002</b>	<b>207</b>	<b>80</b>	<b>1289</b>
						<b>78%</b>	<b>16%</b>
							<b>6%</b>

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: VE Vegetation**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
AC	5	1	1	7	71	14	14
AG	8	0	0	8	100	0	0
AI	4	2	1	7	57	29	14
AM	4	1	1	6	67	17	17
AT	6	0	0	6	100	0	0
AU	6	1	0	7	86	14	0
BA	1	0	0	1	100	0	0
BE	7	0	0	7	100	0	0
BM	4	0	0	4	100	0	0
BN	1	2	0	3	33	67	0
BQ	3	0	1	4	75	0	25
BU	8	0	0	8	100	0	0
BX	6	0	1	7	86	0	14
CD	3	0	0	3	100	0	0
CE	2	1	0	3	67	33	0
CF	3	0	3	6	50	0	50
CG	2	1	0	3	67	33	0
CH	6	0	1	7	86	0	14
CL	3	3	0	6	50	50	0
CN	3	0	0	3	100	0	0
CR	3	0	0	3	100	0	0
CS	2	0	0	2	100	0	0
CU	3	0	0	3	100	0	0
CW	8	0	0	8	100	0	0
EG	6	2	0	8	75	25	0
FL	0	0	4	4	0	0	100
FN	3	0	0	3	100	0	0
FR	4	0	0	4	100	0	0
FU	15	0	0	15	100	0	0
GA	6	0	0	6	100	0	0
GC	6	3	0	9	67	33	0
GE	7	0	0	7	100	0	0
GT	4	2	0	6	67	33	0
HU	3	1	0	4	75	25	0
IN	2	1	0	3	67	33	0
IO	3	1	0	4	75	25	0
IS	7	0	0	7	100	0	0
IT	5	1	0	6	83	17	0
IT	5	1	0	6	83	17	0
KE	2	2	0	4	50	50	0
KO	6	0	0	6	100	0	0
KR	13	2	0	15	87	13	0
KS	3	0	0	3	100	0	0
LA	15	3	0	18	83	17	0
LM	4	0	0	4	100	0	0
LV	2	2	0	4	50	50	0
ME	3	7	0	10	30	70	0
MH	3	0	1	4	75	0	25
ML	1	0	0	1	100	0	0
NA	5	0	0	5	100	0	0
NJ	12	0	0	12	100	0	0
NR	1	0	0	1	100	0	0
NZ	2	1	0	3	67	33	0
OB	3	1	2	6	50	17	33

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: VE Vegetation**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
OH	1	0	2	3	33	0	67
OT	7	0	0	7	100	0	0
OU	1	1	0	2	50	50	0
PO	3	0	1	4	75	0	25
PS	2	0	3	5	40	0	60
RA	6	0	0	6	100	0	0
RB	3	1	0	4	75	25	0
RI	5	0	0	5	100	0	0
RS	0	0	4	4	0	0	100
RU	3	1	0	4	75	25	0
SB	2	1	0	3	67	33	0
SD	4	2	0	6	67	33	0
SE	9	0	2	11	82	0	18
SI	4	0	0	4	100	0	0
SK	3	1	0	4	75	25	0
SN	4	3	0	7	57	43	0
SR	3	2	2	7	43	29	29
SX	3	2	1	6	50	33	17
SY	3	0	0	3	100	0	0
TE	5	1	1	7	71	14	14
TI	6	0	1	7	86	0	14
TM	2	2	3	7	29	29	43
TN	6	1	0	7	86	14	0
TO	3	3	1	7	43	43	14
TP	3	0	0	3	100	0	0
TQ	4	0	0	4	100	0	0
TW	3	0	0	3	100	0	0
TX	4	1	1	6	67	17	17
TY	1	2	1	4	25	50	25
UC	2	1	0	3	67	33	0
UY	6	1	0	7	86	14	0
WA	6	0	1	7	86	0	14
WC	6	1	0	7	86	14	0
WE	15	2	2	19	79	11	11
WI	15	6	0	21	71	29	0
WN	8	1	0	9	89	11	0
WO	6	0	0	6	100	0	0
WT	2	1	0	3	67	33	0
YA	7	0	0	7	100	0	0
YU	3	0	0	3	100	0	0

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<b>Totals</b>	<b>94</b>	<b>Labs:</b>	<b>431</b>	<b>79</b>	<b>42</b>	<b>552</b>	<b>78%</b>	<b>14%</b>	<b>8%</b>
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**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: WA Water**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
AC	6	6	0	12	50	50	0
AF	4	1	3	8	50	13	38
AG	10	1	0	11	91	9	0
AI	5	6	3	14	36	43	21
AM	6	6	0	12	50	50	0
AN	9	0	1	10	90	0	10
AP	0	1	1	2	0	50	50
AS	2	1	0	3	67	33	0
AT	12	0	1	13	92	0	8
AU	11	1	0	12	92	8	0
AW	3	0	0	3	100	0	0
BA	2	0	0	2	100	0	0
BE	10	2	1	13	77	15	8
BM	8	0	0	8	100	0	0
BN	5	2	0	7	71	29	0
BP	10	1	0	11	91	9	0
BQ	4	3	3	10	40	30	30
BU	10	0	1	11	91	0	9
BX	9	3	0	12	75	25	0
CA	3	2	0	5	60	40	0
CB	10	1	0	11	91	9	0
CD	5	0	0	5	100	0	0
CE	5	1	0	6	83	17	0
CF	8	2	5	15	53	13	33
CG	3	1	3	7	43	14	43
CH	13	0	0	13	100	0	0
CL	7	5	1	13	54	38	8
CM	9	2	1	12	75	17	8
CP	4	1	0	5	80	20	0
CR	6	4	0	10	60	40	0
CS	2	0	1	3	67	0	33
CU	4	1	0	5	80	20	0
CW	11	0	0	11	100	0	0
CZ	5	1	0	6	83	17	0
EC	19	1	0	20	95	5	0
EG	10	1	0	11	91	9	0
EP	4	0	0	4	100	0	0
FE	4	1	0	5	80	20	0
FG	6	0	3	9	67	0	33
FL	6	1	1	8	75	13	13
FM	10	2	0	12	83	17	0
FN	6	0	0	6	100	0	0
FR	3	1	0	4	75	25	0
GC	8	0	0	8	100	0	0
GE	8	5	0	13	62	38	0
GS	3	0	3	6	50	0	50
GT	10	1	0	11	91	9	0
HC	3	0	0	3	100	0	0
HT	3	0	1	4	75	0	25
HU	7	1	0	8	88	13	0
IL	5	0	0	5	100	0	0
IN	8	1	0	9	89	11	0
IO	8	1	0	9	89	11	0
IS	9	4	0	13	69	31	0

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: WA Water**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
IT	8	2	1	11	73	18	9
IT	8	2	1	11	73	18	9
KA	9	0	0	9	100	0	0
KG	0	0	1	1	0	0	100
KO	12	2	0	14	86	14	0
KS	7	0	0	7	100	0	0
LA	19	8	0	27	70	30	0
LI	10	0	0	10	100	0	0
LL	3	0	1	4	75	0	25
LM	4	1	1	6	67	17	17
LN	3	0	0	3	100	0	0
LV	5	1	1	7	71	14	14
LW	8	1	0	9	89	11	0
ME	12	3	0	15	80	20	0
MH	2	0	2	4	50	0	50
MI	9	3	2	14	64	21	14
ML	5	0	0	5	100	0	0
MS	3	0	0	3	100	0	0
NA	9	0	0	9	100	0	0
NJ	35	1	0	36	97	3	0
NL	10	0	0	10	100	0	0
NM	1	4	0	5	20	80	0
NP	4	0	1	5	80	0	20
NQ	7	1	2	10	70	10	20
NR	2	0	0	2	100	0	0
NS	3	0	9	12	25	0	75
NZ	2	2	1	5	40	40	20
OB	2	4	2	8	25	50	25
OD	6	3	0	9	67	33	0
OH	7	1	0	8	88	13	0
OK	7	0	1	8	88	0	13
OT	6	2	3	11	55	18	27
OU	3	3	3	9	33	33	33
PC	1	1	0	2	50	50	0
PR	3	1	0	4	75	25	0
PS	8	1	1	10	80	10	10
RB	1	0	1	2	50	0	50
RC	4	0	0	4	100	0	0
RG	2	0	0	2	100	0	0
RI	5	4	3	12	42	33	25
RM	4	0	0	4	100	0	0
RS	2	1	4	7	29	14	57
RU	1	3	0	4	25	75	0
SA	6	1	0	7	86	14	0
SB	9	0	1	10	90	0	10
SD	10	3	0	13	77	23	0
SE	8	3	4	15	53	20	27
SI	4	2	0	6	67	33	0
SK	8	3	0	11	73	27	0
SL	2	0	1	3	67	0	33
SN	10	1	2	13	77	8	15
SR	9	3	0	12	75	25	0
ST	1	0	0	1	100	0	0
SX	6	1	1	8	75	13	13

**QAP 56 Summary of Laboratory Evaluations by Matrix****Matrix: WA Water**

Labcode	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
SY	4	1	0	5	80	20	0
TE	9	2	0	11	82	18	0
TI	7	5	0	12	58	42	0
TM	10	1	2	13	77	8	15
TN	12	1	0	13	92	8	0
TO	10	3	0	13	77	23	0
TP	2	0	0	2	100	0	0
TQ	5	1	0	6	83	17	0
TW	4	1	0	5	80	20	0
TX	7	5	0	12	58	42	0
UC	7	0	0	7	100	0	0
UP	1	0	0	1	100	0	0
US	2	1	0	3	67	33	0
UY	11	0	0	11	100	0	0
WA	9	2	0	11	82	18	0
WC	10	2	0	12	83	17	0
WE	29	5	1	35	83	14	3
WI	21	2	1	24	88	8	4
WN	7	2	0	9	78	22	0
WO	13	1	1	15	87	7	7
WT	5	0	0	5	100	0	0
WV	5	2	0	7	71	29	0
YA	8	2	1	11	73	18	9
YP	0	1	0	1	0	100	0
YU	3	2	0	5	60	40	0

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<b>Totals</b>							
<b>133 Labs:</b>	<b>897</b>	<b>189</b>	<b>89</b>	<b>1175</b>	<b>76%</b>	<b>16%</b>	<b>8%</b>

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**QAP 56 Summary of Matrix Evaluations by Radionuclide****Matrix:** Air Filter

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
SR90	39	4	4	47	83	9	9
MN54	122	5	8	135	90	4	6
CS137	122	10	5	137	89	7	4
PU238	32	8	8	48	67	17	17
PU239	38	9	3	50	76	18	6
AM241	49	16	3	68	72	24	4
U234	36	1	4	41	88	2	10
U238	35	3	3	41	85	7	7
Bq U	13	2	0	15	87	13	0
ug U	13	5	1	19	68	26	5
GROSS ALPHA	72	17	8	97	74	18	8
GROSS BETA	78	10	9	97	80	10	9
CO60	125	7	4	136	92	5	3
<b>Totals:</b>	<b>774</b>	<b>97</b>	<b>60</b>	<b>931</b>	<b>83%</b>	<b>10%</b>	<b>6%</b>

**QAP 56 Summary of Matrix Evaluations by Radionuclide****Matrix:** Soil

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
ug U	27	1	2	30	90	3	7
SR90	41	9	5	55	75	16	9
AC228	91	13	7	111	82	12	6
U234	38	6	6	50	76	12	12
AM241	73	19	6	98	74	19	6
PU239	47	14	4	65	72	22	6
PU238	9	2	0	11	82	18	0
U238	42	7	4	53	79	13	8
BI212	76	13	6	95	80	14	6
K40	113	22	7	142	80	15	5
PB212	87	17	4	108	81	16	4
TH234	55	3	9	67	82	4	13
BI214	68	32	9	109	62	29	8
CS137	125	21	6	152	82	14	4
Bq U	18	3	1	22	82	14	5
PB214	83	24	3	110	75	22	3
<b>Totals:</b>	<b>993</b>	<b>206</b>	<b>79</b>	<b>1278</b>	<b>78%</b>	<b>16%</b>	<b>6%</b>

**QAP 56 Summary of Matrix Evaluations by Radionuclide****Matrix:** Vegetation

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
CO60	76	31	6	113	67	27	5
CM244	29	3	3	35	83	9	9
AM241	45	5	11	61	74	8	18
PU239	36	5	8	49	73	10	16
PU238	7	0	0	7	100	0	0
SR90	47	4	1	52	90	8	2
CS137	95	15	8	118	81	13	7
K40	91	15	5	111	82	14	5
<b>Totals:</b>		<b>426</b>	<b>78</b>	<b>42</b>	<b>546</b>	<b>78%</b>	<b>14%</b>

**QAP 56 Summary of Matrix Evaluations by Radionuclide****Matrix:** Water

Radio-Nuclide	Evaluation Summary			Total Analyses	Evaluation Percentages		
	A	W	N		% A	% W	% N
CS137	126	16	4	146	86	11	3
SR90	51	20	2	73	70	27	3
PU238	43	14	5	62	69	23	8
PU239	53	9	3	65	82	14	5
AM241	65	12	8	85	76	14	9
U234	31	17	6	54	57	31	11
U238	38	9	8	55	69	16	15
Bq U	23	1	3	27	85	4	11
ug U	24	13	2	39	62	33	5
GROSS ALPHA	63	19	13	95	66	20	14
GROSS BETA	90	6	2	98	92	6	2
H3	81	14	9	104	78	13	9
CS134	71	27	19	117	61	23	16
CO60	130	10	4	144	90	7	3
<b>Totals:</b>	<b>889</b>	<b>187</b>	<b>88</b>	<b>1164</b>	<b>76%</b>	<b>16%</b>	<b>8%</b>

**QAP 56 EML Results****Environmental Measurements Laboratory, New York, NY**

<b>Matrix</b>	<b>Radionuclide</b>	<b>EML Value</b>	<b>EML Error</b>
0203AIAA	238Pu	0.057	0.001
	Gross Alpha	0.534	0.053
	239Pu	0.187	0.003
	54Mn	38.530	0.867
	ug U	24.105	0.103
	Bq U	0.608	0.005
	238U	0.298	0.004
	234U	0.297	0.004
	137Cs	28.230	0.701
	90Sr	4.832	0.184
	60Co	30.520	0.652
	Gross Beta	1.300	0.130
	241Am	0.088	0.005

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**pCi/g or mL = Bq x 0.027**

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**QAP 56 EML Results****Environmental Measurements Laboratory, New York, NY**

<b>Matrix</b>	<b>Radionuclide</b>	<b>EML Value</b>	<b>EML Error</b>
0203SOAA	Bq U	194.769	15.642
	241Am	10.927	0.373
	239Pu	19.098	0.706
	238Pu	0.691	0.105
	ug U	7.829	0.755
	238U	96.778	8.410
	234U	93.885	7.767
	137Cs	1326.670	66.510
	214Pb	54.367	2.249
	40K	621.670	33.860
	212Pb	51.100	2.753
	90Sr	53.756	1.446
	212Bi	53.430	5.215
	228Ac	51.167	1.941
	234Th	89.300	6.837
	214Bi	53.933	2.249

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**pCi/g or mL = Bq x 0.027**

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**QAP 56 EML Results****Environmental Measurements Laboratory, New York, NY**

<b>Matrix</b>	<b>Radionuclide</b>	<b>EML Value</b>	<b>EML Error</b>
0203VEAA	241Am	2.228	0.216
	239Pu	3.543	0.377
	238Pu	0.257	0.046
	137Cs	313.667	15.910
	90Sr	586.280	11.140
	60Co	11.230	0.677
	40K	864.330	47.220
	244Cm	1.320	0.164

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$$\text{pCi/g or mL} = \text{Bq} \times 0.027$$

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**QAP 56 EML Results****Environmental Measurements Laboratory, New York, NY**

<b>Matrix</b>	<b>Radionuclide</b>	<b>EML Value</b>	<b>EML Error</b>
0203WAAA	<sup>3</sup> H	283.700	3.380
	Bq U	2.836	0.121
	<sup>241</sup> Am	1.474	0.021
	<sup>239</sup> Pu	4.219	0.172
	<sup>238</sup> Pu	0.490	0.032
	ug U	0.112	0.007
	<sup>238</sup> U	1.381	0.079
	<sup>234</sup> U	1.402	0.056
	<sup>137</sup> Cs	56.067	2.929
	<sup>60</sup> Co	347.330	12.400
	<sup>134</sup> Cs	3.357	0.200
	Gross Beta	1030.000	103.000
	Gross Alpha	375.000	37.500
	<sup>90</sup> Sr	7.579	0.176

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**pCi/g or mL = Bq x 0.027**

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**QAP 56 Results by Laboratory****Lab:** AC Analytical Chemistry Laboratory, ANL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.100	0.010	0.088	0.005	1.133	A	A
1	CO60	31.700	0.900	30.520	0.652	1.039	A	A
1	CS137	29.300	0.600	28.230	0.701	1.038	A	A
1	MN54	40.100	0.500	38.530	0.867	1.041	A	N
1	PU238	0.060	0.010	0.057	0.001	1.045	A	W
1	PU239	0.170	0.020	0.187	0.003	0.907	A	W
1	SR90	4.900	0.200	4.832	0.184	1.014	A	W
1	U234	0.290	0.010	0.297	0.004	0.975	A	W
1	U238	0.270	0.010	0.298	0.004	0.906	A	W

**Matrix:** SO Soil Bq / kg

1	AC228	53.800	8.000	51.167	1.941	1.051	A	A
1	AM241	13.300	3.700	10.927	0.373	1.217	A	A
1	BI212	63.000	12.700	53.430	5.215	1.179	W	A
1	BI214	59.000	9.600	53.933	2.249	1.094	A	A
1	CS137	1310.000	106.000	1326.670	66.510	0.987	A	A
1	K40	724.000	26.000	621.670	33.860	1.165	A	A
1	PB212	63.000	12.700	51.100	2.753	1.233	W	A
1	PB214	78.700	9.800	54.367	2.249	1.448	W	A
1	PU239	16.700	5.600	19.098	0.706	0.874	A	W
1	SR90	13.000	1.500	53.756	1.446	0.242	N	A
1	U234	65.400	2.400	93.885	7.767	0.697	N	W
1	U238	70.400	2.500	96.778	8.410	0.727	W	W

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.600	0.700	2.228	0.216	1.167	A	A
1	CM244	2.300	0.700	1.320	0.164	1.742	N	A
1	CO60	13.500	1.600	11.230	0.677	1.202	A	A
1	CS137	356.000	4.000	313.667	15.910	1.135	A	A
1	K40	1140.000	33.000	864.330	47.220	1.319	W	A
1	PU239	3.200	0.500	3.543	0.377	0.903	A	W
1	SR90	555.000	37.000	586.280	11.140	0.947	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.600	0.300	1.474	0.021	1.086	A	N
1	CO60	348.000	5.000	347.330	12.400	1.002	A	A
1	CS134	3.800	0.900	3.357	0.200	1.132	A	
1	CS137	49.300	1.300	56.067	2.929	0.879	W	A
1	GROSS ALPHA	357.000	35.000	375.000	37.500	0.952	A	
1	GROSS BETA	988.000	40.000	1030.000	103.000	0.959	A	
1	H3	577.000	12.000	283.700	3.380	2.034	W	N
1	PU238	0.500	0.100	0.490	0.032	1.020	A	A
1	PU239	3.500	0.300	4.219	0.172	0.830	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 56 Results by Laboratory****Lab:** AC Analytical Chemistry Laboratory, ANL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	SR90	6.200	1.600	7.579	0.176	0.818	W	A
1	U234	1.200	0.100	1.402	0.056	0.856	W	W
1	U238	1.200	0.100	1.381	0.079	0.869	W	W

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

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

**QAP 56 Results by Laboratory****Lab:** AF Air Force Analytical Lab (AFIERA/SDRR), Brooks AFB

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	41.810	2.610	51.167	1.941	0.817	W
1	AM241	12.180	3.020	10.927	0.373	1.115	A
1	Bq U	154.780	12.990	194.769	15.642	0.795	W
1	CS137	1143.300	11.070	1326.670	66.510	0.862	W
1	K40	503.200	5.450	621.670	33.860	0.809	W
1	PU239	18.320	0.510	19.098	0.706	0.959	A
1	TH234	91.760	14.930	89.300	6.837	1.028	A
1	U234	72.520	9.430	93.885	7.767	0.772	W
1	U238	76.710	3.590	96.778	8.410	0.793	W

**Matrix:** WA Water Bq / L

1	Bq U	3.920	1.040	2.836	0.121	1.382	N
1	CO60	339.170	3.270	347.330	12.400	0.977	A
1	CS134	2.980	0.530	3.357	0.200	0.888	W
1	CS137	53.530	3.020	56.067	2.929	0.955	A
1	H3	320.050	53.420	283.700	3.380	1.128	A
1	SR90	7.460	1.430	7.579	0.176	0.984	A
1	U234	1.890	0.510	1.402	0.056	1.348	N
1	U238	1.890	0.490	1.381	0.079	1.368	N

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

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

**QAP 56 Results by Laboratory****Lab:** AG Paragon Analytics, Inc, Fort Collins, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.099	0.022	0.088	0.005	1.118	A	A
1	Bq U	0.594	0.061	0.608	0.005	0.978	A	
1	CO60	28.100	4.640	30.520	0.652	0.921	A	A
1	CS137	30.100	4.980	28.230	0.701	1.066	A	A
1	MN54	39.600	6.540	38.530	0.867	1.028	A	A
1	PU238	0.060	0.013	0.057	0.001	1.052	A	A
1	PU239	0.185	0.029	0.187	0.003	0.987	A	A
1	SR90	4.520	0.816	4.832	0.184	0.935	A	

**Matrix:** SO Soil Bq / kg

1	AC228	49.100	9.730	51.167	1.941	0.960	A	A
1	AM241	11.900	1.960	10.927	0.373	1.089	A	A
1	BI212	48.100	17.800	53.430	5.215	0.900	A	A
1	BI214	42.900	9.510	53.933	2.249	0.795	W	W
1	Bq U	185.000	16.200	194.769	15.642	0.950	A	
1	CS137	1320.000	218.000	1326.670	66.510	0.995	A	A
1	K40	582.000	102.000	621.670	33.860	0.936	A	A
1	PB212	50.600	8.940	51.100	2.753	0.990	A	A
1	PB214	48.100	8.800	54.367	2.249	0.885	A	A
1	PU238	0.923	0.403	0.691	0.105	1.336	A	
1	PU239	20.400	3.000	19.098	0.706	1.068	A	A
1	SR90	46.200	8.810	53.756	1.446	0.859	A	A
1	TH234	123.000	30.700	89.300	6.837	1.377	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.740	0.900	2.228	0.216	1.230	A	A
1	CM244	1.380	0.590	1.320	0.164	1.045	A	A
1	CO60	11.700	2.500	11.230	0.677	1.042	A	A
1	CS137	343.000	56.900	313.667	15.910	1.094	A	A
1	K40	894.000	158.000	864.330	47.220	1.034	A	A
1	PU238	0.243	1.100	0.257	0.046	0.947	A	
1	PU239	3.240	1.560	3.543	0.377	0.914	A	W
1	SR90	516.000	93.300	586.280	11.140	0.880	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.500	0.221	1.474	0.021	1.018	A	A
1	Bq U	2.780	0.275	2.836	0.121	0.980	A	
1	CO60	347.000	57.200	347.330	12.400	0.999	A	A
1	CS134	2.830	0.611	3.357	0.200	0.843	W	
1	CS137	56.600	9.410	56.067	2.929	1.010	A	A
1	GROSS ALPHA	321.000	45.500	375.000	37.500	0.856	A	A
1	GROSS BETA	875.000	120.000	1030.000	103.000	0.850	A	A
1	H3	316.000	43.000	283.700	3.380	1.114	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 56 Results by Laboratory****Lab:** AG Paragon Analytics, Inc, Fort Collins, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU238	0.494	0.084	0.490	0.032	1.007	A	A
1	PU239	4.240	0.552	4.219	0.172	1.005	A	A
1	SR90	6.710	1.220	7.579	0.176	0.885	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** AI Nuclear Technology Services, Inc., Roswell, GA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.076	0.003	0.088	0.005	0.861	W	A
1	Bq U	0.620	0.018	0.608	0.005	1.020	A	W
1	CO60	32.000	4.800	30.520	0.652	1.048	A	A
1	CS137	30.400	4.500	28.230	0.701	1.077	A	A
1	GROSS ALPHA	0.540	0.030	0.534	0.053	1.011	A	A
1	GROSS BETA	1.380	0.040	1.300	0.130	1.062	A	A
1	MN54	40.500	6.000	38.530	0.867	1.051	A	A
1	PU238	0.053	0.003	0.057	0.001	0.923	A	W
1	PU239	0.160	0.006	0.187	0.003	0.854	W	W
1	SR90	5.840	0.880	4.832	0.184	1.209	W	A
1	U234	0.301	0.012	0.297	0.004	1.012	A	N
1	U238	0.305	0.013	0.298	0.004	1.023	A	W
1	Ug U	24.700	3.000	24.105	0.103	1.025	A	

**Matrix:** SO Soil Bq / kg

1	AC228	49.700	7.500	51.167	1.941	0.971	A	A
1	AM241	14.700	2.300	10.927	0.373	1.345	A	A
1	BI212	58.800	8.800	53.430	5.215	1.101	A	A
1	BI214	43.500	6.500	53.933	2.249	0.807	W	W
1	Bq U	196.000	4.000	194.769	15.642	1.006	A	N
1	CS137	1200.000	180.000	1326.670	66.510	0.905	A	A
1	K40	592.300	88.800	621.670	33.860	0.953	A	A
1	PB212	53.500	8.000	51.100	2.753	1.047	A	A
1	PB214	44.000	6.600	54.367	2.249	0.809	W	W
1	PU239	19.700	2.000	19.098	0.706	1.032	A	A
1	SR90	101.660	15.250	53.756	1.446	1.891	W	A
1	TH234	110.000	16.500	89.300	6.837	1.232	A	N
1	U234	96.600	3.000	93.885	7.767	1.029	A	A
1	U238	94.600	2.500	96.778	8.410	0.977	A	
1	Ug U	7.660	1.000	7.829	0.755	0.978	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.980	0.330	2.228	0.216	1.337	A	A
1	CM244	2.700	0.450	1.320	0.164	2.045	N	A
1	CO60	10.440	1.500	11.230	0.677	0.930	A	A
1	CS137	320.000	48.000	313.667	15.910	1.020	A	A
1	K40	867.100	130.000	864.330	47.220	1.003	A	W
1	PU239	2.900	0.300	3.543	0.377	0.818	W	A
1	SR90	677.500	101.600	586.280	11.140	1.156	W	A

**Matrix:** WA Water Bq / L

1	AM241	1.260	0.030	1.474	0.021	0.855	W	A
1	Bq U	2.540	0.300	2.836	0.121	0.896	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 56 Results by Laboratory****Lab:** AI Nuclear Technology Services, Inc., Roswell, GA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	CO60	309.400	50.000	347.330	12.400	0.891	W	W
1	CS134	2.780	0.520	3.357	0.200	0.828	W	
1	CS137	50.500	8.000	56.067	2.929	0.901	A	A
1	GROSS ALPHA	330.000	15.000	375.000	37.500	0.880	A	A
1	GROSS BETA	1063.000	50.000	1030.000	103.000	1.032	A	A
1	H3	130.000	13.000	283.700	3.380	0.458	N	W
1	PU238	0.345	0.014	0.490	0.032	0.704	N	W
1	PU239	2.780	0.090	4.219	0.172	0.659	N	W
1	SR90	9.040	1.360	7.579	0.176	1.193	W	A
1	U234	1.240	0.030	1.402	0.056	0.885	W	W
1	U238	1.240	0.030	1.381	0.079	0.898	W	N
1	Ug U	0.101	0.011	0.112	0.007	0.904	A	

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

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

**QAP 56 Results by Laboratory****Lab:** AM American Radiation Services, Inc., Baton Rouge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.093	0.022	0.088	0.005	1.049	A	A
1	Bq U	0.766	0.070	0.608	0.005	1.261	A	N
1	CO60	30.460	0.090	30.520	0.652	0.998	A	A
1	CS137	29.300	0.100	28.230	0.701	1.038	A	A
1	GROSS ALPHA	0.510	0.010	0.534	0.053	0.955	A	A
1	GROSS BETA	1.200	0.010	1.300	0.130	0.923	A	A
1	MN54	40.050	0.150	38.530	0.867	1.039	A	A
1	PU238	0.047	0.018	0.057	0.001	0.819	W	A
1	PU239	0.188	0.033	0.187	0.003	1.003	A	A
1	SR90	4.603	0.384	4.832	0.184	0.953	A	A
1	U234	0.382	0.058	0.297	0.004	1.284	A	N
1	U238	0.384	0.055	0.298	0.004	1.288	W	N

**Matrix:** SO Soil Bq / kg

1	AM241	11.390	0.740	10.927	0.373	1.042	A	A
1	BI212	48.550	2.960	53.430	5.215	0.909	A	A
1	BI214	55.230	1.520	53.933	2.249	1.024	A	W
1	Bq U	209.160	20.920	194.769	15.642	1.074	A	A
1	CS137	1243.150	2.822	1326.670	66.510	0.937	A	W
1	K40	598.600	9.360	621.670	33.860	0.963	A	A
1	PB212	52.390	0.760	51.100	2.753	1.025	A	W
1	PB214	55.150	1.490	54.367	2.249	1.014	A	A
1	PU239	19.257	3.699	19.098	0.706	1.008	A	W
1	SR90	26.670	8.180	53.756	1.446	0.496	N	W
1	TH234	94.200	6.230	89.300	6.837	1.055	A	A
1	U234	102.680	9.990	93.885	7.767	1.094	A	A
1	U238	106.480	9.620	96.778	8.410	1.100	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.720	0.660	2.228	0.216	1.221	A	A
1	CO60	12.680	0.530	11.230	0.677	1.129	A	A
1	CS137	318.200	1.790	313.667	15.910	1.014	A	A
1	K40	941.580	13.800	864.330	47.220	1.089	A	A
1	PU239	13.484	2.550	3.543	0.377	3.805	N	N
1	SR90	655.840	205.160	586.280	11.140	1.119	W	W

**Matrix:** WA Water Bq / L

1	AM241	1.530	0.150	1.474	0.021	1.038	A	A
1	Bq U	2.500	22.000	2.836	0.121	0.882	A	A
1	CO60	363.400	0.820	347.330	12.400	1.046	A	A
1	CS137	56.930	0.520	56.067	2.929	1.015	A	A
1	GROSS ALPHA	307.440	7.550	375.000	37.500	0.820	A	A
1	GROSS BETA	1024.310	11.360	1030.000	103.000	0.994	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 56 Results by Laboratory****Lab:** AM American Radiation Services, Inc., Baton Rouge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	H3	246.770	3.266	283.700	3.380	0.870	W	A
1	PU238	0.426	0.049	0.490	0.032	0.869	W	N
1	PU239	3.540	0.142	4.219	0.172	0.839	W	N
1	SR90	5.340	0.450	7.579	0.176	0.705	W	A
1	U234	1.252	0.118	1.402	0.056	0.893	W	A
1	U238	1.219	0.092	1.381	0.079	0.883	W	A

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

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

**QAP 56 Results by Laboratory****Lab:** AN Argonne National Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.090	0.010	0.088	0.005	1.019	A	A
1	CO60	31.500	0.900	30.520	0.652	1.032	A	A
1	CS137	29.100	0.800	28.230	0.701	1.031	A	A
1	MN54	38.000	0.800	38.530	0.867	0.986	A	A
1	PU238	0.070	0.010	0.057	0.001	1.219	W	A
1	PU239	0.180	0.010	0.187	0.003	0.961	A	A
1	SR90	4.250	0.170	4.832	0.184	0.880	A	A
1	U234	0.290	0.010	0.297	0.004	0.975	A	W
1	U238	0.300	0.010	0.298	0.004	1.006	A	A

**Matrix:** SO Soil Bq / kg

1	AM241	13.100	1.000	10.927	0.373	1.199	A	A
1	CS137	1396.000	30.000	1326.670	66.510	1.052	A	A
1	K40	648.000	80.000	621.670	33.860	1.042	A	A
1	PU239	20.500	1.300	19.098	0.706	1.073	A	A
1	SR90	46.900	2.000	53.756	1.446	0.872	A	A
1	U234	140.000	10.000	93.885	7.767	1.491	N	A
1	U238	137.000	7.000	96.778	8.410	1.416	N	A

**Matrix:** WA Water Bq / L

1	AM241	1.500	0.080	1.474	0.021	1.018	A	A
1	CO60	345.000	13.000	347.330	12.400	0.993	A	A
1	CS134	2.350	0.750	3.357	0.200	0.700	N	
1	CS137	54.800	3.600	56.067	2.929	0.977	A	A
1	H3	289.000	3.000	283.700	3.380	1.019	A	A
1	PU238	0.500	0.010	0.490	0.032	1.020	A	A
1	PU239	4.160	0.110	4.219	0.172	0.986	A	A
1	SR90	6.780	0.280	7.579	0.176	0.895	A	A
1	U234	1.360	0.020	1.402	0.056	0.970	A	A
1	U238	1.320	0.040	1.381	0.079	0.956	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** AP Aberdeen Proving Ground, Aberdeen, MD

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS ALPHA	556.000	0.040	375.000	37.500	1.483	N
1	GROSS BETA	663.000	0.060	1030.000	103.000	0.644	W

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

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

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

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**QAP 56 Results by Laboratory****Lab:** AS USACHPPM, Aberdeen Proving Ground, MD

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.200	0.300	30.520	0.652	0.990	A	A
1	CS137	30.700	0.200	28.230	0.701	1.087	A	A
1	GROSS ALPHA	0.488	0.031	0.534	0.053	0.914	A	A
1	GROSS BETA	1.260	0.050	1.300	0.130	0.969	A	A
1	MN54	41.200	0.300	38.530	0.867	1.069	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	49.300	3.000	51.167	1.941	0.964	A	A
1	BI212	32.800	4.900	53.430	5.215	0.614	A	A
1	BI214	46.500	3.400	53.933	2.249	0.862	W	A
1	CS137	1271.000	8.000	1326.670	66.510	0.958	A	A
1	K40	565.000	23.000	621.670	33.860	0.909	A	A
1	PB212	48.700	1.800	51.100	2.753	0.953	A	W
1	PB214	48.500	2.800	54.367	2.249	0.892	A	A
1	TH234	77.700	23.400	89.300	6.837	0.870	A	A
1	Ug U	7.590	0.060	7.829	0.755	0.969	A	

**Matrix:** WA Water Bq / L

1	GROSS ALPHA	429.000	24.000	375.000	37.500	1.144	W	A
1	GROSS BETA	869.000	27.000	1030.000	103.000	0.844	A	A
1	Ug U	0.107	0.001	0.112	0.007	0.958	A	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** AT ATL International inc., Germantown, MD

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.093	0.034	0.088	0.005	1.053	A	A
1	Bq U	0.557	0.052	0.608	0.005	0.917	A	A
1	CO60	31.290	3.235	30.520	0.652	1.025	A	A
1	CS137	29.335	4.320	28.230	0.701	1.039	A	A
1	GROSS ALPHA	0.498	0.030	0.534	0.053	0.933	A	A
1	GROSS BETA	1.258	0.041	1.300	0.130	0.968	A	A
1	MN54	40.365	7.080	38.530	0.867	1.048	A	A
1	PU238	0.059	0.008	0.057	0.001	1.028	A	A
1	PU239	0.188	0.023	0.187	0.003	1.003	A	A
1	SR90	4.431	0.241	4.832	0.184	0.917	A	W
1	U234	0.273	0.037	0.297	0.004	0.918	A	A
1	U238	0.271	0.037	0.298	0.004	0.909	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	47.827	11.660	51.167	1.941	0.935	A	W
1	AM241	14.203	2.008	10.927	0.373	1.300	A	A
1	BI214	50.568	4.490	53.933	2.249	0.938	A	
1	Bq U	176.919	14.299	194.769	15.642	0.908	A	A
1	CS137	1332.750	166.250	1326.670	66.510	1.005	A	A
1	K40	582.475	55.850	621.670	33.860	0.937	A	A
1	PB214	51.383	4.315	54.367	2.249	0.945	A	W
1	PU238	0.749	0.437	0.691	0.105	1.084	A	A
1	PU239	20.500	3.036	19.098	0.706	1.073	A	A
1	SR90	56.111	3.834	53.756	1.446	1.044	A	A
1	U234	84.350	9.897	93.885	7.767	0.898	A	A
1	U238	87.710	10.280	96.778	8.410	0.906	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.600	0.950	2.228	0.216	1.167	A	A
1	CO60	11.837	1.211	11.230	0.677	1.054	A	A
1	CS137	334.386	35.943	313.667	15.910	1.066	A	A
1	K40	929.586	91.500	864.330	47.220	1.075	A	A
1	PU239	3.013	0.732	3.543	0.377	0.850	A	A
1	SR90	553.177	31.334	586.280	11.140	0.944	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.107	0.346	1.474	0.021	0.751	N	W
1	Bq U	2.663	0.256	2.836	0.121	0.939	A	A
1	CO60	331.529	22.114	347.330	12.400	0.955	A	A
1	CS134	3.122	0.463	3.357	0.200	0.930	A	
1	CS137	54.073	5.691	56.067	2.929	0.964	A	A
1	GROSS ALPHA	331.500	17.500	375.000	37.500	0.884	A	A
1	GROSS BETA	901.000	48.650	1030.000	103.000	0.875	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 56 Results by Laboratory****Lab:** AT ATL International inc., Germantown, MD

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	H3	277.148	7.237	283.700	3.380	0.977	A	A
1	PU238	0.522	0.073	0.490	0.032	1.064	A	A
1	PU239	4.369	0.520	4.219	0.172	1.036	A	A
1	SR90	7.236	0.451	7.579	0.176	0.955	A	W
1	U234	1.321	0.184	1.402	0.056	0.942	A	A
1	U238	1.279	0.178	1.381	0.079	0.926	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** AU ORISE RSAT/ESSAP, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.900	1.400	30.520	0.652	1.012	A	A
1	CS137	29.200	1.500	28.230	0.701	1.034	A	A
1	GROSS ALPHA	0.840	0.040	0.534	0.053	1.573	N	W
1	GROSS BETA	1.290	0.080	1.300	0.130	0.992	A	A
1	MN54	40.800	1.800	38.530	0.867	1.059	A	A
1	U234	0.290	0.040	0.297	0.004	0.975	A	A
1	U238	0.290	0.040	0.298	0.004	0.973	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	55.000	6.900	51.167	1.941	1.075	A	A
1	AM241	10.800	1.600	10.927	0.373	0.988	A	A
1	BI212	57.000	13.000	53.430	5.215	1.067	A	A
1	BI214	52.600	5.400	53.933	2.249	0.975	A	A
1	CS137	1330.000	56.000	1326.670	66.510	1.003	A	A
1	K40	568.000	33.000	621.670	33.860	0.914	A	A
1	PB212	52.300	4.100	51.100	2.753	1.023	A	A
1	PB214	53.700	5.700	54.367	2.249	0.988	A	A
1	PU239	19.200	2.400	19.098	0.706	1.005	A	A
1	SR90	48.800	4.100	53.756	1.446	0.908	A	A
1	TH234	111.000	20.000	89.300	6.837	1.243	A	A
1	U234	91.900	11.700	93.885	7.767	0.979	A	A
1	U238	94.300	12.000	96.778	8.410	0.974	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.550	0.470	2.228	0.216	1.144	A	A
1	CM244	1.410	0.350	1.320	0.164	1.068	A	A
1	CO60	12.800	2.200	11.230	0.677	1.140	A	A
1	CS137	331.000	15.000	313.667	15.910	1.055	A	A
1	K40	823.000	45.000	864.330	47.220	0.952	A	A
1	PU239	4.090	0.630	3.543	0.377	1.154	W	A
1	SR90	579.000	20.000	586.280	11.140	0.988	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.630	0.200	1.474	0.021	1.106	A	A
1	CO60	358.000	13.000	347.330	12.400	1.031	A	A
1	CS134	3.100	1.400	3.357	0.200	0.923	A	
1	CS137	57.400	3.100	56.067	2.929	1.024	A	A
1	GROSS ALPHA	407.000	128.000	375.000	37.500	1.085	A	A
1	GROSS BETA	971.000	308.000	1030.000	103.000	0.943	A	A
1	H3	278.000	24.000	283.700	3.380	0.980	A	A
1	PU238	0.530	0.100	0.490	0.032	1.081	A	A
1	PU239	4.490	0.440	4.219	0.172	1.064	A	W
1	SR90	6.320	0.500	7.579	0.176	0.834	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 56 Results by Laboratory****Lab:** AU ORISE RSAT/ESSAP, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	U234	1.270	0.190	1.402	0.056	0.906	A	W
1	U238	1.290	0.200	1.381	0.079	0.934	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** AW Argonne West National Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	29.000	4.600	30.520	0.652	0.950	A	A
1	CS137	28.000	4.500	28.230	0.701	0.992	A	A
1	MN54	30.000	5.000	38.530	0.867	0.779	N	A

**Matrix:** WA Water Bq / L

1	CO60	351.000	28.000	347.330	12.400	1.011	A	A
1	CS134	3.100	0.600	3.357	0.200	0.923	A	A
1	CS137	57.000	5.100	56.067	2.929	1.017	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** BA Bettis Atomic Power Lab, West Mifflin, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.940	2.600	30.520	0.652	1.014	A	W
1	CS137	30.230	6.040	28.230	0.701	1.071	A	W
1	MN54	42.190	6.780	38.530	0.867	1.095	A	W

**Matrix:** SO Soil Bq / kg

1	CS137	1434.440	238.730	1326.670	66.510	1.081	A	N
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**Matrix:** VE Vegetation Bq / kg

1	CS137	368.520	66.820	313.667	15.910	1.175	A	N
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**Matrix:** WA Water Bq / L

1	CO60	343.760	27.420	347.330	12.400	0.990	A	A
1	CS137	56.030	9.880	56.067	2.929	0.999	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** BE Grand Junction Office Analytical Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.087	0.005	0.088	0.005	0.990	A	A
1	CO60	36.000	2.000	30.520	0.652	1.180	W	A
1	CS137	31.000	2.000	28.230	0.701	1.098	A	A
1	GROSS ALPHA	0.542	0.056	0.534	0.053	1.015	A	A
1	GROSS BETA	1.290	0.130	1.300	0.130	0.992	A	A
1	MN54	43.000	8.000	38.530	0.867	1.116	A	A
1	PU238	0.057	0.005	0.057	0.001	0.996	A	A
1	PU239	0.191	0.014	0.187	0.003	1.019	A	A
1	SR90	4.260	0.250	4.832	0.184	0.882	A	A
1	U234	0.285	0.026	0.297	0.004	0.958	A	A
1	U238	0.281	0.026	0.298	0.004	0.943	A	A
1	Ug U	22.700		24.105	0.103	0.942	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	46.000	10.000	51.167	1.941	0.899	A	A
1	AM241	11.600	0.640	10.927	0.373	1.062	A	A
1	BI212	58.000	22.000	53.430	5.215	1.086	A	A
1	BI214	55.000	8.000	53.933	2.249	1.020	A	A
1	CS137	1240.000	172.000	1326.670	66.510	0.935	A	W
1	K40	482.000	70.000	621.670	33.860	0.775	N	A
1	PB212	62.000	18.000	51.100	2.753	1.213	W	A
1	PU239	20.530	1.480	19.098	0.706	1.075	A	A
1	SR90	50.000	4.200	53.756	1.446	0.930	A	A
1	U234	90.700	8.200	93.885	7.767	0.966	A	A
1	U238	91.300	8.200	96.778	8.410	0.943	A	A
1	Ug U	7.800		7.829	0.755	0.996	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.300	0.140	2.228	0.216	1.032	A	A
1	CM244	1.240	0.092	1.320	0.164	0.939	A	A
1	CO60	13.000	2.000	11.230	0.677	1.158	A	A
1	CS137	319.000	44.000	313.667	15.910	1.017	A	A
1	K40	800.000	116.000	864.330	47.220	0.926	A	W
1	PU239	3.520	0.270	3.543	0.377	0.993	A	A
1	SR90	580.000	30.000	586.280	11.140	0.989	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.473	0.070	1.474	0.021	1.000	A	A
1	CO60	322.000	28.000	347.330	12.400	0.927	A	A
1	CS134	2.000	1.000	3.357	0.200	0.596	N	
1	CS137	45.000	10.000	56.067	2.929	0.803	W	A
1	GROSS ALPHA	361.000	40.000	375.000	37.500	0.963	A	A
1	GROSS BETA	930.000	55.000	1030.000	103.000	0.903	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 56 Results by Laboratory****Lab:** BE Grand Junction Office Analytical Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	H3	300.000	11.000	283.700	3.380	1.057	A	A
1	PU238	0.518	0.039	0.490	0.032	1.056	A	A
1	PU239	4.390	0.300	4.219	0.172	1.041	A	A
1	SR90	6.920	0.480	7.579	0.176	0.913	A	A
1	U234	1.260	0.120	1.402	0.056	0.899	W	A
1	U238	1.280	0.120	1.381	0.079	0.927	A	A
1	Ug U	0.104		0.112	0.007	0.931	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** BM Battelle Memorial Institute, Columbus, OH

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.093	0.015	0.088	0.005	1.051	A	A
1	CO60	31.500	3.040	30.520	0.652	1.032	A	A
1	CS137	29.400	3.630	28.230	0.701	1.041	A	A
1	PU238	0.059	0.009	0.057	0.001	1.026	A	A
1	PU239	0.194	0.027	0.187	0.003	1.035	A	A
1	SR90	4.470	0.080	4.832	0.184	0.925	A	A
1	U234	0.304	0.039	0.297	0.004	1.022	A	A
1	U238	0.302	0.039	0.298	0.004	1.013	A	A

**Matrix:** SO Soil Bq / kg

1	AM241	12.260	2.860	10.927	0.373	1.122	A	A
1	CS137	1540.000	192.000	1326.670	66.510	1.161	W	A
1	PU239	20.330	3.120	19.098	0.706	1.065	A	A
1	SR90	47.960	4.080	53.756	1.446	0.892	A	A
1	U234	96.150	15.530	93.885	7.767	1.024	A	A
1	U238	99.910	16.040	96.778	8.410	1.032	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	12.300	1.720	11.230	0.677	1.095	A	A
1	CS137	356.000	45.000	313.667	15.910	1.135	A	A
1	PU239	3.120	0.680	3.543	0.377	0.881	A	A
1	SR90	561.000	16.000	586.280	11.140	0.957	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.510	0.280	1.474	0.021	1.025	A	W
1	CO60	344.000	29.000	347.330	12.400	0.990	A	A
1	CS137	56.900	7.000	56.067	2.929	1.015	A	A
1	PU238	0.480	0.079	0.490	0.032	0.979	A	A
1	PU239	4.280	0.590	4.219	0.172	1.014	A	A
1	SR90	6.870	0.820	7.579	0.176	0.906	A	A
1	U234	1.330	0.180	1.402	0.056	0.949	A	A
1	U238	1.310	0.180	1.381	0.079	0.948	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** BN U.S. Department of Energy

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.200	1.000	30.520	0.652	0.990	A	A
1	CS137	32.900	2.100	28.230	0.701	1.165	A	A
1	GROSS ALPHA	0.470	0.040	0.534	0.053	0.880	A	
1	GROSS BETA	1.140	0.050	1.300	0.130	0.877	A	
1	MN54	43.000	2.100	38.530	0.867	1.116	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	47.500	5.800	51.167	1.941	0.928	A	A
1	BI212	30.600	3.200	53.430	5.215	0.573	W	
1	BI214	50.300	5.400	53.933	2.249	0.933	A	A
1	CS137	1394.900	61.300	1326.670	66.510	1.051	A	A
1	K40	536.500	33.600	621.670	33.860	0.863	W	A
1	PB212	49.500	1.500	51.100	2.753	0.969	A	A
1	PB214	52.500	3.200	54.367	2.249	0.966	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	9.800	0.700	11.230	0.677	0.873	W	A
1	CS137	319.100	47.100	313.667	15.910	1.017	A	A
1	K40	756.000	157.000	864.330	47.220	0.875	W	A

**Matrix:** WA Water Bq / L

1	CO60	355.700	5.420	347.330	12.400	1.024	A	A
1	CS134	3.500	0.180	3.357	0.200	1.043	A	
1	CS137	60.700	1.600	56.067	2.929	1.083	A	A
1	GROSS ALPHA	288.000	89.100	375.000	37.500	0.768	W	N
1	GROSS BETA	887.400	120.200	1030.000	103.000	0.862	A	A
1	H3	307.400	21.600	283.700	3.380	1.084	A	A
1	SR90	5.820	0.220	7.579	0.176	0.768	W	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** BP Battelle Pacific Northwest National Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.082	0.004	0.088	0.005	0.929	A
1	CO60	32.000	0.300	30.520	0.652	1.048	A
1	CS137	30.500	0.500	28.230	0.701	1.080	A
1	GROSS ALPHA	0.540	0.020	0.534	0.053	1.011	A
1	GROSS BETA	1.180	0.030	1.300	0.130	0.908	A
1	MN54	40.100	0.500	38.530	0.867	1.041	A
1	PU238	0.059	0.003	0.057	0.001	1.028	A
1	PU239	0.167	0.005	0.187	0.003	0.891	A
1	Ug U	22.400	0.900	24.105	0.103	0.929	A

**Matrix:** WA Water Bq / L

1	AM241	1.340	0.030	1.474	0.021	0.909	A
1	Bq U	2.590	0.100	2.836	0.121	0.913	A
1	CO60	345.000	10.000	347.330	12.400	0.993	A
1	CS134	3.620	0.470	3.357	0.200	1.078	A
1	CS137	56.200	1.700	56.067	2.929	1.002	A
1	GROSS ALPHA	318.000	16.000	375.000	37.500	0.848	A
1	GROSS BETA	857.000	43.000	1030.000	103.000	0.832	A
1	H3	256.000	24.000	283.700	3.380	0.902	A
1	PU238	0.500	0.020	0.490	0.032	1.020	A
1	PU239	4.160	0.120	4.219	0.172	0.986	A
1	SR90	5.510	0.170	7.579	0.176	0.727	W

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

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

**QAP 56 Results by Laboratory****Lab:** BQ Becquerel Laboratories Inc., Mississauga, Ontario, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.000	2.000	30.520	0.652	0.983	A	N
1	CS137	33.000	2.000	28.230	0.701	1.169	A	N
1	GROSS ALPHA	0.550	0.040	0.534	0.053	1.030	A	A
1	GROSS BETA	1.220	0.080	1.300	0.130	0.938	A	N
1	MN54	35.000	2.000	38.530	0.867	0.908	A	N
1	SR90	1.180	0.080	4.832	0.184	0.244	N	
1	U234	0.230	0.020	0.297	0.004	0.773	N	
1	U238	0.240	0.020	0.298	0.004	0.805	W	
1	Ug U	25.000	2.000	24.105	0.103	1.037	A	N

**Matrix:** SO Soil Bq / kg

1	AC228	56.000	8.000	51.167	1.941	1.094	A	W
1	BI212	88.000	20.000	53.430	5.215	1.647	N	
1	BI214	52.000	5.000	53.933	2.249	0.964	A	N
1	CS137	1290.000	90.000	1326.670	66.510	0.972	A	A
1	K40	619.000	76.000	621.670	33.860	0.996	A	A
1	PB212	58.000	4.000	51.100	2.753	1.135	A	A
1	PB214	65.000	10.000	54.367	2.249	1.196	A	N
1	TH234	100.000	20.000	89.300	6.837	1.120	A	
1	U234	87.000	5.000	93.885	7.767	0.927	A	
1	U238	85.000	5.000	96.778	8.410	0.878	A	
1	Ug U	7.000	0.500	7.829	0.755	0.894	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	49.000	22.000	11.230	0.677	4.363	N	N
1	CS137	350.000	24.000	313.667	15.910	1.116	A	A
1	K40	900.000	120.000	864.330	47.220	1.041	A	A
1	SR90	490.000	34.000	586.280	11.140	0.836	A	

**Matrix:** WA Water Bq / L

1	CO60	330.000	23.000	347.330	12.400	0.950	A	A
1	CS134	2.000	2.000	3.357	0.200	0.596	N	
1	CS137	49.000	3.000	56.067	2.929	0.874	W	A
1	GROSS ALPHA	380.000	20.000	375.000	37.500	1.013	A	N
1	GROSS BETA	750.000	52.000	1030.000	103.000	0.728	W	A
1	H3	280.000	19.000	283.700	3.380	0.987	A	W
1	SR90	4.100	0.300	7.579	0.176	0.541	N	
1	U234	1.160	0.080	1.402	0.056	0.828	W	
1	U238	1.100	0.080	1.381	0.079	0.796	N	
1	Ug U	0.111	0.008	0.112	0.007	0.994	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 56 Results by Laboratory****Lab:** BU Autoridad Regulatoria, Buenos Aires, Argentina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	Bq U	0.580	0.030	0.608	0.005	0.955	A	A
1	CO60	30.000	1.500	30.520	0.652	0.983	A	A
1	CS137	28.000	1.400	28.230	0.701	0.992	A	A
1	GROSS ALPHA	0.530	0.015	0.534	0.053	0.993	A	
1	MN54	38.000	1.700	38.530	0.867	0.986	A	A
1	PU238	0.046	0.005	0.057	0.001	0.801	W	A
1	PU239	0.180	0.009	0.187	0.003	0.961	A	A
1	U234	0.270	0.014	0.297	0.004	0.908	A	A
1	U238	0.290	0.014	0.298	0.004	0.973	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	54.000	10.000	51.167	1.941	1.055	A	A
1	AM241	9.500	1.000	10.927	0.373	0.869	W	A
1	BI212	54.000	10.000	53.430	5.215	1.011	A	A
1	Bq U	161.000	8.000	194.769	15.642	0.827	A	A
1	CS137	1320.000	60.000	1326.670	66.510	0.995	A	A
1	K40	590.000	30.000	621.670	33.860	0.949	A	A
1	PB212	52.000	10.000	51.100	2.753	1.018	A	A
1	PU238	0.520	0.030	0.691	0.105	0.753	W	A
1	PU239	20.000	1.000	19.098	0.706	1.047	A	A
1	U234	76.000	3.800	93.885	7.767	0.810	W	A
1	U238	79.000	4.000	96.778	8.410	0.816	W	A
1	Ug U	6.730	0.650	7.829	0.755	0.860	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.300	0.100	2.228	0.216	1.032	A	A
1	CM244	1.090	0.060	1.320	0.164	0.826	A	A
1	CO60	11.800	0.600	11.230	0.677	1.051	A	A
1	CS137	315.000	16.000	313.667	15.910	1.004	A	A
1	K40	860.000	45.000	864.330	47.220	0.995	A	A
1	PU238	0.200	0.030	0.257	0.046	0.779	A	A
1	PU239	3.300	0.370	3.543	0.377	0.931	A	A
1	SR90	551.100	19.800	586.280	11.140	0.940	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.010	0.050	1.474	0.021	0.685	N	A
1	Bq U	2.800	0.140	2.836	0.121	0.987	A	A
1	CO60	350.000	18.000	347.330	12.400	1.008	A	A
1	CS134	3.500	0.700	3.357	0.200	1.043	A	
1	CS137	56.000	2.800	56.067	2.929	0.999	A	A
1	GROSS ALPHA	372.000	30.000	375.000	37.500	0.992	A	
1	H3	283.600	8.600	283.700	3.380	1.000	A	
1	PU238	0.500	0.030	0.490	0.032	1.020	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 56 Results by Laboratory****Lab:** BU Autoridad Regulatoria, Buenos Aires, Argentina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU239	4.300	0.200	4.219	0.172	1.019	A	W
1	U234	1.350	0.070	1.402	0.056	0.963	A	A
1	U238	1.330	0.070	1.381	0.079	0.963	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** BX BWX Technologies, Inc., Lynchburg, VA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.082	0.017	0.088	0.005	0.932	A	A
1	CO60	30.000	1.600	30.520	0.652	0.983	A	A
1	CS137	27.300	1.200	28.230	0.701	0.967	A	A
1	GROSS ALPHA	0.539	0.034	0.534	0.053	1.009	A	A
1	GROSS BETA	1.180	0.040	1.300	0.130	0.908	A	W
1	MN54	38.100	3.000	38.530	0.867	0.989	A	A
1	PU238	0.059	0.009	0.057	0.001	1.029	A	A
1	PU239	0.192	0.020	0.187	0.003	1.025	A	A
1	SR90	4.140	0.210	4.832	0.184	0.857	A	A
1	U234	0.358	0.036	0.297	0.004	1.204	A	A
1	U238	0.358	0.035	0.298	0.004	1.201	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	47.000	6.800	51.167	1.941	0.919	A	W
1	AM241	8.580	0.880	10.927	0.373	0.785	W	A
1	BI212	38.100	10.100	53.430	5.215	0.713	A	A
1	BI214	46.600	6.200	53.933	2.249	0.864	W	A
1	CS137	1400.000	140.000	1326.670	66.510	1.055	A	A
1	K40	592.000	63.000	621.670	33.860	0.952	A	A
1	PB212	57.400	6.200	51.100	2.753	1.123	A	A
1	PB214	50.000	8.600	54.367	2.249	0.920	A	A
1	PU239	15.700	1.400	19.098	0.706	0.822	W	A
1	SR90	47.700	5.500	53.756	1.446	0.887	A	W
1	TH234	121.000	20.000	89.300	6.837	1.355	A	N
1	U234	91.700	8.000	93.885	7.767	0.977	A	A
1	U238	98.700	8.600	96.778	8.410	1.020	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.160	0.650	2.228	0.216	0.969	A	A
1	CM244	1.240	0.900	1.320	0.164	0.939	A	A
1	CO60	13.700	1.900	11.230	0.677	1.220	A	A
1	CS137	360.000	41.000	313.667	15.910	1.148	A	A
1	K40	947.000	96.000	864.330	47.220	1.096	A	A
1	PU239	2.360	0.430	3.543	0.377	0.666	N	A
1	SR90	556.000	18.000	586.280	11.140	0.948	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.450	0.180	1.474	0.021	0.984	A	A
1	CO60	368.000	15.000	347.330	12.400	1.060	A	A
1	CS134	3.160	1.210	3.357	0.200	0.941	A	
1	CS137	55.900	2.300	56.067	2.929	0.997	A	A
1	GROSS ALPHA	468.000	27.000	375.000	37.500	1.248	W	A
1	GROSS BETA	899.000	30.000	1030.000	103.000	0.873	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 56 Results by Laboratory****Lab:** BX BWX Technologies, Inc., Lynchburg, VA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	H3	335.000	21.000	283.700	3.380	1.181	A	A
1	PU238	0.526	0.055	0.490	0.032	1.073	A	A
1	PU239	4.400	0.370	4.219	0.172	1.043	A	A
1	SR90	6.670	0.360	7.579	0.176	0.880	A	A
1	U234	1.670	0.140	1.402	0.056	1.191	W	A
1	U238	1.620	0.140	1.381	0.079	1.173	W	A

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

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

**QAP 56 Results by Laboratory****Lab:** CA Canadian Nuclear Safety Commission, Ottawa, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.600	3.200	30.520	0.652	1.035	A	A
1	CS137	31.200	3.100	28.230	0.701	1.105	A	A
1	GROSS ALPHA	0.480	0.050	0.534	0.053	0.899	A	A
1	GROSS BETA	1.300	0.100	1.300	0.130	1.000	A	A
1	MN54	41.700	4.200	38.530	0.867	1.082	A	A

**Matrix:** SO Soil Bq / kg

1	Ug U	7.900	0.800	7.829	0.755	1.009	A	A
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**Matrix:** WA Water Bq / L

1	CO60	332.000	33.000	347.330	12.400	0.956	A	A
1	CS137	56.000	5.000	56.067	2.929	0.999	A	A
1	GROSS BETA	1400.000	100.000	1030.000	103.000	1.359	W	A
1	H3	265.000	27.000	283.700	3.380	0.934	A	A
1	Ug U	0.126	0.013	0.112	0.007	1.128	W	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** CB Radiation Protection Bureau, Ontario, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.103	0.024	0.088	0.005	1.170	A	A
1	CO60	32.600	0.800	30.520	0.652	1.068	A	A
1	CS137	32.400	1.100	28.230	0.701	1.148	A	A
1	MN54	44.300	1.400	38.530	0.867	1.150	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.557	0.307	1.474	0.021	1.057	A	A
1	CO60	329.800	12.700	347.330	12.400	0.950	A	A
1	CS134	2.920	0.340	3.357	0.200	0.870	W	
1	CS137	56.200	3.400	56.067	2.929	1.002	A	A
1	H3	289.000	14.000	283.700	3.380	1.019	A	A
2	H3	316.000	14.000	283.700	3.380	1.114	A	A
2	SR90	6.950	0.210	7.579	0.176	0.917	A	A
1	SR90	6.840	0.210	7.579	0.176	0.903	A	A
2	Ug U	0.106	0.008	0.112	0.007	0.949	A	A
1	Ug U	0.108	0.008	0.112	0.007	0.967	A	A
3	Ug U	0.107	0.008	0.112	0.007	0.958	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** CD Centrale nucleaire Gentilly-2

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.000	1.000	30.520	0.652	1.048	A	A
1	CS137	32.000	2.000	28.230	0.701	1.134	A	W
1	GROSS BETA	1.300	0.200	1.300	0.130	1.000	A	W
1	MN54	43.000	2.000	38.530	0.867	1.116	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	45.000	3.000	51.167	1.941	0.879	A	A
1	BI212	54.000	8.000	53.430	5.215	1.011	A	A
1	BI214	46.000	2.000	53.933	2.249	0.853	W	A
1	CS137	1310.000	40.000	1326.670	66.510	0.987	A	A
1	K40	590.000	20.000	621.670	33.860	0.949	A	A
1	PB212	50.000	2.000	51.100	2.753	0.978	A	A
1	PB214	47.000	3.000	54.367	2.249	0.864	W	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.300	0.900	11.230	0.677	1.006	A	A
1	CS137	340.000	10.000	313.667	15.910	1.084	A	A
1	K40	930.000	30.000	864.330	47.220	1.076	A	A

**Matrix:** WA Water Bq / L

1	CO60	338.000	9.000	347.330	12.400	0.973	A	A
1	CS134	3.400	1.000	3.357	0.200	1.013	A	
1	CS137	55.000	2.000	56.067	2.929	0.981	A	A
1	GROSS BETA	900.000	90.000	1030.000	103.000	0.874	A	A
1	H3	295.000	20.000	283.700	3.380	1.040	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** CE Environmental Monitoring Laboratory, New Brunswick, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	29.000	1.200	30.520	0.652	0.950	A	A
1	CS137	28.000	1.600	28.230	0.701	0.992	A	A
1	GROSS ALPHA	0.480	0.030	0.534	0.053	0.899	A	A
1	GROSS BETA	1.200	0.050	1.300	0.130	0.923	A	A
1	MN54	39.000	2.300	38.530	0.867	1.012	A	A
1	SR90	3.600	0.070	4.832	0.184	0.745	W	A

**Matrix:** SO Soil Bq / kg

1	CS137	1170.000	68.000	1326.670	66.510	0.882	W	W
1	K40	567.000	48.000	621.670	33.860	0.912	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	14.000	2.000	11.230	0.677	1.247	W	A
1	CS137	361.000	23.000	313.667	15.910	1.151	A	A
1	K40	964.000	87.000	864.330	47.220	1.115	A	A

**Matrix:** WA Water Bq / L

1	CO60	319.000	15.000	347.330	12.400	0.918	A	A
1	CS137	52.000	4.000	56.067	2.929	0.927	A	A
1	GROSS ALPHA	303.000	24.000	375.000	37.500	0.808	A	W
1	GROSS BETA	930.000	52.000	1030.000	103.000	0.903	A	A
1	H3	262.000	11.000	283.700	3.380	0.924	A	A
1	SR90	5.700	0.400	7.579	0.176	0.752	W	N

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** CF Freshwater Institute Radiochemistry Winnipeg, Manitoba, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

2	BI214	45.100	1.100	53.933	2.249	0.836	W	
1	BI214	44.500	1.500	53.933	2.249	0.825	W	
2	CS137	1241.000	3.700	1326.670	66.510	0.935	A	A
3	CS137	1223.000	2.700	1326.670	66.510	0.922	A	A
1	CS137	1236.000	3.700	1326.670	66.510	0.932	A	A
1	PB214	45.000	1.800	54.367	2.249	0.828	W	A
3	U234	83.300	5.500	93.885	7.767	0.887	A	A
1	U234	87.900	5.200	93.885	7.767	0.936	A	A
2	U234	97.300	6.000	93.885	7.767	1.036	A	A
3	U238	93.800	6.100	96.778	8.410	0.969	A	A
2	U238	100.300	6.200	96.778	8.410	1.036	A	A
1	U238	95.500	5.600	96.778	8.410	0.987	A	A

**Matrix:** VE Vegetation Bq / kg

3	CO60	11.000	1.700	11.230	0.677	0.980	A	A
2	CO60	10.800	1.200	11.230	0.677	0.962	A	A
1	CO60	10.900	1.400	11.230	0.677	0.971	A	A
1	CS137	1077.000	8.600	313.667	15.910	3.434	N	A
2	CS137	1077.000	7.500	313.667	15.910	3.434	N	A
3	CS137	1026.000	6.200	313.667	15.910	3.271	N	A

**Matrix:** WA Water Bq / L

3	CO60	345.700	1.700	347.330	12.400	0.995	A	A
2	CO60	342.600	1.000	347.330	12.400	0.986	A	A
1	CO60	343.300	1.700	347.330	12.400	0.988	A	A
3	CS134	3.180	0.160	3.357	0.200	0.947	A	
2	CS134	2.840	0.100	3.357	0.200	0.846	W	
1	CS134	2.310	0.140	3.357	0.200	0.688	N	
3	CS137	55.600	0.600	56.067	2.929	0.992	A	A
2	CS137	54.800	0.400	56.067	2.929	0.977	A	A
1	CS137	54.800	0.500	56.067	2.929	0.977	A	A
3	U234	1.020	0.060	1.402	0.056	0.728	N	W
1	U234	1.070	0.070	1.402	0.056	0.763	N	W
2	U234	1.190	0.090	1.402	0.056	0.849	W	W
1	U238	1.080	0.070	1.381	0.079	0.782	N	A
2	U238	1.250	0.090	1.381	0.079	0.905	A	A
3	U238	1.070	1.070	1.381	0.079	0.775	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 56 Results by Laboratory****Lab:** CG AECL WL Environmental Monitoring Group, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.600	0.900	30.520	0.652	1.003	A	W
1	CS137	28.200	0.800	28.230	0.701	0.999	A	W
1	GROSS ALPHA	0.670	0.020	0.534	0.053	1.255	W	
1	GROSS BETA	1.080	0.050	1.300	0.130	0.831	W	
1	MN54	42.200	1.400	38.530	0.867	1.095	A	W

**Matrix:** SO Soil Bq / kg

1	CS137	1297.000	61.000	1326.670	66.510	0.978	A	A
1	K40	599.000	168.000	621.670	33.860	0.964	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	15.000	10.000	11.230	0.677	1.336	W	W
1	CS137	308.000	36.000	313.667	15.910	0.982	A	A
1	K40	795.000	51.000	864.330	47.220	0.920	A	A

**Matrix:** WA Water Bq / L

1	CO60	358.000	3.100	347.330	12.400	1.031	A	A
1	CS134	2.530	0.750	3.357	0.200	0.754	N	
1	CS137	57.500	1.000	56.067	2.929	1.026	A	A
1	GROSS ALPHA	194.000	20.000	375.000	37.500	0.517	N	
1	GROSS BETA	805.000	27.000	1030.000	103.000	0.782	W	
1	H3	183.000	8.000	283.700	3.380	0.645	N	A
1	Ug U	0.119	0.004	0.112	0.007	1.065	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter, g, or mL}$ .  $\text{pCi/g or mL} = \text{Bq} \times 0.027$** **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 56 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> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.027	0.010	0.088	0.005	0.307	N	A
1	CO60	32.050	0.338	30.520	0.652	1.050	A	A
1	CS137	29.660	0.264	28.230	0.701	1.051	A	A
1	GROSS ALPHA	0.547	0.036	0.534	0.053	1.024	A	N
1	GROSS BETA	1.111	0.040	1.300	0.130	0.855	A	N
1	MN54	40.960	0.332	38.530	0.867	1.063	A	A
1	PU238	0.012	0.008	0.057	0.001	0.215	N	A
1	PU239	0.043	0.004	0.187	0.003	0.231	N	A
1	SR90	12.190	0.683	4.832	0.184	2.523	N	A
1	U234	0.056	0.016	0.297	0.004	0.190	N	A
1	U238	0.064	0.016	0.298	0.004	0.214	N	W

**Matrix:** SO Soil Bq / kg

1	AC228	53.500	4.110	51.167	1.941	1.046	A	A
1	AM241	12.040	1.756	10.927	0.373	1.102	A	A
1	BI212	56.300	11.050	53.430	5.215	1.054	A	W
1	BI214	52.000	2.990	53.933	2.249	0.964	A	A
1	CS137	1448.000	6.380	1326.670	66.510	1.091	A	A
1	K40	659.000	19.900	621.670	33.860	1.060	A	A
1	PB212	55.500	2.089	51.100	2.753	1.086	A	A
1	PB214	56.700	3.770	54.367	2.249	1.043	A	A
1	PU239	20.330	1.990	19.098	0.706	1.065	A	A
1	SR90	51.170	10.880	53.756	1.446	0.952	A	A
1	TH234	101.900	37.260	89.300	6.837	1.141	A	A
1	U234	79.360	5.720	93.885	7.767	0.845	A	A
1	U238	84.820	6.030	96.778	8.410	0.876	A	A
1	Ug U	5.940	0.594	7.829	0.755	0.759	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.980	0.300	2.228	0.216	1.337	A	A
1	CM244	1.380	0.160	1.320	0.164	1.045	A	A
1	CO60	12.100	1.500	11.230	0.677	1.077	A	A
1	CS137	321.800	3.900	313.667	15.910	1.026	A	A
1	K40	965.400	31.400	864.330	47.220	1.117	A	A
1	PU239	7.020	0.570	3.543	0.377	1.981	N	A
1	SR90	508.800	16.800	586.280	11.140	0.868	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.556	0.127	1.474	0.021	1.056	A	A
1	CO60	345.700	3.310	347.330	12.400	0.995	A	A
1	CS134	3.370	0.700	3.357	0.200	1.004	A	
1	CS137	54.880	1.470	56.067	2.929	0.979	A	A
1	GROSS ALPHA	344.700	42.200	375.000	37.500	0.919	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 56 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> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS BETA	982.500	46.100	1030.000	103.000	0.954	A	A
1	H3	293.300	11.750	283.700	3.380	1.034	A	A
1	PU238	0.513	0.051	0.490	0.032	1.046	A	A
1	PU239	4.409	0.304	4.219	0.172	1.045	A	A
1	SR90	7.315	0.586	7.579	0.176	0.965	A	A
1	U234	1.266	0.102	1.402	0.056	0.903	A	A
1	U238	1.261	0.101	1.381	0.079	0.913	A	A
1	Ug U	0.103	0.010	0.112	0.007	0.922	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** CL Enviro-Test Laboratories, Casper, WY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.110	0.030	0.088	0.005	1.246	A	A
1	CO60	29.900	0.100	30.520	0.652	0.980	A	A
1	CS137	28.200	0.100	28.230	0.701	0.999	A	A
1	GROSS ALPHA	0.630	0.020	0.534	0.053	1.180	A	
1	GROSS BETA	1.660	0.060	1.300	0.130	1.277	W	
1	MN54	39.400	0.100	38.530	0.867	1.023	A	A
1	PU238	0.010	0.030	0.057	0.001	0.174	N	W
1	PU239	0.150	0.040	0.187	0.003	0.800	W	W
1	SR90	4.300	0.500	4.832	0.184	0.890	A	A
1	U234	0.290	0.050	0.297	0.004	0.975	A	A
1	U238	0.270	0.050	0.298	0.004	0.906	A	W
1	Ug U	0.026	0.001	24.105	0.103	0.001	N	

**Matrix:** SO Soil Bq / kg

1	AC228	55.700	2.200	51.167	1.941	1.089	A	A
1	AM241	15.500	8.100	10.927	0.373	1.419	A	W
1	BI212	68.300	9.500	53.430	5.215	1.278	W	N
1	BI214	48.200	2.200	53.933	2.249	0.894	A	A
1	CS137	1480.000	4.200	1326.670	66.510	1.116	A	A
1	K40	737.000	18.300	621.670	33.860	1.186	A	A
1	PB212	60.300	1.600	51.100	2.753	1.180	A	A
1	PB214	48.300	2.300	54.367	2.249	0.888	A	A
1	PU239	11.000	8.700	19.098	0.706	0.576	N	
1	SR90	18.200	31.000	53.756	1.446	0.339	N	
1	TH234	130.000	17.300	89.300	6.837	1.456	A	A
1	U234	74.400	13.500	93.885	7.767	0.792	W	W
1	U238	85.500	14.500	96.778	8.410	0.883	A	A
1	Ug U	0.005	0.001	7.829	0.755	0.001	N	

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.800	4.500	2.228	0.216	1.257	A	A
1	CM244	1.400	2.500	1.320	0.164	1.061	A	N
1	CO60	15.100	1.300	11.230	0.677	1.345	W	A
1	CS137	395.000	3.400	313.667	15.910	1.259	W	A
1	K40	1130.000	34.700	864.330	47.220	1.307	W	A
1	SR90	483.000	54.000	586.280	11.140	0.824	A	A

**Matrix:** WA Water Bq / L

1	AM241	2.800	4.500	1.474	0.021	1.900	N	A
1	CO60	342.000	0.700	347.330	12.400	0.985	A	A
1	CS134	3.000	0.200	3.357	0.200	0.894	W	
1	CS137	56.500	0.500	56.067	2.929	1.008	A	A
1	GROSS ALPHA	356.000	24.100	375.000	37.500	0.949	A	

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

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

**QAP 56 Results by Laboratory****Lab:** CL Enviro-Test Laboratories, Casper, WY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS BETA	1210.000	65.700	1030.000	103.000	1.175	A	
1	H3	409.000	15.100	283.700	3.380	1.442	W	W
1	PU238	0.400	0.100	0.490	0.032	0.816	W	W
1	PU239	4.000	0.500	4.219	0.172	0.948	A	A
1	SR90	5.900	0.800	7.579	0.176	0.779	W	W
1	U234	1.300	0.100	1.402	0.056	0.927	A	A
1	U238	1.300	0.100	1.381	0.079	0.941	A	A
1	Ug U	0.100	0.010	0.112	0.007	0.895	W	

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

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

**QAP 56 Results by Laboratory****Lab:** CM Metropolitan Water Reclamation District of Greater Chicago

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	46.600	1.100	51.167	1.941	0.911	A	A
2	AC228	46.600	1.100	51.167	1.941	0.911	A	A
2	BI212	29.300	2.000	53.430	5.215	0.548	W	W
1	BI212	28.300	1.900	53.430	5.215	0.530	W	W
1	BI214	46.800	1.100	53.933	2.249	0.868	W	A
2	BI214	50.800	1.200	53.933	2.249	0.942	A	A
2	CS137	1221.000	29.000	1326.670	66.510	0.920	A	A
1	CS137	1199.000	28.000	1326.670	66.510	0.904	A	A
2	K40	577.000	18.000	621.670	33.860	0.928	A	A
1	K40	577.000	18.000	621.670	33.860	0.928	A	A
1	PB212	46.000	1.600	51.100	2.753	0.900	A	W
2	PB212	45.500	1.500	51.100	2.753	0.890	A	W
2	PB214	54.900	1.400	54.367	2.249	1.010	A	A
1	PB214	52.500	1.100	54.367	2.249	0.966	A	A

**Matrix:** WA Water Bq / L

1	CO60	345.000	5.000	347.330	12.400	0.993	A	A
2	CO60	343.000	5.000	347.330	12.400	0.988	A	A
1	CS134	3.000	0.100	3.357	0.200	0.894	W	
2	CS134	3.100	0.100	3.357	0.200	0.923	A	
2	CS137	55.300	1.200	56.067	2.929	0.986	A	A
1	CS137	54.800	1.200	56.067	2.929	0.977	A	A
2	GROSS ALPHA	482.000	15.000	375.000	37.500	1.285	W	W
1	GROSS ALPHA	512.000	15.500	375.000	37.500	1.365	N	W
2	GROSS BETA	1180.000	15.000	1030.000	103.000	1.146	A	A
1	GROSS BETA	1182.000	15.000	1030.000	103.000	1.148	A	A
2	H3	257.000	3.000	283.700	3.380	0.906	A	A
1	H3	261.000	3.100	283.700	3.380	0.920	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** CN China Institute for Radiation Protection

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	29.580	1.910	30.520	0.652	0.969	A	A
1	CS137	29.260	1.890	28.230	0.701	1.036	A	A
1	MN54	42.240	2.720	38.530	0.867	1.096	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	45.790	4.360	51.167	1.941	0.895	A	A
1	BI214	50.860	3.580	53.933	2.249	0.943	A	A
1	CS137	1380.000	88.000	1326.670	66.510	1.040	A	A
1	K40	558.800	45.400	621.670	33.860	0.899	W	A
1	PB212	44.240	4.290	51.100	2.753	0.866	W	A
1	PB214	52.600	3.790	54.367	2.249	0.968	A	A
1	TH234	96.610	6.720	89.300	6.837	1.082	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.940	1.130	11.230	0.677	1.063	A	A
1	CS137	331.800	21.500	313.667	15.910	1.058	A	A
1	K40	862.200	59.800	864.330	47.220	0.998	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** CP CoPhysics Corporation, Monroe, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.520	0.040	0.534	0.053	0.974	A
1	GROSS BETA	1.010	0.040	1.300	0.130	0.777	W

**Matrix:** SO Soil Bq / kg

1	AC228	74.000	6.000	51.167	1.941	1.446	N
1	BI212	77.000	6.000	53.430	5.215	1.441	N
1	BI214	63.000	5.000	53.933	2.249	1.168	A
1	CS137	1540.000	80.000	1326.670	66.510	1.161	W
1	K40	702.000	48.000	621.670	33.860	1.129	A
1	PB212	72.000	7.000	51.100	2.753	1.409	N
1	PB214	67.000	8.000	54.367	2.249	1.232	A

**Matrix:** WA Water Bq / L

1	CO60	374.000	15.000	347.330	12.400	1.077	A
1	CS134	3.800	0.600	3.357	0.200	1.132	A
1	CS137	65.300	3.700	56.067	2.929	1.165	W
1	GROSS ALPHA	388.000	21.000	375.000	37.500	1.035	A
1	GROSS BETA	1150.000	55.000	1030.000	103.000	1.117	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** CR Atomic Energy of Canada, Chalk River Laboratories, Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	64.000	1.000	51.167	1.941	1.251	W
1	BI212	73.000	7.000	53.430	5.215	1.366	N
1	BI214	62.000	1.000	53.933	2.249	1.150	A
1	CS137	1360.000	20.000	1326.670	66.510	1.025	A
1	K40	700.000	20.000	621.670	33.860	1.126	A
1	PB212	57.000	1.000	51.100	2.753	1.115	A
1	PB214	59.000	1.000	54.367	2.249	1.085	A
1	TH234	1700.000	90.000	89.300	6.837	19.037	N

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.900	0.700	11.230	0.677	1.060	A
1	CS137	358.000	5.000	313.667	15.910	1.141	A
1	K40	1029.000	24.000	864.330	47.220	1.191	A

**Matrix:** WA Water Bq / L

1	AM241	1.800	0.100	1.474	0.021	1.221	W
1	CO60	360.000	2.000	347.330	12.400	1.036	A
1	CS134	2.800	0.100	3.357	0.200	0.834	W
1	CS137	59.300	0.700	56.067	2.929	1.058	A
1	GROSS ALPHA	352.000	4.000	375.000	37.500	0.939	A
1	GROSS BETA	960.000	30.000	1030.000	103.000	0.932	A
1	H3	528.000	51.000	283.700	3.380	1.861	W
1	PU238	0.470	0.020	0.490	0.032	0.958	A
1	PU239	3.970	0.050	4.219	0.172	0.941	A
1	SR90	5.800	0.200	7.579	0.176	0.765	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** CS Rocketdyne Propulsion & Power, Canoga Park, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	35.170	5.700	51.167	1.941	0.687	N	A
1	AM241	9.140	1.560	10.927	0.373	0.836	W	
1	BI212	21.680	3.740	53.430	5.215	0.406	N	W
1	CS137	1177.000	184.800	1326.670	66.510	0.887	W	A
1	K40	520.100	82.340	621.670	33.860	0.837	W	A
1	PB212	42.870	6.790	51.100	2.753	0.839	W	A
1	PB214	48.070	7.540	54.367	2.249	0.884	A	A
1	TH234	74.430	13.220	89.300	6.837	0.833	A	

**Matrix:** VE Vegetation Bq / kg

1	CS137	318.500	97.860	313.667	15.910	1.015	A	A
1	K40	803.400	247.500	864.330	47.220	0.930	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.030	0.190	1.474	0.021	0.699	N	
1	CO60	342.900	25.460	347.330	12.400	0.987	A	
1	CS137	60.080	4.580	56.067	2.929	1.072	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** CU Universite Laval, Quebec Canada

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.200	0.300	30.520	0.652	0.990	A	A
1	CS137	28.600	0.300	28.230	0.701	1.013	A	A
1	GROSS ALPHA	0.560	0.050	0.534	0.053	1.049	A	A
1	MN54	39.200	0.400	38.530	0.867	1.017	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	48.500	5.000	51.167	1.941	0.948	A	A
1	BI212	47.000	4.000	53.430	5.215	0.880	A	A
1	BI214	45.700	3.000	53.933	2.249	0.847	W	A
1	CS137	1361.000	50.000	1326.670	66.510	1.026	A	A
1	K40	605.000	30.000	621.670	33.860	0.973	A	A
1	PB212	49.500	4.000	51.100	2.753	0.969	A	A
1	PB214	50.800	3.000	54.367	2.249	0.934	A	W

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.500	2.000	11.230	0.677	1.024	A	N
1	CS137	326.000	25.000	313.667	15.910	1.039	A	N
1	K40	884.000	50.000	864.330	47.220	1.023	A	N

**Matrix:** WA Water Bq / L

1	CO60	355.000	3.000	347.330	12.400	1.022	A	A
1	CS134	3.600	0.200	3.357	0.200	1.072	A	
1	CS137	52.000	2.000	56.067	2.929	0.927	A	A
1	H3	273.000	5.000	283.700	3.380	0.962	A	A
1	SR90	8.900	0.300	7.579	0.176	1.174	W	

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

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

**QAP 56 Results by Laboratory****Lab:** CW Carlsbad Environmental Monitoring Research Center, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.092	0.002	0.088	0.005	1.042	A	A
1	CO60	31.080	0.920	30.520	0.652	1.018	A	A
1	CS137	29.400	1.000	28.230	0.701	1.041	A	A
1	MN54	38.500	1.200	38.530	0.867	0.999	A	A
1	PU238	0.061	0.002	0.057	0.001	1.062	A	A
1	PU239	0.195	0.004	0.187	0.003	1.041	A	A
1	SR90	4.260	0.090	4.832	0.184	0.882	A	
1	U234	0.296	0.008	0.297	0.004	0.995	A	A
1	U238	0.292	0.008	0.298	0.004	0.980	A	A
1	Ug U	22.300	1.100	24.105	0.103	0.925	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	48.100	2.100	51.167	1.941	0.940	A	A
1	AM241	11.490	0.380	10.927	0.373	1.052	A	A
1	BI212	46.400	3.100	53.430	5.215	0.868	A	A
1	BI214	50.500	1.800	53.933	2.249	0.936	A	A
1	CS137	1229.000	28.000	1326.670	66.510	0.926	A	A
1	K40	528.000	18.000	621.670	33.860	0.849	W	A
1	PB212	48.000	1.200	51.100	2.753	0.939	A	A
1	PB214	49.300	1.500	54.367	2.249	0.907	A	A
1	PU238	0.713	0.047	0.691	0.105	1.032	A	A
1	PU239	19.290	0.300	19.098	0.706	1.010	A	A
1	SR90	48.300	1.000	53.756	1.446	0.899	A	
1	U234	87.400	1.400	93.885	7.767	0.931	A	A
1	U238	93.500	1.500	96.778	8.410	0.966	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.441	0.067	2.228	0.216	1.095	A	A
1	CM244	1.108	0.044	1.320	0.164	0.839	A	A
1	CO60	11.900	0.700	11.230	0.677	1.060	A	A
1	CS137	323.000	10.000	313.667	15.910	1.030	A	A
1	K40	865.000	34.000	864.330	47.220	1.001	A	A
1	PU238	0.275	0.024	0.257	0.046	1.072	A	A
1	PU239	3.511	0.098	3.543	0.377	0.991	A	A
1	SR90	560.000	17.000	586.280	11.140	0.955	A	

**Matrix:** WA Water Bq / L

1	AM241	1.580	0.033	1.474	0.021	1.072	A	A
1	CO60	352.000	6.000	347.330	12.400	1.013	A	A
1	CS137	55.200	1.300	56.067	2.929	0.985	A	A
1	GROSS ALPHA	365.000	11.000	375.000	37.500	0.973	A	A
1	GROSS BETA	859.000	16.000	1030.000	103.000	0.834	A	A
1	PU238	0.520	0.016	0.490	0.032	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 56 Results by Laboratory****Lab:** CW Carlsbad Environmental Monitoring Research Center, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU239	4.385	0.080	4.219	0.172	1.039	A	A
1	SR90	6.930	0.250	7.579	0.176	0.914	A	
1	U234	1.325	0.043	1.402	0.056	0.945	A	A
1	U238	1.321	0.043	1.381	0.079	0.956	A	A
1	Ug U	0.109	0.005	0.112	0.007	0.976	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** CZ ACZ Laboratories, Inc. Steamboat Springs, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS ALPHA	425.000	22.000	375.000	37.500	1.133	W
2	GROSS ALPHA	420.000	34.000	375.000	37.500	1.120	A
3	GROSS ALPHA	420.000	34.000	375.000	37.500	1.120	A
3	GROSS BETA	914.000	34.000	1030.000	103.000	0.887	A
1	GROSS BETA	1147.000	29.000	1030.000	103.000	1.114	A
2	GROSS BETA	919.000	34.000	1030.000	103.000	0.892	A

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

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

**QAP 56 Results by Laboratory****Lab:** EC Envirocare of Utah

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

4	AM241	0.140	0.080	0.088	0.005	1.586	W	A
3	AM241	0.140	0.060	0.088	0.005	1.586	W	A
5	AM241	0.130	0.070	0.088	0.005	1.472	W	A
2	AM241	0.100	0.060	0.088	0.005	1.133	A	A
1	AM241	0.150	0.070	0.088	0.005	1.699	W	A
4	CO60	32.000	1.090	30.520	0.652	1.048	A	W
5	CO60	30.680	1.560	30.520	0.652	1.005	A	W
3	CO60	33.100	1.150	30.520	0.652	1.085	A	W
2	CO60	31.100	0.980	30.520	0.652	1.019	A	W
1	CO60	26.500	3.000	30.520	0.652	0.868	W	W
5	CS137	32.280	2.860	28.230	0.701	1.143	A	W
2	CS137	31.700	1.760	28.230	0.701	1.123	A	W
3	CS137	34.800	2.130	28.230	0.701	1.233	W	W
4	CS137	33.400	1.450	28.230	0.701	1.183	W	W
1	CS137	29.200	2.880	28.230	0.701	1.034	A	W
1	GROSS ALPHA	0.550	0.050	0.534	0.053	1.030	A	A
2	GROSS ALPHA	0.480	0.050	0.534	0.053	0.899	A	A
3	GROSS ALPHA	0.610	0.060	0.534	0.053	1.142	A	A
4	GROSS ALPHA	0.620	0.060	0.534	0.053	1.161	A	A
5	GROSS ALPHA	0.790	0.080	0.534	0.053	1.479	N	A
2	GROSS BETA	2.900	0.300	1.300	0.130	2.231	N	N
5	GROSS BETA	2.800	0.300	1.300	0.130	2.154	N	N
4	GROSS BETA	2.910	0.300	1.300	0.130	2.238	N	N
1	GROSS BETA	2.700	0.300	1.300	0.130	2.077	N	N
3	GROSS BETA	2.570	0.300	1.300	0.130	1.977	N	N
3	MN54	46.000	2.260	38.530	0.867	1.194	W	W
5	MN54	43.330	2.710	38.530	0.867	1.125	A	W
1	MN54	38.500	4.710	38.530	0.867	0.999	A	W
2	MN54	43.200	2.010	38.530	0.867	1.121	A	W
4	MN54	45.600	1.870	38.530	0.867	1.183	A	W

**Matrix:** SO Soil Bq / kg

1	AC228	58.900	2.160	51.167	1.941	1.151	A	A
5	AC228	58.300	2.110	51.167	1.941	1.139	A	A
4	AC228	59.600	2.120	51.167	1.941	1.165	A	A
3	AC228	58.600	2.180	51.167	1.941	1.145	A	A
2	AC228	58.100	2.140	51.167	1.941	1.136	A	A
5	AM241	15.500	1.550	10.927	0.373	1.419	A	A
4	AM241	15.000	1.520	10.927	0.373	1.373	A	A
3	AM241	15.900	1.580	10.927	0.373	1.455	A	A
2	AM241	15.300	1.560	10.927	0.373	1.400	A	A
1	AM241	15.600	1.560	10.927	0.373	1.428	A	A
4	BI212	48.680	7.160	53.430	5.215	0.911	A	A
5	BI212	48.000	7.110	53.430	5.215	0.898	A	A
2	BI212	49.200	7.380	53.430	5.215	0.921	A	A
3	BI212	45.980	6.920	53.430	5.215	0.861	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 56 Results by Laboratory****Lab:** EC Envirocare of Utah

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	BI212	46.950	6.920	53.430	5.215	0.879	A	A
3	BI214	67.400	2.650	53.933	2.249	1.250	W	A
4	BI214	65.400	3.920	53.933	2.249	1.213	A	A
2	BI214	64.400	2.560	53.933	2.249	1.194	A	A
1	BI214	66.100	2.600	53.933	2.249	1.226	A	A
5	BI214	65.500	2.590	53.933	2.249	1.214	A	A
5	CS137	1338.750	60.400	1326.670	66.510	1.009	A	A
4	CS137	1350.650	60.900	1326.670	66.510	1.018	A	A
3	CS137	1354.900	61.100	1326.670	66.510	1.021	A	A
2	CS137	1349.800	60.800	1326.670	66.510	1.017	A	A
1	CS137	1346.400	60.700	1326.670	66.510	1.015	A	A
1	K40	585.340	36.600	621.670	33.860	0.942	A	A
3	K40	588.800	36.800	621.670	33.860	0.947	A	A
4	K40	592.240	36.900	621.670	33.860	0.953	A	A
5	K40	589.760	36.800	621.670	33.860	0.949	A	A
2	K40	583.280	36.500	621.670	33.860	0.938	A	A
1	PB212	47.400	3.860	51.100	2.753	0.928	A	A
3	PB212	48.980	3.970	51.100	2.753	0.959	A	A
2	PB212	47.550	3.660	51.100	2.753	0.931	A	A
4	PB212	48.080	3.920	51.100	2.753	0.941	A	A
5	PB212	46.500	4.080	51.100	2.753	0.910	A	A
3	PB214	71.300	3.370	54.367	2.249	1.311	W	A
5	PB214	68.700	3.250	54.367	2.249	1.264	A	A
4	PB214	71.500	3.340	54.367	2.249	1.315	W	A
1	PB214	69.900	3.290	54.367	2.249	1.286	W	A
2	PB214	70.100	3.310	54.367	2.249	1.289	W	A
2	TH234	117.200	56.900	89.300	6.837	1.312	A	A
1	TH234	125.300	60.700	89.300	6.837	1.403	A	A
3	TH234	121.800	59.000	89.300	6.837	1.364	A	A
4	TH234	119.900	58.100	89.300	6.837	1.343	A	A
5	TH234	123.700	59.900	89.300	6.837	1.385	A	A

**Matrix:** WA Water Bq / L

4	AM241	1.560	0.450	1.474	0.021	1.059	A	A
3	AM241	1.450	0.410	1.474	0.021	0.984	A	A
1	AM241	1.600	0.450	1.474	0.021	1.086	A	A
2	AM241	1.610	0.460	1.474	0.021	1.092	A	A
5	AM241	1.550	0.450	1.474	0.021	1.052	A	A
3	CO60	362.000	9.920	347.330	12.400	1.042	A	A
2	CO60	363.300	9.950	347.330	12.400	1.046	A	A
5	CO60	363.000	9.940	347.330	12.400	1.045	A	A
4	CO60	362.900	9.940	347.330	12.400	1.045	A	A
1	CO60	361.700	9.910	347.330	12.400	1.041	A	A
1	CS134	3.240	0.560	3.357	0.200	0.965	A	
5	CS134	3.120	0.490	3.357	0.200	0.929	A	
2	CS134	3.050	0.470	3.357	0.200	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 56 Results by Laboratory****Lab:** EC Envirocare of Utah

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
3	CS134	2.960	0.520	3.357	0.200	0.882	W	
4	CS134	3.340	0.500	3.357	0.200	0.995	A	
3	CS137	56.700	2.410	56.067	2.929	1.011	A	A
2	CS137	56.900	2.420	56.067	2.929	1.015	A	A
5	CS137	57.200	2.440	56.067	2.929	1.020	A	A
4	CS137	57.200	2.430	56.067	2.929	1.020	A	A
1	CS137	56.600	2.410	56.067	2.929	1.010	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** EG INEEL TRA Radioanalytical Laboratory, Scoville

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.092	0.007	0.088	0.005	1.042	A	
1	CO60	33.300	2.000	30.520	0.652	1.091	A	A
1	CS137	31.000	2.000	28.230	0.701	1.098	A	A
1	MN54	43.700	3.000	38.530	0.867	1.134	A	A
1	PU238	0.063	0.005	0.057	0.001	1.097	A	
1	PU239	0.208	0.013	0.187	0.003	1.110	A	
1	SR90	4.080	0.130	4.832	0.184	0.844	A	
1	U234	0.289	0.020	0.297	0.004	0.972	A	
1	U238	0.294	0.020	0.298	0.004	0.986	A	

**Matrix:** SO Soil Bq / kg

1	AC228	58.000	10.000	51.167	1.941	1.134	A	W
1	AM241	11.400	0.900	10.927	0.373	1.043	A	
1	BI212	61.000	24.000	53.430	5.215	1.142	A	A
1	BI214	39.000	7.000	53.933	2.249	0.723	N	A
1	CS137	1370.000	100.000	1326.670	66.510	1.033	A	A
1	K40	490.000	80.000	621.670	33.860	0.788	N	A
1	PB212	62.000	6.000	51.100	2.753	1.213	W	A
1	PB214	65.000	8.000	54.367	2.249	1.196	A	W
1	PU239	22.400	1.900	19.098	0.706	1.173	W	
1	SR90	51.800	2.800	53.756	1.446	0.964	A	
1	TH234	124.000	26.000	89.300	6.837	1.389	A	A
1	U234	84.200	5.300	93.885	7.767	0.897	A	
1	U238	86.900	5.600	96.778	8.410	0.898	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.400	0.180	2.228	0.216	1.077	A	
1	CM244	1.300	0.110	1.320	0.164	0.985	A	
1	CO60	9.100	1.900	11.230	0.677	0.810	W	W
1	CS137	317.000	25.000	313.667	15.910	1.011	A	A
1	K40	740.000	100.000	864.330	47.220	0.856	W	A
1	PU238	0.250	0.040	0.257	0.046	0.974	A	
1	PU239	3.540	0.250	3.543	0.377	0.999	A	
1	SR90	520.000	17.000	586.280	11.140	0.887	A	

**Matrix:** WA Water Bq / L

1	AM241	1.570	0.100	1.474	0.021	1.065	A	A
1	CO60	360.000	30.000	347.330	12.400	1.036	A	A
1	CS134	3.000	0.400	3.357	0.200	0.894	W	
1	CS137	57.000	4.000	56.067	2.929	1.017	A	A
1	GROSS ALPHA	360.000	29.000	375.000	37.500	0.960	A	A
1	GROSS BETA	1080.000	58.000	1030.000	103.000	1.049	A	A
1	PU238	0.480	0.037	0.490	0.032	0.979	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 56 Results by Laboratory****Lab:** EG INEEL TRA Radioanalytical Laboratory, Scoville

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU239	4.490	0.270	4.219	0.172	1.064	A	A
1	SR90	6.520	0.280	7.579	0.176	0.860	A	
1	U234	1.270	0.070	1.402	0.056	0.906	A	W
1	U238	1.300	0.070	1.381	0.079	0.941	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** EI Eichrom Technologies, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.029	0.018	0.088	0.005	0.328	N
1	PU239	0.220	0.010	0.187	0.003	1.174	W
1	U234	0.306	0.019	0.297	0.004	1.029	A
1	U238	0.293	0.018	0.298	0.004	0.983	A

**Matrix:** SO Soil Bq / kg

1	AM241	12.250	1.700	10.927	0.373	1.121	A
1	PU239	20.780	1.650	19.098	0.706	1.088	A
1	U234	80.710	4.380	93.885	7.767	0.860	A
1	U238	80.720	4.370	96.778	8.410	0.834	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** EP US EPA, Las Vegas

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.440	1.570	30.520	0.652	1.030	A	A
1	CS137	29.370	1.670	28.230	0.701	1.040	A	A
1	MN54	39.650	2.150	38.530	0.867	1.029	A	A

**Matrix:** WA Water Bq / L

1	CO60	360.330	17.640	347.330	12.400	1.037	A	A
1	CS134	3.200	0.530	3.357	0.200	0.953	A	
1	CS137	58.640	3.410	56.067	2.929	1.046	A	A
1	H3	276.200	8.960	283.700	3.380	0.974	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** FE Fernald WPRAP Field Office, Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	U234	0.302	0.020	0.297	0.004	1.015	A	A
1	U238	0.311	0.011	0.298	0.004	1.044	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	61.790	2.093	51.167	1.941	1.208	W	A
1	AM241	13.690	1.238	10.927	0.373	1.253	A	
1	BI214	46.928	4.700	53.933	2.249	0.870	A	A
1	CS137	1417.100	47.273	1326.670	66.510	1.068	A	A
1	K40	614.817	29.823	621.670	33.860	0.989	A	A
1	PB212	52.972	3.855	51.100	2.753	1.037	A	A
1	PB214	43.598	8.218	54.367	2.249	0.802	W	A
1	TH234	107.730	8.128	89.300	6.837	1.206	A	A

**Matrix:** WA Water Bq / L

1	CO60	356.266	6.990	347.330	12.400	1.026	A	A
1	CS137	62.116	2.019	56.067	2.929	1.108	A	A
1	U234	1.410	0.056	1.402	0.056	1.006	A	A
1	U238	1.415	0.050	1.381	0.079	1.024	A	A
1	Ug U	0.097	0.001	0.112	0.007	0.869	W	A

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

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

**QAP 56 Results by Laboratory****Lab:** FG FGL Environmental, Santa Paula, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	58.900	7.600	51.167	1.941	1.151	A	A
1	BI212	44.250	14.100	53.430	5.215	0.828	A	A
1	BI214	55.500	4.900	53.933	2.249	1.029	A	A
1	CS137	1222.000	59.300	1326.670	66.510	0.921	A	A
1	K40	668.000	86.500	621.670	33.860	1.075	A	W
1	PB212	59.900	6.760	51.100	2.753	1.172	A	A
1	PB214	52.600	5.500	54.367	2.249	0.968	A	W

**Matrix:** WA Water Bq / L

1	Bq U	1.210	0.300	2.836	0.121	0.427	N	
1	CO60	346.600	69.900	347.330	12.400	0.998	A	A
1	CS134	3.020	0.750	3.357	0.200	0.900	A	
1	CS137	56.560	8.800	56.067	2.929	1.009	A	A
1	GROSS ALPHA	356.500	35.000	375.000	37.500	0.951	A	A
1	GROSS BETA	940.000	51.000	1030.000	103.000	0.913	A	A
1	H3	260.600	10.100	283.700	3.380	0.919	A	W
1	U234	0.616	0.050	1.402	0.056	0.439	N	
1	U238	0.589	0.050	1.381	0.079	0.426	N	

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

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

**QAP 56 Results by Laboratory****Lab:** FL Florida Dept of Health & Rehab. Serv., Orlando

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.110	0.026	0.088	0.005	1.246	A	W
1	CO60	34.370	0.180	30.520	0.652	1.126	W	W
1	CS137	29.210	0.160	28.230	0.701	1.035	A	N
1	GROSS ALPHA	0.440	0.020	0.534	0.053	0.824	W	W
1	GROSS BETA	1.220	0.030	1.300	0.130	0.938	A	A
1	MN54	87.870	0.290	38.530	0.867	2.281	N	W

**Matrix:** SO Soil Bq / kg

1	AC228	47.200	0.820	51.167	1.941	0.922	A	A
1	AM241	0.650	0.010	10.927	0.373	0.059	N	A
1	BI212	59.570	3.280	53.430	5.215	1.115	A	W
1	BI214	49.850	0.400	53.933	2.249	0.924	A	A
1	CS137	1327.000	4.000	1326.670	66.510	1.000	A	A
1	K40	603.500	4.160	621.670	33.860	0.971	A	A
1	PB212	48.110	0.990	51.100	2.753	0.941	A	A
1	PB214	53.840	1.170	54.367	2.249	0.990	A	A
1	TH234	17.790	1.890	89.300	6.837	0.199	N	A
1	U238	4.360	0.070	96.778	8.410	0.045	N	W

**Matrix:** VE Vegetation Bq / kg

1	AM241	0.283	0.038	2.228	0.216	0.127	N	A
1	CO60	1.092	0.027	11.230	0.677	0.097	N	A
1	CS137	30.770	0.220	313.667	15.910	0.098	N	A
1	K40	82.940	1.480	864.330	47.220	0.096	N	A

**Matrix:** WA Water Bq / L

1	AM241	1.920	0.250	1.474	0.021	1.303	W	
1	CO60	345.100	0.420	347.330	12.400	0.994	A	A
1	CS134	3.440	0.160	3.357	0.200	1.025	A	
1	CS137	57.300	0.230	56.067	2.929	1.022	A	A
1	GROSS ALPHA	655.090	16.640	375.000	37.500	1.747	N	A
1	GROSS BETA	1177.970	14.830	1030.000	103.000	1.144	A	A
1	H3	301.560	5.140	283.700	3.380	1.063	A	A
1	SR90	6.470	0.310	7.579	0.176	0.854	A	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** FM Florida Mobile Emergency Radiological Laboratory, Orlando

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

3	AM241	0.170	0.050	0.088	0.005	1.925	W	
2	AM241	0.160	0.060	0.088	0.005	1.812	W	
1	AM241	0.120	0.040	0.088	0.005	1.359	W	
1	CO60	32.300	0.500	30.520	0.652	1.058	A	A
3	CO60	31.300	0.500	30.520	0.652	1.026	A	A
2	CO60	31.500	0.500	30.520	0.652	1.032	A	A
1	CS137	31.700	0.700	28.230	0.701	1.123	A	A
3	CS137	30.900	0.700	28.230	0.701	1.095	A	A
2	CS137	31.500	0.700	28.230	0.701	1.116	A	A
3	MN54	42.000	0.900	38.530	0.867	1.090	A	A
1	MN54	43.200	0.900	38.530	0.867	1.121	A	A
2	MN54	43.100	0.900	38.530	0.867	1.119	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.800	0.600	1.474	0.021	1.221	W	W
3	AM241	1.800	0.500	1.474	0.021	1.221	W	W
2	AM241	1.400	0.400	1.474	0.021	0.950	A	W
1	CO60	354.000	5.000	347.330	12.400	1.019	A	A
3	CO60	357.000	5.000	347.330	12.400	1.028	A	A
2	CO60	349.000	5.000	347.330	12.400	1.005	A	A
2	CS134	3.700	0.200	3.357	0.200	1.102	A	
3	CS134	3.300	0.200	3.357	0.200	0.983	A	
1	CS134	3.300	0.200	3.357	0.200	0.983	A	
1	CS137	61.000	1.000	56.067	2.929	1.088	A	A
2	CS137	58.000	1.000	56.067	2.929	1.034	A	A
3	CS137	60.000	1.000	56.067	2.929	1.070	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** FN Fermi Lab, Batavia, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.400	1.700	30.520	0.652	1.062	A	A
1	CS137	30.100	2.300	28.230	0.701	1.066	A	A
1	GROSS ALPHA	0.550	0.080	0.534	0.053	1.030	A	A
1	GROSS BETA	1.430	0.210	1.300	0.130	1.100	A	A
1	MN54	39.400	3.000	38.530	0.867	1.023	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	47.200	2.900	51.167	1.941	0.922	A	W
1	BI212	55.100	17.000	53.430	5.215	1.031	A	A
1	BI214	55.800	3.300	53.933	2.249	1.035	A	A
1	CS137	1249.000	110.000	1326.670	66.510	0.941	A	A
1	K40	568.000	51.000	621.670	33.860	0.914	A	W
1	PB212	44.800	4.000	51.100	2.753	0.877	W	W
1	PB214	56.300	3.700	54.367	2.249	1.036	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	12.800	1.000	11.230	0.677	1.140	A	A
1	CS137	314.000	28.000	313.667	15.910	1.001	A	A
1	K40	884.000	80.000	864.330	47.220	1.023	A	A

**Matrix:** WA Water Bq / L

1	CO60	362.000	23.000	347.330	12.400	1.042	A	A
1	CS134	3.700	0.450	3.357	0.200	1.102	A	
1	CS137	56.100	5.100	56.067	2.929	1.001	A	A
1	GROSS ALPHA	366.000	12.000	375.000	37.500	0.976	A	A
1	GROSS BETA	1087.000	28.000	1030.000	103.000	1.055	A	A
1	H3	263.000	5.000	283.700	3.380	0.927	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** FR CEA/SACLAY - SPR/SRSE, France

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	53.000	8.000	51.167	1.941	1.036	A	A
1	AM241	13.000	4.000	10.927	0.373	1.190	A	A
1	BI212	50.000	10.000	53.430	5.215	0.936	A	A
1	BI214	55.000	8.000	53.933	2.249	1.020	A	A
1	CS137	1400.000	170.000	1326.670	66.510	1.055	A	A
1	K40	670.000	100.000	621.670	33.860	1.078	A	A
1	PB212	58.000	9.000	51.100	2.753	1.135	A	A
1	PB214	67.000	10.000	54.367	2.249	1.232	A	A
1	TH234	93.000	50.000	89.300	6.837	1.041	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.400	0.700	2.228	0.216	1.077	A	A
1	CO60	12.000	2.000	11.230	0.677	1.069	A	A
1	CS137	320.000	45.000	313.667	15.910	1.020	A	A
1	K40	920.000	110.000	864.330	47.220	1.064	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.400	0.500	1.474	0.021	0.950	A	
1	CO60	341.000	34.000	347.330	12.400	0.982	A	
1	CS134	2.700	1.400	3.357	0.200	0.804	W	
1	CS137	56.000	6.000	56.067	2.929	0.999	A	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** FS Florida State University, Tallahassee

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	51.300	2.200	51.167	1.941	1.003	A	A
1	AM241	11.300	1.400	10.927	0.373	1.034	A	A
1	BI214	57.600	1.100	53.933	2.249	1.068	A	A
1	CS137	1385.400	2.200	1326.670	66.510	1.044	A	A
1	K40	607.500	4.500	621.670	33.860	0.977	A	A
1	TH234	75.600	14.900	89.300	6.837	0.847	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** FU FUSRAP Laboratory, Missouri

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix: SO Soil Bq / kg</b>								
1	AC228	48.310	2.290	51.167	1.941	0.944	A	A
5	AC228	46.210	2.020	51.167	1.941	0.903	A	A
4	AC228	48.990	2.430	51.167	1.941	0.957	A	A
3	AC228	47.670	2.010	51.167	1.941	0.932	A	A
2	AC228	48.590	2.810	51.167	1.941	0.950	A	A
2	AM241	11.650	1.320	10.927	0.373	1.066	A	
1	AM241	13.180	1.550	10.927	0.373	1.206	A	
2	BI212	44.600	6.660	53.430	5.215	0.835	A	A
3	BI212	39.190	4.960	53.430	5.215	0.733	A	A
4	BI212	52.280	4.940	53.430	5.215	0.978	A	A
1	BI212	48.170	6.830	53.430	5.215	0.902	A	A
5	BI212	51.380	5.270	53.430	5.215	0.962	A	A
4	BI214	49.250	1.980	53.933	2.249	0.913	A	A
3	BI214	42.840	1.510	53.933	2.249	0.794	W	A
2	BI214	43.580	1.810	53.933	2.249	0.808	W	A
1	BI214	44.740	1.770	53.933	2.249	0.830	W	A
5	BI214	45.810	1.720	53.933	2.249	0.849	W	A
3	CS137	1247.000	38.830	1326.670	66.510	0.940	A	A
5	CS137	1234.000	38.430	1326.670	66.510	0.930	A	A
1	CS137	1264.000	39.440	1326.670	66.510	0.953	A	A
2	CS137	1221.000	38.140	1326.670	66.510	0.920	A	A
4	CS137	1222.000	38.140	1326.670	66.510	0.921	A	A
4	K40	597.400	21.040	621.670	33.860	0.961	A	A
5	K40	608.500	20.380	621.670	33.860	0.979	A	A
3	K40	604.500	20.240	621.670	33.860	0.972	A	A
2	K40	593.000	21.940	621.670	33.860	0.954	A	A
1	K40	605.300	21.190	621.670	33.860	0.974	A	A
1	PB212	49.870	1.870	51.100	2.753	0.976	A	A
2	PB212	45.840	1.810	51.100	2.753	0.897	A	A
3	PB212	45.990	1.630	51.100	2.753	0.900	A	A
4	PB212	45.660	1.790	51.100	2.753	0.894	A	A
5	PB212	45.300	1.610	51.100	2.753	0.886	W	A
4	PB214	49.250	1.980	54.367	2.249	0.906	A	A
1	PB214	45.810	1.850	54.367	2.249	0.843	W	A
3	PB214	46.880	1.700	54.367	2.249	0.862	W	A
5	PB214	48.230	2.760	54.367	2.249	0.887	A	A
2	PB214	45.040	3.530	54.367	2.249	0.828	W	A
3	TH234	98.580	34.810	89.300	6.837	1.104	A	A
1	TH234	102.700	18.870	89.300	6.837	1.150	A	A
2	TH234	91.480	11.290	89.300	6.837	1.024	A	A
4	TH234	89.980	9.920	89.300	6.837	1.008	A	A
1	U234	85.130	7.610	93.885	7.767	0.907	A	A
2	U234	115.700	11.940	93.885	7.767	1.232	N	A
4	U234	101.900	11.490	93.885	7.767	1.085	A	A
3	U234	80.520	11.220	93.885	7.767	0.858	A	A
1	U238	79.260	7.150	96.778	8.410	0.819	W	A
2	U238	104.100	10.880	96.778	8.410	1.076	A	A
3	U238	94.250	12.780	96.778	8.410	0.974	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 56 Results by Laboratory****Lab:** FU FUSRAP Laboratory, Missouri

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> SO Soil Bq / kg								
4	U238	96.480	10.960	96.778	8.410	0.997	A	A
<b>Matrix:</b> VE Vegetation Bq / kg								
5	CO60	13.280	0.750	11.230	0.677	1.183	A	A
2	CO60	13.020	0.880	11.230	0.677	1.159	A	A
1	CO60	11.610	0.940	11.230	0.677	1.034	A	A
3	CO60	12.640	0.850	11.230	0.677	1.126	A	A
4	CO60	12.490	1.040	11.230	0.677	1.112	A	A
2	CS137	324.000	10.430	313.667	15.910	1.033	A	A
5	CS137	328.500	10.460	313.667	15.910	1.047	A	A
1	CS137	331.300	10.800	313.667	15.910	1.056	A	A
4	CS137	324.800	10.610	313.667	15.910	1.035	A	A
3	CS137	327.000	10.520	313.667	15.910	1.043	A	A
3	K40	966.500	34.790	864.330	47.220	1.118	A	A
4	K40	965.000	38.950	864.330	47.220	1.116	A	A
5	K40	974.400	34.050	864.330	47.220	1.127	A	A
1	K40	940.600	36.150	864.330	47.220	1.088	A	A
2	K40	963.000	34.820	864.330	47.220	1.114	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** GA Lockheed Martin, Pikton, OH

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.110	0.015	0.088	0.005	1.246	A	A
1	CO60	30.000	1.400	30.520	0.652	0.983	A	A
1	CS137	28.000	2.000	28.230	0.701	0.992	A	A
1	MN54	38.200	2.800	38.530	0.867	0.991	A	A
1	PU238	0.052	0.009	0.057	0.001	0.906	A	A
1	PU239	0.210	0.002	0.187	0.003	1.121	W	W
1	SR90	4.725	0.335	4.832	0.184	0.978	A	A
1	U234	0.280	0.024	0.297	0.004	0.941	A	
1	U238	0.300	0.034	0.298	0.004	1.006	A	
1	Ug U	24.400	2.730	24.105	0.103	1.012	A	W

**Matrix:** SO Soil Bq / kg

1	AC228	45.400	9.500	51.167	1.941	0.887	A	A
1	AM241	12.000	3.040	10.927	0.373	1.098	A	A
1	BI212	29.200	17.500	53.430	5.215	0.547	W	
1	BI214	43.000	5.700	53.933	2.249	0.797	W	N
1	CS137	1248.000	88.000	1326.670	66.510	0.941	A	A
1	K40	554.000	50.000	621.670	33.860	0.891	W	W
1	PB212	53.700	5.100	51.100	2.753	1.051	A	A
1	PB214	49.000	10.400	54.367	2.249	0.901	A	N
1	PU239	19.300	2.090	19.098	0.706	1.011	A	W
1	TH234	76.200	29.700	89.300	6.837	0.853	A	
1	U234	83.400	4.770	93.885	7.767	0.888	A	
1	U238	85.000	6.720	96.778	8.410	0.878	A	
1	Ug U	6.890	0.540	7.829	0.755	0.880	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.800	0.699	2.228	0.216	1.257	A	A
1	CM244	1.640	0.579	1.320	0.164	1.242	A	A
1	CO60	13.400	3.100	11.230	0.677	1.193	A	A
1	CS137	325.000	25.000	313.667	15.910	1.036	A	A
1	K40	925.000	100.000	864.330	47.220	1.070	A	A
1	PU239	3.670	0.826	3.543	0.377	1.036	A	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** GC Georgia Power Company Environmental Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	CO60	30.630	1.450	30.520	0.652	1.004	A	A
1	CO60	29.040	1.330	30.520	0.652	0.952	A	A
2	CS137	29.800	1.480	28.230	0.701	1.056	A	A
1	CS137	29.450	1.390	28.230	0.701	1.043	A	A
2	MN54	39.300	1.950	38.530	0.867	1.020	A	A
1	MN54	39.200	1.840	38.530	0.867	1.017	A	A

**Matrix:** SO Soil Bq / kg

3	CS137	1131.000	47.900	1326.670	66.510	0.853	W	W
2	CS137	1115.000	45.900	1326.670	66.510	0.840	W	W
1	CS137	1132.000	45.600	1326.670	66.510	0.853	W	W
1	K40	587.000	42.400	621.670	33.860	0.944	A	A
2	K40	572.000	45.400	621.670	33.860	0.920	A	A
3	K40	597.000	33.700	621.670	33.860	0.960	A	A

**Matrix:** VE Vegetation Bq / kg

3	CO60	10.320	1.420	11.230	0.677	0.919	A	A
1	CO60	10.500	2.400	11.230	0.677	0.935	A	A
2	CO60	13.240	2.840	11.230	0.677	1.179	A	A
2	CS137	274.300	13.500	313.667	15.910	0.874	W	W
3	CS137	267.800	12.430	313.667	15.910	0.854	W	W
1	CS137	271.100	13.300	313.667	15.910	0.864	W	W
2	K40	938.500	69.600	864.330	47.220	1.086	A	A
3	K40	900.000	54.500	864.330	47.220	1.041	A	A
1	K40	943.730	70.600	864.330	47.220	1.092	A	A

**Matrix:** WA Water Bq / L

3	CO60	339.900	14.430	347.330	12.400	0.979	A	A
2	CO60	340.500	14.150	347.330	12.400	0.980	A	A
1	CO60	342.100	42.000	347.330	12.400	0.985	A	A
2	CS137	57.500	3.220	56.067	2.929	1.026	A	A
3	CS137	57.800	2.950	56.067	2.929	1.031	A	A
1	CS137	56.080	7.340	56.067	2.929	1.000	A	A
1	H3	288.000		283.700	3.380	1.015	A	A
1	SR90	6.750		7.579	0.176	0.891	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 56 Results by Laboratory****Lab:** GE General Engineering Labs, Charleston, SC

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.097	0.019	0.088	0.005	1.099	A	A
1	CO60	31.900	3.730	30.520	0.652	1.045	A	A
1	CS137	29.800	2.950	28.230	0.701	1.056	A	A
1	GROSS ALPHA	0.535	0.013	0.534	0.053	1.002	A	A
1	GROSS BETA	1.080	0.016	1.300	0.130	0.831	W	W
1	MN54	40.200	4.900	38.530	0.867	1.043	A	A
1	PU238	0.055	0.014	0.057	0.001	0.958	A	A
1	PU239	0.192	0.029	0.187	0.003	1.025	A	A
1	SR90	5.240	0.090	4.832	0.184	1.085	A	A
1	U234	0.277	0.048	0.297	0.004	0.931	A	A
1	U238	0.274	0.049	0.298	0.004	0.919	A	A
1	Ug U	25.000	0.832	24.105	0.103	1.037	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	51.200	8.540	51.167	1.941	1.001	A	
1	AM241	13.100	2.980	10.927	0.373	1.199	A	A
1	BI212	35.300	8.890	53.430	5.215	0.661	A	
1	BI214	43.900	6.840	53.933	2.249	0.814	W	
1	CS137	1399.000	192.000	1326.670	66.510	1.055	A	A
1	K40	651.200	74.400	621.670	33.860	1.048	A	A
1	PB212	48.000	10.600	51.100	2.753	0.939	A	
1	PB214	52.700	7.560	54.367	2.249	0.969	A	
1	PU239	19.700	2.460	19.098	0.706	1.032	A	A
1	SR90	67.100	3.090	53.756	1.446	1.248	A	W
1	TH234	108.800	36.030	89.300	6.837	1.218	A	
1	U234	82.900	9.570	93.885	7.767	0.883	A	W
1	U238	85.700	9.870	96.778	8.410	0.886	A	A
1	Ug U	7.700	0.173	7.829	0.755	0.984	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.430	0.340	2.228	0.216	1.091	A	A
1	CM244	1.390	0.231	1.320	0.164	1.053	A	A
1	CO60	12.700	2.070	11.230	0.677	1.131	A	A
1	CS137	335.000	38.600	313.667	15.910	1.068	A	A
1	K40	1000.000	112.000	864.330	47.220	1.157	A	A
1	PU239	3.460	0.500	3.543	0.377	0.976	A	A
1	SR90	611.000	7.760	586.280	11.140	1.042	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.540	0.169	1.474	0.021	1.045	A	A
1	CO60	356.000	38.700	347.330	12.400	1.025	A	A
1	CS134	2.730	0.659	3.357	0.200	0.813	W	
1	CS137	57.200	6.180	56.067	2.929	1.020	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 56 Results by Laboratory****Lab:** GE General Engineering Labs, Charleston, SC

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS ALPHA	483.000	20.500	375.000	37.500	1.288	W	W
1	GROSS BETA	1101.000	25.600	1030.000	103.000	1.069	A	A
1	H3	244.000	6.320	283.700	3.380	0.860	W	A
1	PU238	0.476	0.067	0.490	0.032	0.971	A	A
1	PU239	4.260	0.443	4.219	0.172	1.010	A	A
1	SR90	7.510	0.129	7.579	0.176	0.991	A	A
1	U234	1.220	0.134	1.402	0.056	0.870	W	W
1	U238	1.210	0.134	1.381	0.079	0.876	W	W
1	Ug U	0.108	0.004	0.112	0.007	0.967	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** GS USGS/NWQL, Arvada, CO

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS ALPHA	540.000	40.000	375.000	37.500	1.440	N	W
3	GROSS ALPHA	520.000	40.000	375.000	37.500	1.387	N	W
2	GROSS ALPHA	550.000	40.000	375.000	37.500	1.467	N	W
1	GROSS BETA	1140.000	40.000	1030.000	103.000	1.107	A	A
2	GROSS BETA	1230.000	50.000	1030.000	103.000	1.194	A	A
3	GROSS BETA	1180.000	40.000	1030.000	103.000	1.146	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** GT Georgia Institute of Technology

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.090	0.020	0.088	0.005	1.019	A	A
1	CO60	31.000	3.000	30.520	0.652	1.016	A	A
1	CS137	30.000	5.000	28.230	0.701	1.063	A	W
1	GROSS ALPHA	0.560	0.100	0.534	0.053	1.049	A	A
1	GROSS BETA	1.110	0.200	1.300	0.130	0.854	A	W
1	MN54	44.000	10.000	38.530	0.867	1.142	A	A
1	SR90	4.200	0.300	4.832	0.184	0.869	A	A

**Matrix:** SO Soil Bq / kg

1	AM241	15.300	3.800	10.927	0.373	1.400	A	A
1	CS137	1280.000	360.000	1326.670	66.510	0.965	A	A
1	K40	640.000	160.000	621.670	33.860	1.029	A	A
1	PU239	21.800	5.400	19.098	0.706	1.141	W	A
1	SR90	46.000	19.000	53.756	1.446	0.856	A	A
1	U238	91.000	23.000	96.778	8.410	0.940	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.100	0.500	2.228	0.216	0.942	A	W
1	CO60	14.000	4.000	11.230	0.677	1.247	W	A
1	CS137	330.000	30.000	313.667	15.910	1.052	A	W
1	K40	1100.000	100.000	864.330	47.220	1.273	W	A
1	PU239	3.800	0.900	3.543	0.377	1.072	A	A
1	SR90	470.000	50.000	586.280	11.140	0.802	A	W

**Matrix:** WA Water Bq / L

1	AM241	1.400	0.300	1.474	0.021	0.950	A	A
1	CO60	360.000	50.000	347.330	12.400	1.036	A	A
1	CS134	3.000	1.000	3.357	0.200	0.894	W	
1	CS137	53.000	12.000	56.067	2.929	0.945	A	A
1	GROSS ALPHA	360.000	50.000	375.000	37.500	0.960	A	A
1	GROSS BETA	910.000	100.000	1030.000	103.000	0.883	A	A
1	H3	275.000	30.000	283.700	3.380	0.969	A	A
1	PU238	0.480	0.100	0.490	0.032	0.979	A	A
1	PU239	4.200	0.800	4.219	0.172	0.995	A	A
1	SR90	7.100	0.800	7.579	0.176	0.937	A	A
1	U238	1.300	0.300	1.381	0.079	0.941	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** HC Lawrence Livermore Laboratory, California

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.670	0.030	0.534	0.053	1.255	W	A
1	GROSS BETA	1.350	0.040	1.300	0.130	1.038	A	A

**Matrix:** WA Water Bq / L

1	GROSS ALPHA	407.000	41.000	375.000	37.500	1.085	A	N
1	GROSS BETA	1005.000	111.000	1030.000	103.000	0.976	A	N
1	H3	281.000	14.000	283.700	3.380	0.990	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** HT Technical University, Budapest, Hungary

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	Bq U	181.300	15.000	194.769	15.642	0.931	A	W
1	U234	85.500	0.800	93.885	7.767	0.911	A	N
1	U238	90.000	0.800	96.778	8.410	0.930	A	W
1	Ug U	7.170	0.700	7.829	0.755	0.916	A	W

**Matrix:** WA Water Bq / L

1	Bq U	2.870	0.200	2.836	0.121	1.012	A	A
1	U234	1.410	0.100	1.402	0.056	1.006	A	A
1	U238	1.430	0.100	1.381	0.079	1.035	A	A
1	Ug U	. 0.112	0.010	0.112	0.007	1.003	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** HU Water Resources Research Centre (VITUKI), Hungary

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	28.400	1.100	30.520	0.652	0.931	A	A
1	CS137	26.850	1.650	28.230	0.701	0.951	A	A
1	MN54	37.100	1.700	38.530	0.867	0.963	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	50.300	1.200	51.167	1.941	0.983	A	A
1	AM241	7.620	1.700	10.927	0.373	0.697	W	W
1	BI212	44.900	4.700	53.430	5.215	0.840	A	A
1	BI214	51.600	1.400	53.933	2.249	0.957	A	A
1	CS137	1336.000	38.000	1326.670	66.510	1.007	A	A
1	K40	608.000	25.000	621.670	33.860	0.978	A	A
1	PB212	49.300	1.500	51.100	2.753	0.965	A	W
1	PB214	53.600	1.300	54.367	2.249	0.986	A	A
1	TH234	116.500	8.000	89.300	6.837	1.305	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	3.480	1.100	2.228	0.216	1.562	W	W
1	CO60	11.640	0.340	11.230	0.677	1.037	A	A
1	CS137	318.800	8.400	313.667	15.910	1.016	A	A
1	K40	920.000	65.000	864.330	47.220	1.064	A	A

**Matrix:** WA Water Bq / L

2	CO60	349.500	9.100	347.330	12.400	1.006	A	W
1	CO60	350.200	9.100	347.330	12.400	1.008	A	W
1	CS134	3.130	0.220	3.357	0.200	0.932	A	
2	CS134	2.700	0.260	3.357	0.200	0.804	W	
2	CS137	54.500	3.100	56.067	2.929	0.972	A	W
1	CS137	54.800	3.200	56.067	2.929	0.977	A	W
1	GROSS BETA	1100.000	100.000	1030.000	103.000	1.068	A	W
2	GROSS BETA	1250.000	110.000	1030.000	103.000	1.214	A	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** IL ISU Environmental Assessment Laboratory, Pocatello, ID

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	33.000	0.300	30.520	0.652	1.081	A	A
1	CS137	31.100	0.500	28.230	0.701	1.102	A	A
1	GROSS ALPHA	0.510	0.010	0.534	0.053	0.955	A	A
1	GROSS BETA	1.240	0.020	1.300	0.130	0.954	A	W
1	MN54	41.400	0.600	38.530	0.867	1.074	A	A

**Matrix:** WA Water Bq / L

1	CO60	359.700	3.700	347.330	12.400	1.036	A	A
1	CS134	3.100	0.100	3.357	0.200	0.923	A	
1	CS137	57.900	0.700	56.067	2.929	1.033	A	A
1	GROSS ALPHA	394.400	15.900	375.000	37.500	1.052	A	W
1	GROSS BETA	1078.800	25.100	1030.000	103.000	1.047	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** IN INEEL INTECH Radioanalytical Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.900	1.180	30.520	0.652	1.078	A	A
1	CS137	33.400	1.130	28.230	0.701	1.183	W	A
1	MN54	45.700	1.690	38.530	0.867	1.186	A	A

**Matrix:** SO Soil Bq / kg

1	AM241	14.210	3.220	10.927	0.373	1.300	A	W
1	CS137	1285.000	45.900	1326.670	66.510	0.969	A	A
1	K40	667.000	63.900	621.670	33.860	1.073	A	A
1	PU239	22.580	4.890	19.098	0.706	1.182	W	A
1	SR90	71.800	18.600	53.756	1.446	1.336	A	A
1	TH234	1274.000	409.000	89.300	6.837	14.267	N	
1	U234	86.100	16.600	93.885	7.767	0.917	A	
1	U238	95.900	19.280	96.778	8.410	0.991	A	

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.300	0.810	11.230	0.677	1.006	A	
1	CS137	328.500	13.600	313.667	15.910	1.047	A	
1	K40	1092.000	97.600	864.330	47.220	1.263	W	

**Matrix:** WA Water Bq / L

1	AM241	1.410	0.243	1.474	0.021	0.957	A	A
1	CO60	357.000	11.600	347.330	12.400	1.028	A	A
1	CS134	3.580	0.290	3.357	0.200	1.066	A	
1	CS137	58.000	2.200	56.067	2.929	1.034	A	A
1	PU238	0.514	0.112	0.490	0.032	1.048	A	W
1	PU239	4.290	0.690	4.219	0.172	1.017	A	A
1	SR90	7.070	0.470	7.579	0.176	0.933	A	W
1	U234	1.820	0.376	1.402	0.056	1.298	W	
1	U238	1.470	0.320	1.381	0.079	1.064	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** IO Illinois Department of Nuclear Safety

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.300	4.200	30.520	0.652	0.993	A	A
1	CS137	28.700	6.000	28.230	0.701	1.017	A	A
1	GROSS ALPHA	0.580	0.100	0.534	0.053	1.086	A	A
1	GROSS BETA	1.340	0.140	1.300	0.130	1.031	A	A
1	MN54	37.700	6.900	38.530	0.867	0.978	A	A
1	SR90	4.500	0.100	4.832	0.184	0.931	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	56.200	33.500	51.167	1.941	1.098	A	A
1	BI214	52.500	25.800	53.933	2.249	0.973	A	A
1	CS137	1374.900	279.900	1326.670	66.510	1.036	A	A
1	K40	600.000	212.200	621.670	33.860	0.965	A	A
1	PB212	49.100	16.000	51.100	2.753	0.961	A	A
1	PB214	47.800	20.600	54.367	2.249	0.879	W	A
1	SR90	52.300	6.500	53.756	1.446	0.973	A	

**Matrix:** VE Vegetation Bq / kg

1	CO60	13.500	3.100	11.230	0.677	1.202	A	A
1	CS137	346.300	43.200	313.667	15.910	1.104	A	A
1	K40	913.400	236.100	864.330	47.220	1.057	A	A
1	SR90	430.000	10.000	586.280	11.140	0.733	W	W

**Matrix:** WA Water Bq / L

1	AM241	1.620	0.380	1.474	0.021	1.099	A	
1	Bq U	2.660	0.200	2.836	0.121	0.938	A	A
1	CO60	353.500	17.800	347.330	12.400	1.018	A	A
1	CS134	3.110	1.550	3.357	0.200	0.926	A	
1	CS137	57.900	6.500	56.067	2.929	1.033	A	A
1	GROSS ALPHA	440.000	144.000	375.000	37.500	1.173	W	A
1	GROSS BETA	907.000	157.000	1030.000	103.000	0.881	A	A
1	H3	290.000	15.000	283.700	3.380	1.022	A	W
1	SR90	7.600	0.800	7.579	0.176	1.003	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter, g, or mL}$ .  $\text{pCi/g or mL} = \text{Bq} \times 0.027$** **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 56 Results by Laboratory****Lab:** IS Severn Trent Laboratories - St. Louis

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.093	0.018	0.088	0.005	1.051	A	A
1	CO60	30.100	2.770	30.520	0.652	0.986	A	A
1	CS137	28.200	2.730	28.230	0.701	0.999	A	A
1	GROSS ALPHA	0.585	0.070	0.534	0.053	1.095	A	A
1	GROSS BETA	1.242	0.130	1.300	0.130	0.956	A	A
1	MN54	37.710	3.800	38.530	0.867	0.979	A	A
1	PU238	0.072	0.015	0.057	0.001	1.256	W	A
1	PU239	0.198	0.038	0.187	0.003	1.054	A	A
1	SR90	4.960	0.770	4.832	0.184	1.027	A	
1	U234	0.273	0.052	0.297	0.004	0.920	A	W
1	U238	0.275	0.052	0.298	0.004	0.923	A	W
1	Ug U	20.600	2.370	24.105	0.103	0.855	W	W

**Matrix:** SO Soil Bq / kg

1	AC228	56.830	15.560	51.167	1.941	1.111	A	N
1	AM241	11.150	2.159	10.927	0.373	1.020	A	A
1	BI212	47.510	15.570	53.430	5.215	0.889	A	N
1	BI214	43.330	6.087	53.933	2.249	0.803	W	A
1	CS137	1383.100	158.250	1326.670	66.510	1.043	A	A
1	K40	609.760	68.302	621.670	33.860	0.981	A	A
1	PB212	48.950	6.790	51.100	2.753	0.958	A	N
1	PB214	45.030	6.479	54.367	2.249	0.828	W	A
1	PU239	21.120	4.095	19.098	0.706	1.106	A	A
1	SR90	45.200	8.100	53.756	1.446	0.841	A	A
2	SR90	55.900	7.600	53.756	1.446	1.040	A	A
1	TH234	96.310	14.060	89.300	6.837	1.078	A	A
1	U234	81.173	15.413	93.885	7.767	0.865	A	A
1	U238	87.500	16.583	96.778	8.410	0.904	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.318	0.476	2.228	0.216	1.040	A	A
1	CM244	1.539	0.339	1.320	0.164	1.166	A	A
1	CO60	10.500	2.260	11.230	0.677	0.935	A	W
1	CS137	365.600	47.600	313.667	15.910	1.166	A	A
1	K40	964.000	107.000	864.330	47.220	1.115	A	A
1	PU239	3.277	0.654	3.543	0.377	0.925	A	A
1	SR90	568.600	78.440	586.280	11.140	0.970	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.429	0.001	1.474	0.021	0.970	A	W
1	CO60	347.700	36.170	347.330	12.400	1.001	A	A
1	CS134	2.880	0.065	3.357	0.200	0.858	W	
1	CS137	57.150	7.044	56.067	2.929	1.019	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 56 Results by Laboratory****Lab:** IS Severn Trent Laboratories - St. Louis

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	GROSS ALPHA	350.400	37.520	375.000	37.500	0.934	A	A
1	GROSS BETA	954.600	96.760	1030.000	103.000	0.927	A	A
1	H3	280.000	34.000	283.700	3.380	0.987	A	A
1	PU238	0.493	0.099	0.490	0.032	1.006	A	A
1	PU239	4.107	0.799	4.219	0.172	0.973	A	A
1	SR90	7.106	1.345	7.579	0.176	0.938	A	W
1	U234	1.213	0.229	1.402	0.056	0.865	W	W
1	U238	1.237	0.234	1.381	0.079	0.896	W	W
1	Ug U	0.100	0.012	0.112	0.007	0.891	W	A

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

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

**QAP 56 Results by Laboratory****Lab:** IT Severn Trent Laboratories - Richland

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.088	0.009	0.088	0.005	0.997	A	A
1	CO60	31.900	1.900	30.520	0.652	1.045	A	A
1	CS137	30.600	1.800	28.230	0.701	1.084	A	W
1	GROSS ALPHA	0.567	0.058	0.534	0.053	1.062	A	A
1	GROSS BETA	1.330	0.110	1.300	0.130	1.023	A	A
1	MN54	41.400	2.500	38.530	0.867	1.074	A	A
1	PU238	0.061	0.006	0.057	0.001	1.062	A	A
1	PU239	0.173	0.015	0.187	0.003	0.923	A	A
1	SR90	4.560	0.480	4.832	0.184	0.944	A	A
1	Ug U	25.000	2.100	24.105	0.103	1.037	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	56.100	3.900	51.167	1.941	1.096	A	A
1	AM241	11.500	1.100	10.927	0.373	1.052	A	A
1	BI214	56.200	3.670	53.933	2.249	1.042	A	A
1	CS137	1516.800	89.900	1326.670	66.510	1.143	A	W
1	K40	690.400	42.500	621.670	33.860	1.111	A	A
1	PB212	60.000	3.880	51.100	2.753	1.174	A	W
1	PB214	68.600	5.000	54.367	2.249	1.262	A	A
1	PU239	22.800	2.250	19.098	0.706	1.194	W	A
1	SR90	54.600	6.240	53.756	1.446	1.016	A	
1	TH234	216.000	45.200	89.300	6.837	2.419	N	A
1	Ug U	7.080	0.570	7.829	0.755	0.904	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.020	0.210	2.228	0.216	0.907	A	A
1	CM244	1.420	0.160	1.320	0.164	1.076	A	W
1	CO60	14.800	1.300	11.230	0.677	1.318	W	A
1	CS137	351.900	20.900	313.667	15.910	1.122	A	A
1	K40	940.200	58.500	864.330	47.220	1.088	A	A
1	PU239	3.240	0.270	3.543	0.377	0.914	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.300	0.120	1.474	0.021	0.882	W	A
1	CO60	346.600	20.500	347.330	12.400	0.998	A	N
1	CS134	4.430	0.740	3.357	0.200	1.320	N	
1	CS137	54.200	3.330	56.067	2.929	0.967	A	N
1	GROSS ALPHA	381.400	42.600	375.000	37.500	1.017	A	A
1	GROSS BETA	1041.000	72.400	1030.000	103.000	1.011	A	A
1	H3	264.300	4.300	283.700	3.380	0.932	A	A
1	PU238	0.470	0.046	0.490	0.032	0.958	A	A
1	PU239	4.250	0.320	4.219	0.172	1.007	A	A
1	SR90	7.450	0.800	7.579	0.176	0.983	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 56 Results by Laboratory****Lab:** IT Severn Trent Laboratories - Richland

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	Ug U	0.095	0.010	0.112	0.007	0.850	W	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** KA Knolls Atomic Power Lab, Schenectady

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.490	0.060	0.534	0.053	0.918	A	A
1	GROSS BETA	1.230	0.070	1.300	0.130	0.946	A	A

**Matrix:** SO Soil Bq / kg

1	CS137	1330.000	71.400	1326.670	66.510	1.003	A	A
1	K40	575.300	147.400	621.670	33.860	0.925	A	A
1	PU239	21.580	0.300	19.098	0.706	1.130	A	A
1	SR90	51.000	4.800	53.756	1.446	0.949	A	A

**Matrix:** WA Water Bq / L

1	CO60	340.670	25.260	347.330	12.400	0.981	A	A
1	CS134	3.290	1.760	3.357	0.200	0.980	A	
1	CS137	56.900	6.640	56.067	2.929	1.015	A	A
1	GROSS ALPHA	345.670	64.670	375.000	37.500	0.922	A	A
1	GROSS BETA	898.000	97.600	1030.000	103.000	0.872	A	A
1	H3	278.300	29.400	283.700	3.380	0.981	A	A
1	PU239	4.460	0.030	4.219	0.172	1.057	A	W
1	SR90	7.280	0.880	7.579	0.176	0.961	A	A
1	Ug U	0.103	0.003	0.112	0.007	0.925	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** KE Uljin NPP Environmental Radiation Laboratory, South Korea

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.700	0.270	30.520	0.652	1.039	A	A
1	CS137	34.550	0.300	28.230	0.701	1.224	W	A
1	MN54	45.760	0.400	38.530	0.867	1.188	A	A
1	SR90	5.071	0.048	4.832	0.184	1.050	A	A

**Matrix:** SO Soil Bq / kg

1	AM241	8.140	3.300	10.927	0.373	0.745	W	
1	BI214	31.730	1.860	53.933	2.249	0.588	N	
1	CS137	1014.600	9.810	1326.670	66.510	0.765	N	A
1	K40	452.750	9.210	621.670	33.860	0.728	N	A
1	PB212	35.130	1.470	51.100	2.753	0.687	N	
1	PB214	35.050	2.810	54.367	2.249	0.645	N	
1	SR90	49.490	0.720	53.756	1.446	0.921	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	9.690	0.620	11.230	0.677	0.863	W	A
1	CS137	290.180	3.470	313.667	15.910	0.925	A	A
1	K40	749.930	19.120	864.330	47.220	0.868	W	A
1	SR90	524.560	1.740	586.280	11.140	0.895	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** KG Korea Institute of Geoscience And Mineral Resources (KIGAM)

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS ALPHA	527.800	20.700	375.000	37.500	1.407	N
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**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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.

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**QAP 56 Results by Laboratory****Lab:** KO Korea Institute of Nuclear Safety

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.112	0.005	0.088	0.005	1.268	A
1	Bq U	0.588	0.017	0.608	0.005	0.968	A
1	CO60	28.950	0.120	30.520	0.652	0.949	A
1	CS137	27.010	0.100	28.230	0.701	0.957	A
1	GROSS ALPHA	0.518	0.049	0.534	0.053	0.970	A
1	GROSS BETA	1.220	0.070	1.300	0.130	0.938	A
1	MN54	36.020	0.110	38.530	0.867	0.935	A
1	PU238	0.066	0.004	0.057	0.001	1.149	W
1	PU239	0.205	0.010	0.187	0.003	1.094	A
1	SR90	4.120	0.050	4.832	0.184	0.853	A
1	U234	0.287	0.008	0.297	0.004	0.965	A
1	U238	0.290	0.008	0.298	0.004	0.973	A
1	Ug U	23.425	0.667	24.105	0.103	0.972	A

**Matrix:** SO Soil Bq / kg

1	AC228	49.400	1.750	51.167	1.941	0.965	A
1	AM241	11.564	0.488	10.927	0.373	1.058	A
1	BI212	47.530	3.730	53.430	5.215	0.890	A
1	BI214	58.480	1.750	53.933	2.249	1.084	A
1	Bq U	184.101	3.223	194.769	15.642	0.945	A
1	CS137	1315.570	30.190	1326.670	66.510	0.992	A
1	K40	621.910	20.870	621.670	33.860	1.000	A
1	PB212	50.070	1.020	51.100	2.753	0.980	A
1	PB214	59.710	1.620	54.367	2.249	1.098	A
1	PU239	20.888	0.878	19.098	0.706	1.094	A
1	SR90	46.100	1.180	53.756	1.446	0.858	A
1	TH234	109.670	7.780	89.300	6.837	1.228	A
1	U234	87.409	2.210	93.885	7.767	0.931	A
1	U238	93.105	2.329	96.778	8.410	0.962	A
1	Ug U	7.529	0.187	7.829	0.755	0.962	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.343	0.138	2.228	0.216	1.051	A
1	CM244	1.292	0.088	1.320	0.164	0.979	A
1	CO60	11.780	0.530	11.230	0.677	1.049	A
1	CS137	330.320	5.640	313.667	15.910	1.053	A
1	K40	925.220	23.700	864.330	47.220	1.070	A
1	PU239	3.599	0.203	3.543	0.377	1.016	A

**Matrix:** WA Water Bq / L

1	AM241	1.552	0.069	1.474	0.021	1.053	A
1	Bq U	2.751	0.101	2.836	0.121	0.970	A
1	CO60	351.900	7.580	347.330	12.400	1.013	A

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

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

**QAP 56 Results by Laboratory****Lab:** KO Korea Institute of Nuclear Safety

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	CS134	3.060	0.320	3.357	0.200	0.911	A
1	CS137	57.370	1.160	56.067	2.929	1.023	A
1	GROSS ALPHA	374.160	38.500	375.000	37.500	0.998	A
1	GROSS BETA	934.060	52.900	1030.000	103.000	0.907	A
1	H3	288.500	2.100	283.700	3.380	1.017	A
1	PU238	0.544	0.024	0.490	0.032	1.109	W
1	PU239	4.646	0.192	4.219	0.172	1.101	W
1	SR90	6.620	0.140	7.579	0.176	0.874	A
1	U234	1.352	0.048	1.402	0.056	0.964	A
1	U238	1.345	0.048	1.381	0.079	0.974	A
1	Ug U	0.109	0.004	0.112	0.007	0.974	A

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

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

**QAP 56 Results by Laboratory****Lab:** KR Korea Atomic Energy Research Institute

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.100	0.040	0.088	0.005	1.133	A	
3	AM241	0.100	0.060	0.088	0.005	1.133	A	
5	AM241	0.100	0.050	0.088	0.005	1.133	A	
2	AM241	0.100	0.060	0.088	0.005	1.133	A	
4	AM241	0.100	0.040	0.088	0.005	1.133	A	
5	CO60	31.300	1.200	30.520	0.652	1.026	A	A
4	CO60	30.900	1.200	30.520	0.652	1.012	A	A
1	CO60	31.500	1.200	30.520	0.652	1.032	A	A
2	CO60	30.800	1.200	30.520	0.652	1.009	A	A
3	CO60	31.000	1.200	30.520	0.652	1.016	A	A
2	CS137	29.400	1.100	28.230	0.701	1.041	A	A
1	CS137	29.900	1.200	28.230	0.701	1.059	A	A
4	CS137	29.600	1.100	28.230	0.701	1.049	A	A
5	CS137	30.300	1.200	28.230	0.701	1.073	A	A
3	CS137	29.900	1.200	28.230	0.701	1.059	A	A
1	GROSS ALPHA	0.550	0.030	0.534	0.053	1.030	A	A
1	GROSS BETA	1.140	0.100	1.300	0.130	0.877	A	A
4	MN54	39.400	1.500	38.530	0.867	1.023	A	A
3	MN54	39.600	1.500	38.530	0.867	1.028	A	A
5	MN54	39.800	1.500	38.530	0.867	1.033	A	A
1	MN54	39.900	1.500	38.530	0.867	1.036	A	A
2	MN54	39.800	1.600	38.530	0.867	1.033	A	A

**Matrix:** SO Soil Bq / kg

2	AM241	10.300	3.800	10.927	0.373	0.943	A	
5	AM241	10.000	1.300	10.927	0.373	0.915	A	
4	AM241	10.100	2.300	10.927	0.373	0.924	A	
3	AM241	11.300	3.800	10.927	0.373	1.007	A	
1	AM241	11.700	3.700	10.927	0.373	1.071	A	
5	CS137	1331.600	52.000	1326.670	66.510	1.000	A	A
3	CS137	1336.400	51.800	1326.670	66.510	1.010	A	A
2	CS137	1342.100	51.900	1326.670	66.510	1.010	A	A
1	CS137	1349.500	53.200	1326.670	66.510	1.020	A	A
4	CS137	1333.500	50.600	1326.670	66.510	1.010	A	A
3	K40	627.300	57.300	621.670	33.860	1.010	A	A
5	K40	595.600	29.700	621.670	33.860	0.960	A	A
1	K40	598.700	66.200	621.670	33.860	0.960	A	A
4	K40	626.000	51.300	621.670	33.860	0.980	A	A
2	K40	607.300	61.200	621.670	33.860	1.010	A	A
1	SR90	45.500	1.460	53.756	1.446	0.846	A	

**Matrix:** VE Vegetation Bq / kg

1	CO60	13.200	4.500	11.230	0.677	1.175	A	A
5	CO60	12.700	1.800	11.230	0.677	1.131	A	A
4	CO60	14.000	4.000	11.230	0.677	1.247	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 56 Results by Laboratory****Lab:** KR Korea Atomic Energy Research Institute

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** VE Vegetation Bq / kg

2	CO60	14.700	3.500	11.230	0.677	1.309	W	A
3	CO60	13.200	2.700	11.230	0.677	1.175	A	A
2	CS137	342.800	14.800	313.667	15.910	1.093	A	A
1	CS137	340.700	15.600	313.667	15.910	1.086	A	A
3	CS137	341.300	15.000	313.667	15.910	1.088	A	A
5	CS137	341.700	6.800	313.667	15.910	1.089	A	A
4	CS137	341.000	15.000	313.667	15.910	1.087	A	A
1	K40	955.100	97.400	864.330	47.220	1.105	A	A
2	K40	955.900	91.800	864.330	47.220	1.106	A	A
3	K40	953.100	98.800	864.330	47.220	1.103	A	A
4	K40	962.400	89.100	864.330	47.220	1.113	A	A
5	K40	931.400	64.100	864.330	47.220	1.078	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** KS Radiochemistry Laboratory, DHEL, KDHE, Kansas

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.100	0.800	0.088	0.005	1.133	A	
1	CO60	31.700	2.200	30.520	0.652	1.039	A	A
1	CS137	28.500	1.300	28.230	0.701	1.010	A	A
1	MN54	40.900	15.100	38.530	0.867	1.062	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	52.000	8.300	51.167	1.941	1.016	A	A
1	CS137	1291.000	52.000	1326.670	66.510	0.973	A	A
1	K40	639.000	83.100	621.670	33.860	1.028	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.000	0.800	11.230	0.677	0.980	A	A
1	CS137	291.800	14.200	313.667	15.910	0.930	A	A
1	K40	869.300	12.700	864.330	47.220	1.006	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.500	0.100	1.474	0.021	1.018	A	
1	CO60	360.200	12.700	347.330	12.400	1.037	A	A
1	CS134	3.300	0.200	3.357	0.200	0.983	A	
1	CS137	54.800	2.600	56.067	2.929	0.977	A	A
1	GROSS ALPHA	312.700	24.300	375.000	37.500	0.834	A	A
1	GROSS BETA	905.600	31.500	1030.000	103.000	0.879	A	A
1	H3	267.900	30.100	283.700	3.380	0.944	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** LA Los Alamos National Laboratory, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

3	AC228	49.500	6.300	51.167	1.941	0.967	A	
2	AC228	50.600	6.900	51.167	1.941	0.989	A	
1	AC228	43.900	5.500	51.167	1.941	0.858	W	
1	AM241	11.240	0.650	10.927	0.373	1.029	A	A
2	AM241	11.040	0.650	10.927	0.373	1.010	A	A
3	AM241	11.130	0.650	10.927	0.373	1.019	A	A
3	BI212	52.100	13.300	53.430	5.215	0.975	A	
2	BI212	48.400	12.000	53.430	5.215	0.906	A	
1	BI212	33.400	10.800	53.430	5.215	0.625	A	
2	BI214	41.600	5.300	53.933	2.249	0.771	N	
3	BI214	40.500	5.100	53.933	2.249	0.751	N	
1	BI214	40.800	4.900	53.933	2.249	0.756	N	
3	CS137	1191.000	131.000	1326.670	66.510	0.898	W	
2	CS137	1181.000	130.000	1326.670	66.510	0.890	W	
1	CS137	1177.000	130.000	1326.670	66.510	0.887	W	
3	K40	550.000	63.000	621.670	33.860	0.885	W	
1	K40	537.000	61.000	621.670	33.860	0.864	W	
2	K40	539.000	62.000	621.670	33.860	0.867	W	
3	PB212	48.300	5.600	51.100	2.753	0.945	A	
1	PB212	47.000	5.400	51.100	2.753	0.920	A	
2	PB212	47.600	5.500	51.100	2.753	0.932	A	
3	PB214	40.900	4.900	54.367	2.249	0.752	N	
2	PB214	43.800	5.300	54.367	2.249	0.806	W	
1	PB214	42.100	5.000	54.367	2.249	0.774	W	
3	PU239	20.370	1.760	19.098	0.706	1.067	A	A
2	PU239	22.340	1.920	19.098	0.706	1.170	W	A
1	PU239	21.150	1.820	19.098	0.706	1.107	A	A
2	TH234	63.200	10.300	89.300	6.837	0.708	W	
3	TH234	46.800	8.900	89.300	6.837	0.524	N	
1	TH234	52.500	9.200	89.300	6.837	0.588	N	
1	Ug U	6.860	0.343	7.829	0.755	0.876	A	A
2	Ug U	7.240	0.362	7.829	0.755	0.925	A	A
3	Ug U	7.300	0.365	7.829	0.755	0.932	A	A

**Matrix:** VE Vegetation Bq / kg

3	AM241	2.357	0.299	2.228	0.216	1.058	A	W
1	AM241	2.172	0.271	2.228	0.216	0.975	A	W
2	AM241	2.362	0.299	2.228	0.216	1.060	A	W
3	CO60	10.000	1.300	11.230	0.677	0.890	W	
2	CO60	12.710	1.620	11.230	0.677	1.132	A	
1	CO60	9.830	1.270	11.230	0.677	0.875	W	
2	CS137	305.000	34.000	313.667	15.910	0.972	A	
1	CS137	280.000	31.000	313.667	15.910	0.893	W	
3	CS137	304.000	34.000	313.667	15.910	0.969	A	
3	K40	871.000	98.000	864.330	47.220	1.008	A	
2	K40	874.000	97.900	864.330	47.220	1.011	A	

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

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

**QAP 56 Results by Laboratory****Lab:** LA Los Alamos National Laboratory, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** VE Vegetation Bq / kg

1	K40	781.000	87.700	864.330	47.220	0.904	A	
3	PU239	3.406	0.530	3.543	0.377	0.961	A	A
1	PU239	3.147	0.492	3.543	0.377	0.888	A	A
2	PU239	2.988	0.468	3.543	0.377	0.843	A	A
3	SR90	526.627	70.636	586.280	11.140	0.898	A	
2	SR90	553.994	79.512	586.280	11.140	0.945	A	
1	SR90	589.127	100.222	586.280	11.140	1.005	A	

**Matrix:** WA Water Bq / L

1	AM241	1.536	0.186	1.474	0.021	1.042	A	A
3	AM241	1.601	0.187	1.474	0.021	1.086	A	A
2	AM241	1.540	0.179	1.474	0.021	1.045	A	A
2	CO60	382.000	43.000	347.330	12.400	1.100	A	
1	CO60	383.000	43.000	347.330	12.400	1.103	W	
3	CO60	382.000	43.000	347.330	12.400	1.100	A	
1	CS134	3.560	0.530	3.357	0.200	1.060	A	
2	CS134	3.620	0.540	3.357	0.200	1.078	A	
3	CS134	3.620	0.540	3.357	0.200	1.078	A	
3	CS137	65.300	7.300	56.067	2.929	1.165	W	
2	CS137	65.300	7.300	56.067	2.929	1.165	W	
1	CS137	64.300	7.200	56.067	2.929	1.147	W	
2	H3	261.220	33.300	283.700	3.380	0.921	A	N
3	H3	264.550	33.670	283.700	3.380	0.932	A	N
1	H3	254.560	32.930	283.700	3.380	0.897	W	N
1	PU238	0.489	0.077	0.490	0.032	0.998	A	A
2	PU238	0.509	0.078	0.490	0.032	1.037	A	A
3	PU238	0.509	0.080	0.490	0.032	1.038	A	A
1	PU239	4.261	0.646	4.219	0.172	1.010	A	A
3	PU239	4.342	0.660	4.219	0.172	1.029	A	A
2	PU239	4.389	0.657	4.219	0.172	1.040	A	A
3	SR90	6.692	0.511	7.579	0.176	0.883	A	
1	SR90	8.231	0.631	7.579	0.176	1.086	A	
2	SR90	7.516	0.601	7.579	0.176	0.992	A	
2	Ug U	0.099	0.002	0.112	0.007	0.886	W	
1	Ug U	0.098	0.002	0.112	0.007	0.877	W	
3	Ug U	0.099	0.002	0.112	0.007	0.886	W	

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

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

**QAP 56 Results by Laboratory****Lab:** LI Lionville Laboratory, Inc. PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

3	GROSS ALPHA	344.400	30.300	375.000	37.500	0.918	A
2	GROSS ALPHA	377.200	32.500	375.000	37.500	1.006	A
4	GROSS ALPHA	348.300	31.300	375.000	37.500	0.929	A
1	GROSS ALPHA	366.300	44.100	375.000	37.500	0.977	A
1	GROSS BETA	1042.800	59.000	1030.000	103.000	1.012	A
2	GROSS BETA	983.000	40.500	1030.000	103.000	0.954	A
3	GROSS BETA	966.800	30.800	1030.000	103.000	0.939	A
4	GROSS BETA	929.400	29.800	1030.000	103.000	0.902	A
1	H3	309.300	30.900	283.700	3.380	1.090	A
2	H3	308.800	30.900	283.700	3.380	1.088	A

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

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

**QAP 56 Results by Laboratory****Lab:** LL LLNL Chemistry and Material Science/Environmental

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	40.000	4.020	51.167	1.941	0.782	N	W
1	CS137	1190.000	151.600	1326.670	66.510	0.897	W	A
1	K40	587.000	82.800	621.670	33.860	0.944	A	A
1	PB212	59.000	4.080	51.100	2.753	1.155	A	A
1	PU239	134.000	9.340	19.098	0.706	7.016	N	A

**Matrix:** WA Water Bq / L

1	CO60	375.000	32.200	347.330	12.400	1.080	A	A
1	CS137	59.600	8.140	56.067	2.929	1.063	A	A
1	H3	185.000	2.640	283.700	3.380	0.652	N	W
1	PU239	4.360	0.554	4.219	0.172	1.033	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** LM American Radiation Services of New Mexico, Los Alamos

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.098	0.032	0.088	0.005	1.110	A	
1	CO60	31.120	0.110	30.520	0.652	1.020	A	A
1	CS137	28.250	0.110	28.230	0.701	1.001	A	A
1	MN54	47.250	0.210	38.530	0.867	1.226	W	A

**Matrix:** SO Soil Bq / kg

1	AC228	50.690	2.090	51.167	1.941	0.991	A	A
1	AM241	11.860	1.130	10.927	0.373	1.085	A	A
1	BI212	29.590	4.260	53.430	5.215	0.554	W	A
1	BI214	43.570	1.690	53.933	2.249	0.808	W	A
1	CS137	1289.700	3.890	1326.670	66.510	0.972	A	A
1	K40	619.850	12.510	621.670	33.860	0.997	A	A
1	PB212	53.080	1.060	51.100	2.753	1.039	A	A
1	PB214	49.600	1.830	54.367	2.249	0.912	A	A
1	TH234	102.560	6.940	89.300	6.837	1.148	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.130	0.800	2.228	0.216	0.956	A	W
1	CO60	13.090	0.930	11.230	0.677	1.166	A	W
1	CS137	308.520	2.620	313.667	15.910	0.984	A	A
1	K40	961.370	19.560	864.330	47.220	1.112	A	W

**Matrix:** WA Water Bq / L

1	AM241	2.090	0.230	1.474	0.021	1.418	N	W
1	CO60	374.340	1.120	347.330	12.400	1.078	A	A
1	CS137	59.490	0.640	56.067	2.929	1.061	A	W
1	GROSS ALPHA	387.240	111.280	375.000	37.500	1.033	A	A
1	GROSS BETA	754.430	120.380	1030.000	103.000	0.732	W	A
1	H3	261.570	3.160	283.700	3.380	0.922	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** LN Los Alamos National Lab, ES&H

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	29.800	1.190	30.520	0.652	0.976	A	A
1	CS137	29.000	1.450	28.230	0.701	1.027	A	A
1	GROSS ALPHA	0.600	0.036	0.534	0.053	1.124	A	A
1	GROSS BETA	1.100	0.049	1.300	0.130	0.846	W	W
1	MN54	40.000	1.600	38.530	0.867	1.038	A	A

**Matrix:** WA Water Bq / L

1	CO60	350.000	14.000	347.330	12.400	1.008	A	A
1	CS137	60.800	6.080	56.067	2.929	1.084	A	A
1	H3	278.000	22.240	283.700	3.380	0.980	A	N

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

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

**QAP 56 Results by Laboratory****Lab:** LV UNLV, Dept of Health Physics

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.128	0.021	0.088	0.005	1.450	W	W
1	CO60	30.600	0.600	30.520	0.652	1.003	A	A
1	CS137	39.900	1.400	28.230	0.701	1.413	N	W
1	GROSS ALPHA	0.513	0.030	0.534	0.053	0.961	A	A
1	GROSS BETA	1.240	0.030	1.300	0.130	0.954	A	W
1	MN54	38.900	1.140	38.530	0.867	1.010	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	46.200	0.800	51.167	1.941	0.903	A	A
1	AM241	3.800	0.650	10.927	0.373	0.348	N	W
1	BI212	46.400	2.300	53.430	5.215	0.868	A	A
1	BI214	45.800	2.200	53.933	2.249	0.849	W	A
1	CS137	1230.000	40.000	1326.670	66.510	0.927	A	A
1	K40	549.000	21.000	621.670	33.860	0.883	W	A
1	PB212	42.200	2.600	51.100	2.753	0.826	W	A
1	PB214	45.900	1.600	54.367	2.249	0.844	W	A
1	TH234	123.000	22.000	89.300	6.837	1.377	A	W

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.480	0.560	2.228	0.216	1.113	A	A
1	CO60	14.000	1.500	11.230	0.677	1.247	W	A
1	CS137	390.000	41.000	313.667	15.910	1.243	W	A
1	K40	811.000	87.000	864.330	47.220	0.938	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.140	0.260	1.474	0.021	0.774	N	N
1	CO60	344.000	8.000	347.330	12.400	0.990	A	A
1	CS134	3.120	0.230	3.357	0.200	0.929	A	
1	CS137	65.400	2.300	56.067	2.929	1.166	W	A
1	GROSS ALPHA	397.000	50.000	375.000	37.500	1.059	A	W
1	GROSS BETA	855.000	110.000	1030.000	103.000	0.830	A	A
1	H3	294.000	23.000	283.700	3.380	1.036	A	N

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

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

**QAP 56 Results by Laboratory****Lab:** LW Lawrence Livermore National Lab, Waste

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AM241	12.100	3.310	10.927	0.373	1.107	A	W
1	CS137	1300.000	58.900	1326.670	66.510	0.980	A	A
1	K40	600.000	41.700	621.670	33.860	0.965	A	A
1	PU239	19.500	6.570	19.098	0.706	1.021	A	N
1	U234	86.200	7.520	93.885	7.767	0.918	A	A
1	U238	89.700	9.330	96.778	8.410	0.927	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.520	0.121	1.474	0.021	1.031	A	W
1	CO60	350.000	15.000	347.330	12.400	1.008	A	W
1	CS137	66.000	5.000	56.067	2.929	1.177	W	W
1	GROSS ALPHA	340.000	25.300	375.000	37.500	0.907	A	A
1	GROSS BETA	1000.000	36.200	1030.000	103.000	0.971	A	A
1	H3	290.000	29.000	283.700	3.380	1.022	A	A
1	PU239	4.150	0.409	4.219	0.172	0.984	A	A
1	U234	1.440	0.142	1.402	0.056	1.027	A	A
1	U238	1.420	0.175	1.381	0.079	1.028	A	N

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

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

**QAP 56 Results by Laboratory****Lab:** ME Radiation Control Program, Jamaica Plain, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	CO60	31.300	0.500	30.520	0.652	1.026	A	A
3	CO60	33.800	0.600	30.520	0.652	1.107	A	A
1	CO60	31.800	0.600	30.520	0.652	1.042	A	A
3	CS137	33.800	0.900	28.230	0.701	1.197	W	A
2	CS137	30.500	0.800	28.230	0.701	1.080	A	A
1	CS137	31.200	0.700	28.230	0.701	1.105	A	A
1	GROSS ALPHA	0.790	0.020	0.534	0.053	1.479	N	W
3	GROSS ALPHA	0.770	0.030	0.534	0.053	1.442	N	W
2	GROSS ALPHA	0.740	0.030	0.534	0.053	1.386	W	W
3	GROSS BETA	1.190	0.020	1.300	0.130	0.915	A	A
2	GROSS BETA	1.240	0.030	1.300	0.130	0.954	A	A
1	GROSS BETA	1.260	0.030	1.300	0.130	0.969	A	A
1	MN54	41.400	0.900	38.530	0.867	1.074	A	A
2	MN54	40.700	0.800	38.530	0.867	1.056	A	A
3	MN54	44.000	1.000	38.530	0.867	1.142	A	A

**Matrix:** SO Soil Bq / kg

3	AC228	52.500	2.100	51.167	1.941	1.026	A	A
2	AC228	54.800	1.800	51.167	1.941	1.071	A	A
1	AC228	57.000	1.900	51.167	1.941	1.114	A	A
1	AM241	13.000	0.800	10.927	0.373	1.190	A	W
2	AM241	10.300	1.000	10.927	0.373	0.943	A	W
3	AM241	11.100	1.400	10.927	0.373	1.016	A	W
2	BI212	51.400	4.400	53.430	5.215	0.962	A	A
3	BI212	60.700	5.100	53.430	5.215	1.136	A	A
1	BI212	52.500	5.000	53.430	5.215	0.983	A	A
1	BI214	59.600	2.400	53.933	2.249	1.105	A	A
2	BI214	52.200	1.500	53.933	2.249	0.968	A	A
3	BI214	53.600	3.100	53.933	2.249	0.994	A	A
1	CS137	1398.400	34.500	1326.670	66.510	1.054	A	A
2	CS137	1379.900	32.800	1326.670	66.510	1.040	A	A
3	CS137	1379.900	34.600	1326.670	66.510	1.040	A	A
3	K40	551.200	39.200	621.670	33.860	0.887	W	A
2	K40	625.200	28.200	621.670	33.860	1.006	A	A
1	K40	577.100	33.200	621.670	33.860	0.928	A	A
3	PB212	41.800	2.500	51.100	2.753	0.818	W	W
2	PB212	41.400	2.400	51.100	2.753	0.810	W	W
1	PB212	41.400	1.900	51.100	2.753	0.810	W	W
1	PB214	57.000	2.300	54.367	2.249	1.048	A	A
2	PB214	51.000	2.300	54.367	2.249	0.938	A	A
3	PB214	52.500	2.500	54.367	2.249	0.966	A	A
1	TH234	106.500	7.700	89.300	6.837	1.193	A	A
3	TH234	124.300	12.800	89.300	6.837	1.392	A	A
2	TH234	91.700	7.200	89.300	6.837	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 56 Results by Laboratory****Lab:** ME Radiation Control Program, Jamaica Plain, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** VE Vegetation Bq / kg

1	AM241	4.100	0.700	2.228	0.216	1.840	W	W
1	CO60	13.700	1.800	11.230	0.677	1.220	A	A
3	CO60	14.900	0.900	11.230	0.677	1.327	W	A
2	CO60	15.500	0.900	11.230	0.677	1.380	W	A
1	CS137	399.600	11.000	313.667	15.910	1.274	W	W
3	CS137	395.900	11.700	313.667	15.910	1.262	W	W
2	CS137	399.600	13.600	313.667	15.910	1.274	W	W
2	K40	1050.700	40.300	864.330	47.220	1.216	A	A
3	K40	1069.200	78.400	864.330	47.220	1.237	W	A
1	K40	984.100	47.400	864.330	47.220	1.139	A	A

**Matrix:** WA Water Bq / L

3	AM241	1.700	0.300	1.474	0.021	1.154	A	A
2	AM241	1.400	0.500	1.474	0.021	0.950	A	A
1	AM241	1.400	0.100	1.474	0.021	0.950	A	A
3	CO60	377.400	6.300	347.330	12.400	1.087	A	A
1	CO60	377.400	6.100	347.330	12.400	1.087	A	A
2	CO60	373.600	5.800	347.330	12.400	1.076	A	A
2	CS134	3.400	0.400	3.357	0.200	1.013	A	
3	CS134	3.100	0.200	3.357	0.200	0.923	A	
1	CS134	3.600	0.200	3.357	0.200	1.072	A	
3	CS137	62.200	1.800	56.067	2.929	1.109	A	A
2	CS137	61.800	1.500	56.067	2.929	1.102	A	A
1	CS137	62.200	1.900	56.067	2.929	1.109	A	A
2	H3	420.100	9.100	283.700	3.380	1.481	W	W
1	H3	430.400	9.000	283.700	3.380	1.517	W	W
3	H3	427.200	9.000	283.700	3.380	1.506	W	W

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

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

**QAP 56 Results by Laboratory****Lab:** MH Maine Health & Environmental Testing Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.600	0.880	30.520	0.652	1.068	A	A
1	CS137	34.120	1.320	28.230	0.701	1.209	W	W
1	MN54	45.160	1.750	38.530	0.867	1.172	A	W

**Matrix:** SO Soil Bq / kg

1	AC228	48.120	3.990	51.167	1.941	0.940	A	
1	AM241	7.160	0.800	10.927	0.373	0.655	W	
1	BI212	26.480	2.780	53.430	5.215	0.496	N	
1	BI214	43.420	2.460	53.933	2.249	0.805	W	
1	CS137	1279.800	81.100	1326.670	66.510	0.965	A	
1	K40	618.400	37.000	621.670	33.860	0.995	A	
1	PB212	47.450	4.710	51.100	2.753	0.929	A	
1	PB214	49.510	2.940	54.367	2.249	0.911	A	
1	TH234	36.660	9.400	89.300	6.837	0.411	N	

**Matrix:** VE Vegetation Bq / kg

1	AM241	8.320	0.820	2.228	0.216	3.734	N	
1	CO60	11.340	0.500	11.230	0.677	1.010	A	
1	CS137	324.800	16.400	313.667	15.910	1.035	A	
1	K40	969.900	47.300	864.330	47.220	1.122	A	

**Matrix:** WA Water Bq / L

1	AM241	1.160	0.280	1.474	0.021	0.787	N	
1	CO60	343.900	11.000	347.330	12.400	0.990	A	A
1	CS134	2.670	0.220	3.357	0.200	0.795	N	
1	CS137	55.400	2.900	56.067	2.929	0.988	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** MI Massachusetts Institute of Technology

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.500	0.900	30.520	0.652	1.032	A
1	CS137	29.600	1.200	28.230	0.701	1.049	A
1	GROSS ALPHA	0.550	0.030	0.534	0.053	1.030	A
1	GROSS BETA	1.610	0.040	1.300	0.130	1.238	W
1	MN54	38.700	1.400	38.530	0.867	1.004	A

**Matrix:** WA Water Bq / L

2	AM241	1.800	0.200	1.474	0.021	1.221	W
1	AM241	1.400	0.200	1.474	0.021	0.950	A
1	CO60	361.000	7.800	347.330	12.400	1.039	A
2	CO60	367.000	7.900	347.330	12.400	1.057	A
2	CS134	3.500	0.200	3.357	0.200	1.043	A
1	CS134	3.300	0.200	3.357	0.200	0.983	A
2	CS137	61.100	2.600	56.067	2.929	1.090	A
1	CS137	60.300	2.600	56.067	2.929	1.075	A
1	GROSS ALPHA	260.000	22.000	375.000	37.500	0.693	W
2	GROSS ALPHA	234.000	42.000	375.000	37.500	0.624	W
1	GROSS BETA	1114.000	40.000	1030.000	103.000	1.082	A
2	GROSS BETA	1013.000	66.000	1030.000	103.000	0.983	A
1	H3	107.900	6.400	283.700	3.380	0.380	N
2	H3	113.400	6.400	283.700	3.380	0.400	N

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** ML BWXT of Ohio, Mound, Miamisburg, Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	PU238	0.055	0.008	0.057	0.001	0.958	A	A
1	PU239	0.186	0.026	0.187	0.003	0.993	A	A
1	U234	0.300	0.042	0.297	0.004	1.009	A	A
1	U238	0.305	0.044	0.298	0.004	1.023	A	A

**Matrix:** SO Soil Bq / kg

1	PU239	19.204	4.038	19.098	0.706	1.006	A	A
1	U234	93.685	15.592	93.885	7.767	0.998	A	A
1	U238	100.315	16.666	96.778	8.410	1.037	A	A

**Matrix:** VE Vegetation Bq / kg

1	PU239	3.000	0.438	3.543	0.377	0.847	A	A
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**Matrix:** WA Water Bq / L

1	H3	296.210	11.330	283.700	3.380	1.044	A	A
1	PU238	0.498	0.082	0.490	0.032	1.015	A	A
1	PU239	4.125	0.614	4.219	0.172	0.978	A	A
1	U234	1.267	0.192	1.402	0.056	0.904	A	A
1	U238	1.333	0.202	1.381	0.079	0.965	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** MS Manufacturing Sciences Corporation, Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.900	3.300	30.520	0.652	1.078	A	A
1	CS137	30.300	3.000	28.230	0.701	1.073	A	A
1	GROSS ALPHA	0.620	0.060	0.534	0.053	1.161	A	A
1	GROSS BETA	0.950	0.100	1.300	0.130	0.731	N	N
1	MN54	41.000	4.100	38.530	0.867	1.064	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	50.800	5.100	51.167	1.941	0.993	A	A
1	BI214	59.700	6.000	53.933	2.249	1.107	A	A
1	CS137	1440.000	144.000	1326.670	66.510	1.085	A	A
1	K40	657.000	66.000	621.670	33.860	1.057	A	A
1	PB212	53.800	5.400	51.100	2.753	1.053	A	A
1	PB214	60.300	6.000	54.367	2.249	1.109	A	A

**Matrix:** WA Water Bq / L

1	CO60	354.000	35.000	347.330	12.400	1.019	A	A
1	CS134	3.150	0.320	3.357	0.200	0.938	A	A
1	CS137	57.400	5.700	56.067	2.929	1.024	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** MX Laboratory of Radiochimica CREN-U of Zacatecas, Mexico

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
1	Bq U	283.894	6.119	194.769	15.642	1.458	N	
2	Bq U	247.301	6.150	194.769	15.642	1.270	W	

**Matrix:** SO Soil Bq / kg

1	Bq U	283.894	6.119	194.769	15.642	1.458	N
2	Bq U	247.301	6.150	194.769	15.642	1.270	W

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**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** MY FUSRAP Maywood Mobile Laboratory, NJ

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	62.650	5.750	51.167	1.941	1.224	W	A
1	AM241	19.140	7.010	10.927	0.373	1.752	W	A
1	BI212	62.540	5.060	53.430	5.215	1.171	W	A
1	BI214	60.140	8.940	53.933	2.249	1.115	A	A
1	CS137	1484.890	48.820	1326.670	66.510	1.119	A	A
1	K40	741.700	50.690	621.670	33.860	1.193	W	A
1	PB212	61.950	4.100	51.100	2.753	1.212	W	A
1	PB214	73.450	7.510	54.367	2.249	1.351	W	A
1	TH234	264.790	52.090	89.300	6.837	2.965	N	A

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

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

**QAP 56 Results by Laboratory****Lab:** MZ Comisi\_n Nacional de Seguridad Nuclear y Salvaguardias, Mexico

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

3	CO60	22.800	0.460	30.520	0.652	0.747	N
1	CO60	22.180	0.450	30.520	0.652	0.727	N
2	CO60	23.010	0.460	30.520	0.652	0.754	N
3	CS137	21.710	0.340	28.230	0.701	0.769	N
2	CS137	21.880	0.340	28.230	0.701	0.775	N
1	CS137	20.670	0.330	28.230	0.701	0.732	N
1	GROSS ALPHA	1.124	0.033	0.534	0.053	2.105	N
1	GROSS BETA	0.808	0.041	1.300	0.130	0.622	N
2	MN54	27.340	0.410	38.530	0.867	0.710	N
3	MN54	27.140	0.410	38.530	0.867	0.704	N
1	MN54	25.220	0.390	38.530	0.867	0.655	N
1	SR90	0.500	0.004	4.832	0.184	0.103	N

**Matrix:** SO Soil Bq / kg

3	CS137	835.740	9.240	1326.670	66.510	0.630	N
2	CS137	851.320	9.320	1326.670	66.510	0.642	N
1	CS137	842.020	9.270	1326.670	66.510	0.635	N
3	K40	349.000	23.580	621.670	33.860	0.561	N
1	K40	366.600	24.170	621.670	33.860	0.590	N
2	K40	427.080	26.090	621.670	33.860	0.687	N
3	SR90	34.600	0.450	53.756	1.446	0.644	N
2	SR90	31.990	0.430	53.756	1.446	0.595	N
1	SR90	36.560	0.620	53.756	1.446	0.680	W

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

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

**QAP 56 Results by Laboratory****Lab:** NA US EPA NAREL, Montgomery, AL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.100	1.000	30.520	0.652	0.986	A	A
1	CS137	31.000	1.100	28.230	0.701	1.098	A	A
1	MN54	40.700	1.400	38.530	0.867	1.056	A	A
1	PU238	0.061	0.011	0.057	0.001	1.062	A	A
1	PU239	0.194	0.020	0.187	0.003	1.035	A	A
1	SR90	4.560	0.280	4.832	0.184	0.944	A	
1	U234	0.303	0.028	0.297	0.004	1.019	A	A
1	U238	0.273	0.026	0.298	0.004	0.916	A	W

**Matrix:** SO Soil Bq / kg

1	BI212	46.300	4.300	53.430	5.215	0.867	A	A
1	BI214	46.600	1.900	53.933	2.249	0.864	W	A
1	CS137	1327.000	43.000	1326.670	66.510	1.000	A	A
1	K40	579.000	21.000	621.670	33.860	0.931	A	A
1	PB212	48.200	2.000	51.100	2.753	0.943	A	A
1	PB214	49.100	2.100	54.367	2.249	0.903	A	A
1	PU239	19.700	2.800	19.098	0.706	1.032	A	
1	U234	86.000	10.000	93.885	7.767	0.916	A	W
1	U238	87.000	10.000	96.778	8.410	0.899	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.700	0.600	11.230	0.677	1.042	A	A
1	CS137	361.000	12.000	313.667	15.910	1.151	A	A
1	K40	927.000	34.000	864.330	47.220	1.073	A	A
1	PU239	3.090	0.500	3.543	0.377	0.872	A	A
1	SR90	559.000	16.000	586.280	11.140	0.953	A	A

**Matrix:** WA Water Bq / L

1	CO60	338.000	11.000	347.330	12.400	0.973	A	A
1	CS134	3.370	0.350	3.357	0.200	1.004	A	
1	CS137	57.400	2.000	56.067	2.929	1.024	A	A
1	H3	257.500	4.900	283.700	3.380	0.908	A	A
1	PU238	0.458	0.040	0.490	0.032	0.934	A	A
1	PU239	4.240	0.210	4.219	0.172	1.005	A	A
1	SR90	6.700	0.900	7.579	0.176	0.884	A	
1	U234	1.280	0.080	1.402	0.056	0.913	A	A
1	U238	1.290	0.080	1.381	0.079	0.934	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** ND Dept. of Environmental Health and Safety, NC State University

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.639	0.919	30.520	0.652	1.004	A	A
1	CS137	29.895	1.458	28.230	0.701	1.059	A	A
1	GROSS ALPHA	0.543	0.058	0.534	0.053	1.017	A	A
1	GROSS BETA	1.352	0.138	1.300	0.130	1.040	A	W
1	MN54	39.633	1.665	38.530	0.867	1.029	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 56 Results by Laboratory****Lab:** NJ NJ Department of Health and Senior Services

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.162	0.057	0.088	0.005	1.835	W	N
3	AM241	0.200	0.043	0.088	0.005	2.265	W	N
2	AM241	0.196	0.053	0.088	0.005	2.220	W	N
1	CO60	28.900	1.800	30.520	0.652	0.947	A	A
3	CO60	28.700	1.700	30.520	0.652	0.940	A	A
2	CO60	28.800	1.700	30.520	0.652	0.944	A	A
3	CS137	26.300	2.300	28.230	0.701	0.932	A	A
2	CS137	26.200	2.700	28.230	0.701	0.928	A	A
1	CS137	26.400	2.400	28.230	0.701	0.935	A	A
3	MN54	35.400	7.800	38.530	0.867	0.919	A	A
2	MN54	35.400	12.600	38.530	0.867	0.919	A	A
1	MN54	35.600	10.800	38.530	0.867	0.924	A	A

**Matrix:** SO Soil Bq / kg

3	AC228	49.600	2.600	51.167	1.941	0.969	A
2	AC228	47.000	3.000	51.167	1.941	0.919	A
1	AC228	50.300	2.600	51.167	1.941	0.983	A
2	AM241	11.800	5.000	10.927	0.373	1.080	A
3	AM241	8.900	1.300	10.927	0.373	0.815	W
1	AM241	8.400	1.700	10.927	0.373	0.769	W
1	BI212	56.600	8.100	53.430	5.215	1.059	A
2	BI212	55.500	9.200	53.430	5.215	1.039	A
3	BI212	53.300	8.900	53.430	5.215	0.998	A
1	BI214	58.500	3.300	53.933	2.249	1.085	A
2	BI214	56.200	3.300	53.933	2.249	1.042	A
3	BI214	55.900	3.300	53.933	2.249	1.036	A
3	CS137	1370.000	140.000	1326.670	66.510	1.033	A
2	CS137	1340.000	140.000	1326.670	66.510	1.010	A
1	CS137	1350.000	140.000	1326.670	66.510	1.018	A
3	K40	603.000	56.000	621.670	33.860	0.970	A
2	K40	599.000	56.000	621.670	33.860	0.964	A
1	K40	603.000	56.000	621.670	33.860	0.970	A
3	PB212	51.400	4.800	51.100	2.753	1.006	A
2	PB212	51.400	4.800	51.100	2.753	1.006	A
1	PB212	51.400	4.800	51.100	2.753	1.006	A
1	PB214	57.700	4.100	54.367	2.249	1.061	A
2	PB214	58.100	3.700	54.367	2.249	1.069	A
3	PB214	59.600	4.100	54.367	2.249	1.096	A
1	TH234	87.000	13.000	89.300	6.837	0.974	A
3	TH234	92.000	8.000	89.300	6.837	1.030	A
2	TH234	81.000	14.000	89.300	6.837	0.907	A

**Matrix:** VE Vegetation Bq / kg

3	AM241	2.600	0.680	2.228	0.216	1.167	A	A
1	AM241	2.090	0.690	2.228	0.216	0.938	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 56 Results by Laboratory****Lab:** NJ NJ Department of Health and Senior Services

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** VE Vegetation Bq / kg

2	AM241	2.470	0.560	2.228	0.216	1.108	A	A
2	CO60	11.200	0.600	11.230	0.677	0.997	A	A
1	CO60	11.400	0.600	11.230	0.677	1.015	A	A
3	CO60	11.000	0.700	11.230	0.677	0.980	A	A
1	CS137	310.000	15.000	313.667	15.910	0.988	A	A
2	CS137	312.000	15.000	313.667	15.910	0.995	A	A
3	CS137	311.000	15.000	313.667	15.910	0.991	A	A
1	K40	810.000	33.000	864.330	47.220	0.937	A	A
3	K40	829.000	33.000	864.330	47.220	0.959	A	A
2	K40	821.000	30.000	864.330	47.220	0.950	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.390	0.450	1.474	0.021	0.943	A	W
2	AM241	1.530	0.620	1.474	0.021	1.038	A	W
3	AM241	1.540	0.400	1.474	0.021	1.045	A	W
3	Bq U	2.780	0.200	2.836	0.121	0.980	A	A
2	Bq U	2.910	0.210	2.836	0.121	1.026	A	A
1	Bq U	2.800	0.200	2.836	0.121	0.987	A	A
1	CO60	348.000	5.000	347.330	12.400	1.002	A	A
2	CO60	344.000	4.000	347.330	12.400	0.990	A	A
3	CO60	348.000	5.000	347.330	12.400	1.002	A	A
3	CS134	3.300	0.530	3.357	0.200	0.983	A	
2	CS134	3.290	0.900	3.357	0.200	0.980	A	
1	CS134	3.300	0.700	3.357	0.200	0.983	A	
2	CS137	56.200	3.000	56.067	2.929	1.002	A	A
3	CS137	57.000	3.000	56.067	2.929	1.017	A	A
1	CS137	55.900	3.000	56.067	2.929	0.997	A	A
3	GROSS ALPHA	347.000	28.000	375.000	37.500	0.925	A	W
1	GROSS ALPHA	339.000	34.000	375.000	37.500	0.904	A	W
2	GROSS ALPHA	349.000	28.000	375.000	37.500	0.931	A	W
1	GROSS BETA	977.000	15.000	1030.000	103.000	0.949	A	A
2	GROSS BETA	984.000	15.000	1030.000	103.000	0.955	A	A
3	GROSS BETA	966.000	15.000	1030.000	103.000	0.938	A	A
1	H3	323.000	10.000	283.700	3.380	1.139	A	W
2	H3	323.000	10.000	283.700	3.380	1.139	A	W
3	H3	315.000	10.000	283.700	3.380	1.110	A	W
1	SR90	7.300	0.400	7.579	0.176	0.963	A	A
2	SR90	6.300	0.300	7.579	0.176	0.831	W	A
3	SR90	8.400	0.400	7.579	0.176	1.108	A	A
3	U234	1.380	0.110	1.402	0.056	0.984	A	A
1	U234	1.390	0.110	1.402	0.056	0.992	A	A
2	U234	1.410	0.110	1.402	0.056	1.006	A	A
2	U238	1.380	0.110	1.381	0.079	0.999	A	A
3	U238	1.300	0.100	1.381	0.079	0.941	A	A
1	U238	1.320	0.100	1.381	0.079	0.956	A	A
3	Ug U	0.104	0.008	0.112	0.007	0.931	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 56 Results by Laboratory****Lab:** NJ NJ Department of Health and Senior Services

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	Ug U	0.106	0.008	0.112	0.007	0.949	A	A
2	Ug U	0.111	0.009	0.112	0.007	0.994	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** NL Fluor Daniel Fernald, Inc., Ohio

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.300	0.800	30.520	0.652	1.026	A	A
1	CS137	33.300	2.000	28.230	0.701	1.180	W	A
1	MN54	43.000	1.800	38.530	0.867	1.116	A	A
1	PU238	0.057	0.007	0.057	0.001	0.993	A	A
1	PU239	0.186	0.022	0.187	0.003	0.993	A	A
1	U234	0.287	0.034	0.297	0.004	0.965	A	A
1	U238	0.289	0.034	0.298	0.004	0.969	A	A
1	Ug U	21.000		24.105	0.103	0.871	W	

**Matrix:** SO Soil Bq / kg

1	AC228	53.600	1.500	51.167	1.941	1.048	A	A
1	BI212	52.500	1.900	53.430	5.215	0.983	A	A
1	BI214	56.800	1.500	53.933	2.249	1.053	A	A
1	CS137	1470.000	80.000	1326.670	66.510	1.108	A	A
1	K40	646.000	23.000	621.670	33.860	1.039	A	A
1	PB212	52.500	1.900	51.100	2.753	1.027	A	A
1	PB214	61.400	1.800	54.367	2.249	1.129	A	A
1	PU239	20.200	2.400	19.098	0.706	1.058	A	A
1	TH234	109.000	13.000	89.300	6.837	1.221	A	A
1	Ug U	5.820	0.090	7.829	0.755	0.743	A	A

**Matrix:** WA Water Bq / L

1	CO60	372.000	6.000	347.330	12.400	1.071	A	A
1	CS134	3.610	0.150	3.357	0.200	1.075	A	
1	CS137	62.800	2.500	56.067	2.929	1.120	A	A
1	GROSS ALPHA	312.000	36.000	375.000	37.500	0.832	A	A
1	GROSS BETA	1013.000	106.000	1030.000	103.000	0.983	A	A
1	PU238	0.472	0.055	0.490	0.032	0.962	A	A
1	PU239	4.160	0.470	4.219	0.172	0.986	A	A
1	U234	1.290	0.150	1.402	0.056	0.920	A	W
1	U238	1.300	0.150	1.381	0.079	0.941	A	W
1	Ug U	0.106	0.012	0.112	0.007	0.949	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** NM Environmental Evaluation Group, Carlsbad, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.091	0.003	0.088	0.005	1.031	A	A
1	CS137	31.300	1.400	28.230	0.701	1.109	A	
1	PU238	0.060	0.003	0.057	0.001	1.045	A	W
1	PU239	0.198	0.008	0.187	0.003	1.057	A	A
1	SR90	4.700	0.560	4.832	0.184	0.973	A	

**Matrix:** WA Water Bq / L

1	AM241	1.300	0.040	1.474	0.021	0.882	W	A
1	CS137	46.700	2.600	56.067	2.929	0.833	W	
1	PU238	0.430	0.020	0.490	0.032	0.877	W	W
1	PU239	3.600	0.150	4.219	0.172	0.853	W	W
1	SR90	7.090	1.100	7.579	0.176	0.936	A	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** NP JAF Environmental Laboratory, New York Power Authority

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	29.300	0.200	30.520	0.652	0.960	A	A
1	CS137	27.900	0.200	28.230	0.701	0.988	A	A
1	GROSS BETA	1.200	0.020	1.300	0.130	0.923	A	A
1	MN54	40.000	0.300	38.530	0.867	1.038	A	A

**Matrix:** WA Water Bq / L

1	CO60	353.800	1.500	347.330	12.400	1.019	A	A
1	CS134	2.600	0.500	3.357	0.200	0.774	N	
1	CS137	55.700	0.800	56.067	2.929	0.993	A	A
1	GROSS BETA	1111.000	10.000	1030.000	103.000	1.079	A	A
1	H3	316.000	3.400	283.700	3.380	1.114	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** NQ New Mexico Department of Health, Albuquerque

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.090	0.006	0.088	0.005	1.015	A	A
1	CO60	30.000	3.200	30.520	0.652	0.983	A	A
1	CS137	28.700	3.200	28.230	0.701	1.017	A	A
1	GROSS ALPHA	0.577	0.087	0.534	0.053	1.081	A	A
1	GROSS BETA	1.400	0.210	1.300	0.130	1.077	A	A
1	MN54	39.600	4.500	38.530	0.867	1.028	A	A
1	PU238	0.058	0.004	0.057	0.001	1.012	A	A
1	PU239	0.195	0.012	0.187	0.003	1.041	A	A
1	U234	0.288	0.016	0.297	0.004	0.968	A	A
1	U238	0.284	0.016	0.298	0.004	0.953	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	55.900	6.300	51.167	1.941	1.093	A	A
1	AM241	12.100	1.300	10.927	0.373	1.107	A	W
1	BI212	64.400	10.000	53.430	5.215	1.205	W	A
1	BI214	49.600	5.600	53.933	2.249	0.920	A	A
1	CS137	1518.000	167.000	1326.670	66.510	1.144	A	A
1	K40	670.000	74.000	621.670	33.860	1.078	A	A
1	PB212	56.300	6.300	51.100	2.753	1.102	A	A
1	PB214	53.700	5.900	54.367	2.249	0.988	A	A
1	PU239	20.400	1.700	19.098	0.706	1.068	A	A
1	TH234	85.200	15.200	89.300	6.837	0.954	A	A
1	U234	85.700	5.200	93.885	7.767	0.913	A	A
1	U238	91.300	5.600	96.778	8.410	0.943	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.560	0.110	1.474	0.021	1.059	A	A
1	CO60	402.000	44.000	347.330	12.400	1.157	W	A
1	CS134	6.000	2.000	3.357	0.200	1.787	N	
1	CS137	54.700	6.700	56.067	2.929	0.976	A	A
1	GROSS ALPHA	485.000	32.000	375.000	37.500	1.293	N	W
1	GROSS BETA	1109.000	78.000	1030.000	103.000	1.077	A	A
1	PU238	0.450	0.032	0.490	0.032	0.918	A	A
1	PU239	3.880	0.240	4.219	0.172	0.920	A	A
1	U234	1.296	0.077	1.402	0.056	0.925	A	A
1	U238	1.327	0.079	1.381	0.079	0.961	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** NR Naval Reactors Facility Chemistry, Scoville, ID

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	28.230	5.610	30.520	0.652	0.925	A	A
1	CS137	28.700	5.700	28.230	0.701	1.017	A	A
1	MN54	38.500	7.700	38.530	0.867	0.999	A	A

**Matrix:** SO Soil Bq / kg

1	CS137	1273.000	255.000	1326.670	66.510	0.960	A	A
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**Matrix:** VE Vegetation Bq / kg

1	CS137	319.300	63.900	313.667	15.910	1.018	A	A
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**Matrix:** WA Water Bq / L

1	CO60	355.000	71.000	347.330	12.400	1.022	A	A
1	CS137	59.600	11.900	56.067	2.929	1.063	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** NS State Lab of Public Health, North Carolina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	28.181	0.174	30.520	0.652	0.923	A
3	CO60	28.185	0.174	30.520	0.652	0.923	A
2	CO60	28.296	0.174	30.520	0.652	0.927	A
3	CS137	26.148	0.133	28.230	0.701	0.926	A
2	CS137	26.074	0.133	28.230	0.701	0.924	A
1	CS137	25.896	0.130	28.230	0.701	0.917	A
3	MN54	37.593	0.185	38.530	0.867	0.976	A
2	MN54	37.926	0.185	38.530	0.867	0.984	A
1	MN54	37.630	0.185	38.530	0.867	0.977	A

**Matrix:** WA Water Bq / L

2	CO60	866.667	3.704	347.330	12.400	2.495	N
1	CO60	864.444	3.333	347.330	12.400	2.489	N
3	CO60	872.963	3.703	347.330	12.400	2.513	N
3	CS134	8.800	0.652	3.357	0.200	2.621	N
2	CS134	7.885	0.719	3.357	0.200	2.349	N
1	CS134	8.270	0.804	3.357	0.200	2.463	N
2	CS137	178.593	1.704	56.067	2.929	3.185	N
3	CS137	151.037	1.741	56.067	2.929	2.694	N
1	CS137	149.370	1.444	56.067	2.929	2.664	N
2	H3	293.010	14.369	283.700	3.380	1.033	A
1	H3	295.640	14.418	283.700	3.380	1.042	A
3	H3	292.876	14.366	283.700	3.380	1.032	A

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

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

**QAP 56 Results by Laboratory****Lab:** NZ National Radiation Laboratory, New Zealand

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.500	3.600	30.520	0.652	0.999	A
1	CS137	31.300	2.000	28.230	0.701	1.109	A
1	MN54	40.800	2.600	38.530	0.867	1.059	A

**Matrix:** SO Soil Bq / kg

1	AC228	53.400	5.500	51.167	1.941	1.044	A	A
1	AM241	14.800	3.100	10.927	0.373	1.354	A	A
1	BI214	64.900	4.900	53.933	2.249	1.203	A	W
1	CS137	1421.000	91.000	1326.670	66.510	1.071	A	A
1	K40	562.000	68.000	621.670	33.860	0.904	A	A
1	PB212	61.800	4.600	51.100	2.753	1.209	W	A
1	PB214	66.800	4.500	54.367	2.249	1.229	A	A
1	TH234	103.000	16.000	89.300	6.837	1.153	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	10.300	1.100	11.230	0.677	0.917	A	A
1	CS137	313.800	9.300	313.667	15.910	1.000	A	A
1	K40	775.000	84.000	864.330	47.220	0.897	W	A

**Matrix:** WA Water Bq / L

1	AM241	1.520	0.870	1.474	0.021	1.031	A	
1	CS134	4.800	1.900	3.357	0.200	1.430	N	
1	CS137	63.000	21.000	56.067	2.929	1.124	W	A
1	GROSS ALPHA	223.000	13.000	375.000	37.500	0.595	W	N
1	GROSS BETA	879.000	42.000	1030.000	103.000	0.853	A	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** OB OBG Laboratories, East Syracuse, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	21.100	2.820	30.520	0.652	0.691	N	
1	CS137	15.700	3.000	28.230	0.701	0.556	N	
1	GROSS ALPHA	0.546	0.059	0.534	0.053	1.022	A	A
1	GROSS BETA	1.140	0.115	1.300	0.130	0.877	A	W
1	MN54	26.700	4.920	38.530	0.867	0.693	N	
1	PU238	0.051	0.016	0.057	0.001	0.888	A	
1	PU239	0.178	0.052	0.187	0.003	0.950	A	
1	U234	0.232	0.071	0.297	0.004	0.780	N	
1	U238	0.222	0.068	0.298	0.004	0.745	N	

**Matrix:** SO Soil Bq / kg

1	AC228	54.800	9.680	51.167	1.941	1.071	A	A
1	AM241	3.030	0.880	10.927	0.373	0.277	N	N
1	BI212	69.300	34.800	53.430	5.215	1.297	W	N
1	BI214	47.900	11.900	53.933	2.249	0.888	A	A
1	CS137	1300.000	243.000	1326.670	66.510	0.980	A	A
1	K40	604.000	124.000	621.670	33.860	0.972	A	A
1	PB212	46.400	10.400	51.100	2.753	0.908	A	A
1	PB214	54.300	14.200	54.367	2.249	0.999	A	A
1	PU238	1.710	0.736	0.691	0.105	2.475	W	W
1	PU239	29.400	8.740	19.098	0.706	1.539	N	N
1	SR90	52.200	15.700	53.756	1.446	0.971	A	
1	TH234	44.800	70.700	89.300	6.837	0.502	N	A
1	U234	92.900	27.800	93.885	7.767	0.990	A	N
1	U238	94.700	28.300	96.778	8.410	0.979	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	17.500	3.460	2.228	0.216	7.854	N	N
1	CO60	14.000	3.460	11.230	0.677	1.247	W	A
1	CS137	346.000	65.700	313.667	15.910	1.103	A	A
1	K40	967.000	197.000	864.330	47.220	1.119	A	A
1	PU239	191.000	54.900	3.543	0.377	53.905	N	W
1	SR90	592.000	152.000	586.280	11.140	1.010	A	

**Matrix:** WA Water Bq / L

1	CO60	385.000	50.300	347.330	12.400	1.108	W	A
1	CS137	62.900	11.900	56.067	2.929	1.122	W	A
1	GROSS ALPHA	318.000	34.500	375.000	37.500	0.848	A	N
1	GROSS BETA	859.000	87.500	1030.000	103.000	0.834	A	A
1	PU238	0.012	0.007	0.490	0.032	0.025	N	A
1	PU239	0.076	0.024	4.219	0.172	0.018	N	A
1	U234	1.170	0.348	1.402	0.056	0.835	W	A
1	U238	1.170	0.349	1.381	0.079	0.847	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 56 Results by Laboratory****Lab:** OD ORNL, Radiobioassay Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.000	0.410	30.520	0.652	1.016	A	A
1	CS137	29.200	0.690	28.230	0.701	1.034	A	A
1	GROSS ALPHA	0.490	0.030	0.534	0.053	0.918	A	A
1	GROSS BETA	1.380	0.039	1.300	0.130	1.062	A	A
1	MN54	39.360	0.800	38.530	0.867	1.022	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.680	0.170	1.474	0.021	1.140	A	A
1	CO60	366.110	7.430	347.330	12.400	1.054	A	A
1	CS137	61.800	3.580	56.067	2.929	1.102	A	A
1	H3	282.670	82.330	283.700	3.380	0.996	A	W
1	PU238	0.550	0.060	0.490	0.032	1.122	W	A
1	PU239	4.250	0.450	4.219	0.172	1.007	A	A
1	SR90	6.940	0.820	7.579	0.176	0.916	A	A
1	U234	1.190	0.120	1.402	0.056	0.849	W	A
1	U238	1.170	0.120	1.381	0.079	0.847	W	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** OH Ohio Dept Of Health Laboratory, Columbus

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	34.700	0.300	30.520	0.652	1.137	W	A
1	CS137	36.000	0.300	28.230	0.701	1.275	W	A
1	GROSS ALPHA	0.602	0.190	0.534	0.053	1.127	A	A
1	GROSS BETA	1.180	0.019	1.300	0.130	0.908	A	W
1	MN54	48.900	0.400	38.530	0.867	1.269	W	A

**Matrix:** SO Soil Bq / kg

1	AC228	58.000	4.000	51.167	1.941	1.134	A	A
1	BI212	61.000	13.000	53.430	5.215	1.142	A	A
1	BI214	42.500	3.000	53.933	2.249	0.788	W	A
1	CS137	1259.000	6.000	1326.670	66.510	0.949	A	A
1	K40	558.000	21.000	621.670	33.860	0.898	W	W
1	PB212	49.900	2.000	51.100	2.753	0.977	A	W
1	PB214	45.100	3.000	54.367	2.249	0.830	W	W

**Matrix:** VE Vegetation Bq / kg

1	CO60	10.600	1.600	11.230	0.677	0.944	A	A
1	CS137	221.700	4.000	313.667	15.910	0.707	N	A
1	K40	614.000	31.000	864.330	47.220	0.710	N	A

**Matrix:** WA Water Bq / L

1	Bq U	2.640	0.410	2.836	0.121	0.931	A	N
1	CO60	353.300	2.900	347.330	12.400	1.017	A	A
1	CS134	2.800	0.650	3.357	0.200	0.834	W	
1	CS137	59.000	1.000	56.067	2.929	1.052	A	A
1	GROSS ALPHA	422.000	28.000	375.000	37.500	1.125	A	W
1	GROSS BETA	914.000	27.000	1030.000	103.000	0.887	A	A
1	H3	271.000	14.000	283.700	3.380	0.955	A	A
1	SR90	6.800	0.600	7.579	0.176	0.897	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** OK Southwest Laboratory of Oklahoma

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	40.000	3.000	0.534	0.053	74.906	N
1	GROSS BETA	93.000	4.000	1.300	0.130	71.538	N

**Matrix:** SO Soil Bq / kg

1	AM241	9.860	1.000	10.927	0.373	0.902	A	A
1	CS137	1531.800	24.500	1326.670	66.510	1.155	A	W
1	K40	691.900	29.100	621.670	33.860	1.113	A	A
1	PU239	23.500	4.000	19.098	0.706	1.230	W	A
1	U234	79.000	14.000	93.885	7.767	0.841	A	A
1	U238	89.400	15.000	96.778	8.410	0.924	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.480	0.200	1.474	0.021	1.004	A	A
1	CO60	363.300	4.400	347.330	12.400	1.046	A	W
1	CS137	57.700	1.900	56.067	2.929	1.029	A	W
1	H3	200.000	14.000	283.700	3.380	0.705	N	A
1	PU238	0.459	0.045	0.490	0.032	0.936	A	W
1	PU239	4.220	0.130	4.219	0.172	1.000	A	W
1	U234	1.510	0.200	1.402	0.056	1.077	A	N
1	U238	1.440	0.200	1.381	0.079	1.043	A	W

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** OT ORNL Radioactive Material Analysis Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.088	0.008	0.088	0.005	0.997	A	A
1	Bq U	0.510	0.100	0.608	0.005	0.839	W	A
1	CO60	31.000	1.000	30.520	0.652	1.016	A	A
1	CS137	30.000	1.000	28.230	0.701	1.063	A	A
1	GROSS ALPHA	1.300	0.100	0.534	0.053	2.434	N	W
1	GROSS BETA	0.630	0.040	1.300	0.130	0.485	N	A
1	MN54	41.000	1.000	38.530	0.867	1.064	A	A
1	PU238	0.180	0.010	0.057	0.001	3.135	N	A
1	PU239	0.055	0.009	0.187	0.003	0.293	N	A
1	SR90	4.000	0.200	4.832	0.184	0.828	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	47.000	7.000	51.167	1.941	0.919	A	W
1	AM241	11.000	1.000	10.927	0.373	1.007	A	A
1	BI212	47.000	21.000	53.430	5.215	0.880	A	N
1	BI214	47.000	10.000	53.933	2.249	0.871	A	N
1	Bq U	208.000	20.000	194.769	15.642	1.068	A	A
1	CS137	1283.000	100.000	1326.670	66.510	0.967	A	A
1	K40	580.000	36.000	621.670	33.860	0.933	A	A
1	PB212	47.000	21.000	51.100	2.753	0.920	A	N
1	PB214	47.000	10.000	54.367	2.249	0.864	W	N
1	PU239	19.000	1.000	19.098	0.706	0.995	A	A
1	SR90	47.000	5.000	53.756	1.446	0.874	A	W

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.600	0.400	2.228	0.216	1.167	A	A
1	CM244	1.400	0.200	1.320	0.164	1.061	A	A
1	CO60	13.000	3.000	11.230	0.677	1.158	A	A
1	CS137	353.000	7.000	313.667	15.910	1.125	A	A
1	K40	953.000	53.000	864.330	47.220	1.103	A	A
1	PU239	3.300	0.500	3.543	0.377	0.931	A	A
1	SR90	567.000	20.000	586.280	11.140	0.967	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.500	0.100	1.474	0.021	1.018	A	A
1	Bq U	383.000	33.000	2.836	0.121	135.073	N	A
1	CO60	352.000	3.000	347.330	12.400	1.013	A	A
1	CS134	3.100	0.700	3.357	0.200	0.923	A	
1	CS137	58.000	2.000	56.067	2.929	1.034	A	A
1	GROSS ALPHA	960.000	43.000	375.000	37.500	2.560	N	A
1	GROSS BETA	2.900	0.200	1030.000	103.000	0.003	N	A
1	H3	256.000	15.000	283.700	3.380	0.902	A	A
1	PU238	0.430	0.110	0.490	0.032	0.877	W	N

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

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

**QAP 56 Results by Laboratory****Lab:** OT ORNL Radioactive Material Analysis Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU239	3.600	0.300	4.219	0.172	0.853	W	A
1	SR90	7.200	0.600	7.579	0.176	0.950	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** OU Outreach Laboratory, Broken Arrow, OK

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.800	1.680	30.520	0.652	1.075	A	A
1	CS137	29.400	1.820	28.230	0.701	1.041	A	A
1	GROSS ALPHA	0.693	0.072	0.534	0.053	1.298	W	W
1	GROSS BETA	1.130	0.080	1.300	0.130	0.869	A	W
1	MN54	41.300	1.990	38.530	0.867	1.072	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	52.300	14.800	51.167	1.941	1.022	A	A
1	BI214	57.700	5.580	53.933	2.249	1.070	A	W
1	CS137	1310.000	68.800	1326.670	66.510	0.987	A	W
1	K40	548.000	69.700	621.670	33.860	0.881	W	W
1	PB212	51.700	8.830	51.100	2.753	1.012	A	N
1	PB214	54.400	13.200	54.367	2.249	1.001	A	W
1	TH234	118.000	45.000	89.300	6.837	1.321	A	A
1	Ug U	6.200	0.001	7.829	0.755	0.792	A	A

**Matrix:** VE Vegetation Bq / kg

1	CS137	337.000	33.000	313.667	15.910	1.074	A	A
1	K40	1090.000	150.000	864.330	47.220	1.261	W	A

**Matrix:** WA Water Bq / L

1	CO60	394.000	8.730	347.330	12.400	1.134	W	A
1	CS137	64.400	3.170	56.067	2.929	1.149	W	A
1	GROSS ALPHA	407.000	55.800	375.000	37.500	1.085	A	W
1	GROSS BETA	946.000	73.800	1030.000	103.000	0.918	A	A
1	H3	437.000	30.500	283.700	3.380	1.540	W	
1	PU238	0.307	0.043	0.490	0.032	0.626	N	N
1	PU239	2.840	0.130	4.219	0.172	0.673	N	N
1	SR90	4.880	0.600	7.579	0.176	0.644	N	A
1	Ug U	0.108	0.002	0.112	0.007	0.967	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** PA BWXT Pantex, Amarillo, TX

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.480	0.080	0.534	0.053	0.899	A
5	GROSS ALPHA	0.500	0.080	0.534	0.053	0.936	A
4	GROSS ALPHA	0.490	0.080	0.534	0.053	0.918	A
3	GROSS ALPHA	0.520	0.080	0.534	0.053	0.974	A
2	GROSS ALPHA	0.490	0.080	0.534	0.053	0.918	A
2	GROSS BETA	1.480	0.140	1.300	0.130	1.138	A
5	GROSS BETA	1.480	0.140	1.300	0.130	1.138	A
3	GROSS BETA	1.490	0.140	1.300	0.130	1.146	A
1	GROSS BETA	1.470	0.140	1.300	0.130	1.131	A
4	GROSS BETA	1.450	0.140	1.300	0.130	1.115	A

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

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

**QAP 56 Results by Laboratory****Lab:** PC pCi/Labs, Inc., Orangeburg, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.680	0.050	0.534	0.053	1.273	W
1	GROSS BETA	1.080	0.040	1.300	0.130	0.831	W

**Matrix:** WA Water Bq / L

1	GROSS ALPHA	454.000	64.000	375.000	37.500	1.211	W
1	GROSS BETA	1041.000	44.000	1030.000	103.000	1.011	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** PK Pakistan Institute of Nuclear Science & Technology

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> SO Soil Bq / kg								
1	AC228	42.260	7.020	51.167	1.941	0.826	W	A
2	AC228	42.260	7.020	51.167	1.941	0.826	W	A
2	AM241	12.080	1.750	10.927	0.373	1.106	A	A
1	AM241	12.080	1.750	10.927	0.373	1.106	A	A
1	BI212	42.200	4.500	53.430	5.215	0.790	A	A
2	BI212	42.200	4.500	53.430	5.215	0.790	A	A
2	BI214	46.600	1.900	53.933	2.249	0.864	W	A
1	BI214	46.600	1.900	53.933	2.249	0.864	W	A
1	CS137	1286.000	19.000	1326.670	66.510	0.969	A	A
2	CS137	1286.000	19.000	1326.670	66.510	0.969	A	A
2	K40	614.800	23.000	621.670	33.860	0.989	A	A
1	K40	614.800	23.000	621.670	33.860	0.989	A	A
1	PB212	46.700	2.500	51.100	2.753	0.914	A	A
2	PB212	46.700	2.500	51.100	2.753	0.914	A	A
1	PB214	52.000	4.600	54.367	2.249	0.956	A	A
2	PB214	52.000	4.600	54.367	2.249	0.956	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** PO Institute of Oceanology PAN, Poland

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	50.000	4.000	51.167	1.941	0.977	A
1	AM241	13.000	3.000	10.927	0.373	1.190	A
1	BI214	54.000	3.000	53.933	2.249	1.001	A
1	CS137	1280.000	50.000	1326.670	66.510	0.965	A
1	K40	580.000	20.000	621.670	33.860	0.933	A
1	PB214	49.000	3.000	54.367	2.249	0.901	A
1	TH234	78.000	13.000	89.300	6.837	0.873	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	5.000	2.000	2.228	0.216	2.244	N
1	CO60	13.000	3.000	11.230	0.677	1.158	A
1	CS137	370.000	20.000	313.667	15.910	1.180	A
1	K40	961.000	46.000	864.330	47.220	1.112	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** PR Princeton Plasma Physics Lab

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.600	0.455	30.520	0.652	1.035	A	N
1	CS137	24.220	0.776	28.230	0.701	0.858	W	N
1	MN54	36.160	0.501	38.530	0.867	0.938	A	N

**Matrix:** WA Water Bq / L

1	CO60	383.330	0.950	347.330	12.400	1.104	W	N
1	CS134	3.320	0.146	3.357	0.200	0.989	A	
1	CS137	51.680	0.706	56.067	2.929	0.922	A	A
1	H3	275.600	0.690	283.700	3.380	0.971	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** PS PA-DEP Bureau of Radiation Protection, Harrisburg

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.480	0.380	30.520	0.652	1.064	A	A
1	CS137	31.700	0.310	28.230	0.701	1.123	A	A
1	GROSS ALPHA	0.580	0.041	0.534	0.053	1.086	A	A
1	GROSS BETA	1.480	0.050	1.300	0.130	1.138	A	W
1	MN54	42.960	0.360	38.530	0.867	1.115	A	A
1	PU238	0.063	0.017	0.057	0.001	1.097	A	A
1	PU239	0.200	0.040	0.187	0.003	1.067	A	A
1	SR90	4.510	0.097	4.832	0.184	0.933	A	A
1	U234	0.270	0.023	0.297	0.004	0.908	A	
1	U238	0.270	0.023	0.298	0.004	0.906	A	

**Matrix:** SO Soil Bq / kg

1	AM241	9.930	6.520	10.927	0.373	0.909	A	A
1	CS137	1522.220	8.810	1326.670	66.510	1.147	A	A
1	K40	670.370	25.370	621.670	33.860	1.078	A	A
1	PB212	59.630	5.220	51.100	2.753	1.167	A	A
1	PB214	53.700	11.930	54.367	2.249	0.988	A	A
1	PU238	0.630	0.480	0.691	0.105	0.912	A	A
1	PU239	21.680	3.400	19.098	0.706	1.135	W	A
1	SR90	57.320	13.740	53.756	1.446	1.066	A	A
1	U234	84.670	6.690	93.885	7.767	0.902	A	A
1	U238	80.190	6.400	96.778	8.410	0.829	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	16.330	2.040	11.230	0.677	1.454	N	N
1	CS137	459.260	7.040	313.667	15.910	1.464	N	N
1	K40	1207.410	44.810	864.330	47.220	1.397	N	N
1	PU239	3.710	1.370	3.543	0.377	1.047	A	A
1	SR90	573.330	15.220	586.280	11.140	0.978	A	A

**Matrix:** WA Water Bq / L

1	CO60	316.670	2.560	347.330	12.400	0.912	A	A
1	CS134	3.240	0.560	3.357	0.200	0.965	A	
1	CS137	51.110	1.090	56.067	2.929	0.912	A	A
1	GROSS ALPHA	401.630	10.410	375.000	37.500	1.071	A	W
1	GROSS BETA	1024.180	12.530	1030.000	103.000	0.994	A	A
1	PU238	0.450	0.086	0.490	0.032	0.918	A	A
1	PU239	4.090	0.610	4.219	0.172	0.969	A	A
1	SR90	6.890	0.230	7.579	0.176	0.909	A	A
1	U234	1.230	0.095	1.402	0.056	0.877	W	W
1	U238	0.006	1.230	1.381	0.079	0.004	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 56 Results by Laboratory****Lab:** RA V. G. Khlopin Radium Institute, St. Petersburg, Russia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.500	1.600	30.520	0.652	1.065	A	A
1	CS137	30.000	2.000	28.230	0.701	1.063	A	A
1	MN54	39.700	2.400	38.530	0.867	1.030	A	A
1	PU238	0.060	0.020	0.057	0.001	1.045	A	W
1	PU239	0.200	0.040	0.187	0.003	1.067	A	A
1	SR90	4.300	0.900	4.832	0.184	0.890	A	A
1	Ug U	21.600	0.800	24.105	0.103	0.896	W	A

**Matrix:** SO Soil Bq / kg

1	AC228	55.500	4.500	51.167	1.941	1.085	A	A
1	BI212	55.000	5.000	53.430	5.215	1.029	A	A
1	BI214	46.300	3.500	53.933	2.249	0.858	W	A
1	CS137	1290.000	80.000	1326.670	66.510	0.972	A	A
1	K40	610.000	100.000	621.670	33.860	0.981	A	A
1	PB212	57.300	3.700	51.100	2.753	1.121	A	A
1	PB214	49.200	3.100	54.367	2.249	0.905	A	A
1	PU238	1.000	0.200	0.691	0.105	1.447	A	A
1	PU239	20.300	4.000	19.098	0.706	1.063	A	A
1	SR90	53.000	11.000	53.756	1.446	0.986	A	A
1	TH234	100.000	8.000	89.300	6.837	1.120	A	
1	Ug U	5.900	0.400	7.829	0.755	0.754	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.600	1.100	11.230	0.677	1.033	A	A
1	CS137	311.000	20.000	313.667	15.910	0.991	A	A
1	K40	860.000	100.000	864.330	47.220	0.995	A	W
1	PU238	0.280	0.080	0.257	0.046	1.091	A	A
1	PU239	3.500	0.700	3.543	0.377	0.988	A	W
1	SR90	480.000	100.000	586.280	11.140	0.819	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** RB Research Department of a Radiative Metrology, Belarus

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.100	2.100	30.520	0.652	1.019	A
1	CS137	29.800	2.900	28.230	0.701	1.056	A
1	GROSS ALPHA	0.620	0.090	0.534	0.053	1.161	A
1	GROSS BETA	1.420	0.360	1.300	0.130	1.092	A
1	MN54	40.200	3.500	38.530	0.867	1.043	A

**Matrix:** SO Soil Bq / kg

1	AC228	49.100	6.800	51.167	1.941	0.960	A
1	AM241	9.400	2.200	10.927	0.373	0.860	W
1	BI212	53.200	5.900	53.430	5.215	0.996	A
1	BI214	47.800	7.000	53.933	2.249	0.886	A
1	CS137	1255.500	87.900	1326.670	66.510	0.946	A
1	K40	529.800	51.500	621.670	33.860	0.852	W
1	PB212	52.600	7.400	51.100	2.753	1.029	A
1	PB214	56.300	6.900	54.367	2.249	1.036	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	9.500	1.000	11.230	0.677	0.846	W
1	CS137	311.400	23.700	313.667	15.910	0.993	A
1	K40	896.700	83.100	864.330	47.220	1.037	A
1	SR90	577.600	144.100	586.280	11.140	0.985	A

**Matrix:** WA Water Bq / L

1	GROSS ALPHA	677.500	106.700	375.000	37.500	1.807	N
1	GROSS BETA	1256.100	314.300	1030.000	103.000	1.220	A

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

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

**QAP 56 Results by Laboratory****Lab:** RC US NRC Region I Laboratory, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.100	1.100	30.520	0.652	1.019	A	A
1	CS137	28.500	1.100	28.230	0.701	1.010	A	A
1	GROSS ALPHA	0.650	0.040	0.534	0.053	1.217	W	A
1	GROSS BETA	1.170	0.060	1.300	0.130	0.900	A	A
1	MN54	38.800	1.100	38.530	0.867	1.007	A	A

**Matrix:** SO Soil Bq / kg

1	CS137	1350.000	45.000	1326.670	66.510	1.018	A	A
1	K40	644.000	33.000	621.670	33.860	1.036	A	A

**Matrix:** WA Water Bq / L

1	CO60	359.000	15.000	347.330	12.400	1.034	A	A
1	CS134	3.500	0.700	3.357	0.200	1.043	A	
1	CS137	57.700	1.100	56.067	2.929	1.029	A	A
1	H3	300.000	20.000	283.700	3.380	1.057	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** RG Thermo Nutech Rocky Flats Plant, Golden

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	GROSS ALPHA	315.400	16.800	375.000	37.500	0.841	A	A
1	GROSS BETA	861.600	22.500	1030.000	103.000	0.837	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** RI Fluor Hanford, Inc., 222S Lab.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.102	0.014	0.088	0.005	1.155	A	A
1	CO60	30.900	0.788	30.520	0.652	1.012	A	W
1	CS137	30.700	0.988	28.230	0.701	1.087	A	A
1	GROSS ALPHA	0.590	0.037	0.534	0.053	1.105	A	A
1	GROSS BETA	1.180	0.050	1.300	0.130	0.908	A	A
1	MN54	40.300	1.220	38.530	0.867	1.046	A	A
1	PU238	0.079	0.010	0.057	0.001	1.379	N	W
1	PU239	0.180	0.018	0.187	0.003	0.961	A	A
1	SR90	7.430	0.111	4.832	0.184	1.538	W	A

**Matrix:** SO Soil Bq / kg

1	AC228	59.900	14.900	51.167	1.941	1.171	A	A
1	BI214	54.700	10.800	53.933	2.249	1.014	A	A
1	CS137	1390.000	16.100	1326.670	66.510	1.048	A	A
1	PB212	45.700	7.400	51.100	2.753	0.894	A	W
1	PB214	63.500	10.700	54.367	2.249	1.168	A	A
1	PU239	20.300	1.480	19.098	0.706	1.063	A	A
1	SR90	59.500	2.560	53.756	1.446	1.107	A	A
1	Ug U	5.540		7.829	0.755	0.708	A	A
2	Ug U	5.820		7.829	0.755	0.743	A	A
3	Ug U	5.920		7.829	0.755	0.756	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.180	0.303	2.228	0.216	0.978	A	W
1	CM244	1.560	0.229	1.320	0.164	1.182	A	W
1	CS137	359.000	54.700	313.667	15.910	1.145	A	A
1	PU239	3.150	0.381	3.543	0.377	0.889	A	A
1	SR90	555.000	10.500	586.280	11.140	0.947	A	W

**Matrix:** WA Water Bq / L

1	AM241	1.790	0.135	1.474	0.021	1.215	W	A
1	CO60	353.000	3.670	347.330	12.400	1.016	A	A
1	CS137	59.800	2.680	56.067	2.929	1.067	A	A
1	GROSS ALPHA	746.000	42.500	375.000	37.500	1.989	N	A
1	GROSS BETA	932.000	28.900	1030.000	103.000	0.905	A	A
1	H3	192.000	12.100	283.700	3.380	0.677	N	A
1	PU238	0.736	0.084	0.490	0.032	1.501	N	N
1	PU239	4.360	0.362	4.219	0.172	1.033	A	W
1	SR90	7.410	0.511	7.579	0.176	0.978	A	A
3	Ug U	0.098		0.112	0.007	0.878	W	W
2	Ug U	0.098		0.112	0.007	0.879	W	W
1	Ug U	0.099		0.112	0.007	0.885	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 56 Results by Laboratory****Lab:** RK Rock Island Arsenal, Illinois

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.450	0.030	0.534	0.053	0.843	A	W
1	GROSS BETA	1.220	0.050	1.300	0.130	0.938	A	W

**Values for elemental uranium are reported in  $\mu\text{g}/\text{filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** RM Earthline Technologies, Ashtabula, OH

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.100	1.000	30.520	0.652	0.986	A	A
1	CS137	29.300	1.200	28.230	0.701	1.038	A	A
1	MN54	38.100	2.500	38.530	0.867	0.989	A	A
1	Ug U	24.100	2.400	24.105	0.103	1.000	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	52.500	6.700	51.167	1.941	1.026	A	A
1	BI212	49.500	4.500	53.430	5.215	0.926	A	A
1	BI214	52.300	4.100	53.933	2.249	0.970	A	A
1	CS137	1365.000	34.000	1326.670	66.510	1.029	A	W
1	K40	626.000	38.000	621.670	33.860	1.007	A	A
1	PB212	49.500	4.500	51.100	2.753	0.969	A	A
1	PB214	52.300	4.100	54.367	2.249	0.962	A	A

**Matrix:** WA Water Bq / L

1	CO60	330.300	7.900	347.330	12.400	0.951	A	A
1	CS134	3.600	1.000	3.357	0.200	1.072	A	
1	CS137	56.900	2.200	56.067	2.929	1.015	A	A
1	Ug U	0.110	0.010	0.112	0.007	0.985	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** RS RSA Laboratories, Hebron, CT

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.280	0.180	0.088	0.005	3.171	N
1	CO60	26.260	1.570	30.520	0.652	0.860	W
1	CS137	26.940	1.490	28.230	0.701	0.954	A
1	GROSS ALPHA	0.750	0.070	0.534	0.053	1.404	W
1	GROSS BETA	1.450	0.100	1.300	0.130	1.115	A
1	MN54	28.740	1.890	38.530	0.867	0.746	N

**Matrix:** SO Soil Bq / kg

1	AC228	56.290	6.210	51.167	1.941	1.100	A
1	AM241	17.620	2.790	10.927	0.373	1.613	W
1	BI212	39.300	6.230	53.430	5.215	0.736	A
1	BI214	58.440	3.530	53.933	2.249	1.084	A
1	CS137	1397.900	38.470	1326.670	66.510	1.054	A
1	K40	694.000	25.790	621.670	33.860	1.116	A
1	PB212	63.200	3.780	51.100	2.753	1.237	W
1	PB214	52.020	4.610	54.367	2.249	0.957	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	7.610	3.070	2.228	0.216	3.415	N
1	CO60	20.070	1.980	11.230	0.677	1.787	N
1	CS137	541.640	16.100	313.667	15.910	1.727	N
1	K40	1522.300	68.930	864.330	47.220	1.761	N

**Matrix:** WA Water Bq / L

1	AM241	0.270	0.015	1.474	0.021	0.183	N
1	CO60	126.690	5.360	347.330	12.400	0.365	N
1	CS134	1.480	0.020	3.357	0.200	0.441	N
1	CS137	20.140	0.920	56.067	2.929	0.359	N
1	GROSS ALPHA	439.100	24.580	375.000	37.500	1.171	W
1	GROSS BETA	1059.000	63.420	1030.000	103.000	1.028	A
1	H3	313.100	16.780	283.700	3.380	1.104	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** RU Research Institute of Radiology, Belarus

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	28.700	3.200	30.520	0.652	0.940	A	A
1	CS137	36.600	4.000	28.230	0.701	1.296	W	N
1	MN54	37.000	4.100	38.530	0.867	0.960	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	107.000	12.800	51.167	1.941	2.091	N	
1	BI212	47.800	8.600	53.430	5.215	0.895	A	N
1	BI214	39.500	4.700	53.933	2.249	0.732	N	W
1	CS137	1290.000	154.800	1326.670	66.510	0.972	A	A
1	K40	515.000	61.800	621.670	33.860	0.828	W	A
1	PB212	52.100	6.300	51.100	2.753	1.020	A	N
1	PB214	40.700	4.900	54.367	2.249	0.749	N	A
1	SR90	44.400	3.300	53.756	1.446	0.826	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	9.900	1.300	11.230	0.677	0.882	W	A
1	CS137	339.000	40.700	313.667	15.910	1.081	A	A
1	K40	814.000	97.700	864.330	47.220	0.942	A	W
1	SR90	456.100	9.500	586.280	11.140	0.778	A	A

**Matrix:** WA Water Bq / L

1	CO60	312.000	34.300	347.330	12.400	0.898	W	A
1	CS134	4.300	0.900	3.357	0.200	1.281	W	
1	CS137	61.000	7.300	56.067	2.929	1.088	A	A
1	SR90	9.800	1.100	7.579	0.176	1.293	W	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** SA Sandia Labs Radioactive Sample Diag. Prog., NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.000	2.900	30.520	0.652	1.048	A	A
1	CS137	31.000	2.600	28.230	0.701	1.098	A	A
1	GROSS ALPHA	0.610	0.130	0.534	0.053	1.142	A	A
2	GROSS ALPHA	0.550	0.110	0.534	0.053	1.030	A	A
1	GROSS BETA	1.300	0.030	1.300	0.130	1.000	A	A
2	GROSS BETA	1.050	0.150	1.300	0.130	0.808	W	A
1	MN54	44.000	3.900	38.530	0.867	1.142	A	A

**Matrix:** SO Soil Bq / kg

1	CS137	1524.000	244.000	1326.670	66.510	1.149	A	A
1	K40	702.000	109.000	621.670	33.860	1.129	A	A

**Matrix:** WA Water Bq / L

1	CO60	352.000	22.000	347.330	12.400	1.013	A	A
1	CS134	3.000	0.700	3.357	0.200	0.894	W	
1	CS137	57.000	4.000	56.067	2.929	1.017	A	A
1	GROSS ALPHA	410.000	46.000	375.000	37.500	1.093	A	W
1	GROSS BETA	986.000	84.000	1030.000	103.000	0.957	A	A
2	H3	278.000	24.000	283.700	3.380	0.980	A	A
1	H3	281.000	72.000	283.700	3.380	0.990	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 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	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.280	3.394	30.520	0.652	1.025	A	A
1	CS137	29.080	3.284	28.230	0.701	1.030	A	A
3	GROSS ALPHA	0.578	0.051	0.534	0.053	1.082	A	A
2	GROSS ALPHA	0.599	0.052	0.534	0.053	1.122	A	A
1	GROSS ALPHA	0.602	0.052	0.534	0.053	1.127	A	A
3	GROSS BETA	1.227	0.061	1.300	0.130	0.944	A	A
2	GROSS BETA	1.241	0.062	1.300	0.130	0.955	A	A
1	GROSS BETA	1.260	0.062	1.300	0.130	0.969	A	A
1	MN54	39.150	4.862	38.530	0.867	1.016	A	A

**Matrix:** SO Soil Bq / kg

1	AM241	9.431	1.764	10.927	0.373	0.863	W	
1	CS137	1212.000	130.800	1326.670	66.510	0.914	A	A
1	K40	612.400	73.890	621.670	33.860	0.985	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	9.080	1.957	11.230	0.677	0.809	W	A
1	CS137	306.500	33.230	313.667	15.910	0.977	A	A
1	K40	953.500	114.800	864.330	47.220	1.103	A	A

**Matrix:** WA Water Bq / L

1	CO60	354.500	36.200	347.330	12.400	1.021	A	A
1	CS134	2.608	0.789	3.357	0.200	0.777	N	
1	CS137	56.430	6.568	56.067	2.929	1.006	A	A
1	GROSS ALPHA	373.000	21.900	375.000	37.500	0.995	A	A
2	GROSS ALPHA	362.000	21.500	375.000	37.500	0.965	A	A
1	GROSS BETA	886.000	24.500	1030.000	103.000	0.860	A	A
2	GROSS BETA	855.000	24.100	1030.000	103.000	0.830	A	A
3	H3	305.000	11.000	283.700	3.380	1.075	A	A
2	H3	287.000	10.600	283.700	3.380	1.012	A	A
1	H3	286.000	10.200	283.700	3.380	1.008	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** SD STL Denver

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.112	0.011	0.088	0.005	1.268	A	A
1	Bq U	0.607	0.041	0.608	0.005	0.999	A	
1	CO60	36.920	1.360	30.520	0.652	1.210	W	A
1	CS137	32.300	1.600	28.230	0.701	1.144	A	A
1	GROSS ALPHA	0.579	0.005	0.534	0.053	1.084	A	A
1	GROSS BETA	1.490	0.009	1.300	0.130	1.146	A	W
1	MN54	83.330	3.700	38.530	0.867	2.163	N	A
1	PU238	0.072	0.010	0.057	0.001	1.254	W	A
1	PU239	0.173	0.015	0.187	0.003	0.923	A	A
1	SR90	4.040	0.100	4.832	0.184	0.836	A	
1	U234	0.291	0.020	0.297	0.004	0.978	A	A
1	U238	0.316	0.021	0.298	0.004	1.060	A	A
1	Ug U	25.400	1.700	24.105	0.103	1.054	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	48.230	3.510	51.167	1.941	0.943	A	A
1	AM241	24.600	7.000	10.927	0.373	2.251	W	A
1	BI214	40.810	2.580	53.933	2.249	0.757	N	A
1	Bq U	176.600	5.900	194.769	15.642	0.907	A	
1	CS137	1439.000	75.000	1326.670	66.510	1.085	A	A
1	K40	598.100	27.390	621.670	33.860	0.962	A	A
1	PB214	55.590	4.200	54.367	2.249	1.023	A	A
1	PU239	17.600	1.900	19.098	0.706	0.922	A	W
1	U234	86.400	2.900	93.885	7.767	0.920	A	A
1	U238	90.200	3.000	96.778	8.410	0.932	A	A
1	Ug U	7.260	0.240	7.829	0.755	0.927	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.350	0.300	2.228	0.216	1.055	A	A
1	CM244	1.500	0.240	1.320	0.164	1.136	A	W
1	CO60	13.770	1.133	11.230	0.677	1.226	W	W
1	CS137	406.300	21.400	313.667	15.910	1.295	W	W
1	K40	1033.000	51.210	864.330	47.220	1.195	A	W
1	PU239	3.770	0.850	3.543	0.377	1.064	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.420	0.050	1.474	0.021	0.964	A	A
1	Bq U	2.660	0.080	2.836	0.121	0.938	A	
1	CO60	393.100	15.070	347.330	12.400	1.132	W	W
1	CS137	63.850	3.471	56.067	2.929	1.139	W	W
1	GROSS ALPHA	369.000	4.000	375.000	37.500	0.984	A	A
1	GROSS BETA	960.000	6.000	1030.000	103.000	0.932	A	A
1	H3	242.000	5.000	283.700	3.380	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 56 Results by Laboratory****Lab:** SD STL Denver

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	PU238	0.497	0.030	0.490	0.032	1.013	A	A
1	PU239	4.180	0.090	4.219	0.172	0.991	A	A
1	SR90	6.430	0.190	7.579	0.176	0.848	A	A
1	U234	1.330	0.040	1.402	0.056	0.949	A	A
1	U238	1.330	0.040	1.381	0.079	0.963	A	A
1	Ug U	0.107	0.003	0.112	0.007	0.958	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** SE Swedish Defence Research Agency (FOI)

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.105	0.009	0.088	0.005	1.189	A	
1	CO60	27.800	0.500	30.520	0.652	0.911	A	A
1	CS137	28.700	0.500	28.230	0.701	1.017	A	A
1	MN54	35.200	0.600	38.530	0.867	0.914	A	A
1	PU238	0.051	0.012	0.057	0.001	0.888	A	
1	PU239	0.180	0.012	0.187	0.003	0.961	A	
1	SR90	3.940	0.080	4.832	0.184	0.815	A	A
1	U234	0.290	0.013	0.297	0.004	0.975	A	
1	U238	0.290	0.012	0.298	0.004	0.973	A	

**Matrix:** SO Soil Bq / kg

1	AC228	44.700	2.500	51.167	1.941	0.874	A	A
1	AM241	11.000	0.860	10.927	0.373	1.007	A	A
1	BI214	49.300	1.700	53.933	2.249	0.914	A	A
1	CS137	1340.000	23.000	1326.670	66.510	1.010	A	A
1	K40	571.000	19.200	621.670	33.860	0.918	A	A
1	PB212	43.800	1.300	51.100	2.753	0.857	W	A
1	PB214	51.700	1.800	54.367	2.249	0.951	A	A
1	PU238	0.740	0.110	0.691	0.105	1.071	A	
2	PU238	0.750	0.090	0.691	0.105	1.086	A	
4	PU239	19.030	1.660	19.098	0.706	0.996	A	A
3	PU239	19.100	0.790	19.098	0.706	1.000	A	A
2	PU239	17.310	0.830	19.098	0.706	0.906	A	A
1	PU239	20.050	1.350	19.098	0.706	1.050	A	A
2	SR90	45.200	1.400	53.756	1.446	0.841	A	A
1	SR90	46.100	1.400	53.756	1.446	0.858	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	9.980	0.052	2.228	0.216	4.479	N	A
2	AM241	10.340	0.740	2.228	0.216	4.640	N	A
1	CO60	11.200	1.300	11.230	0.677	0.997	A	A
1	CS137	330.000	6.300	313.667	15.910	1.052	A	A
1	K40	916.000	42.300	864.330	47.220	1.060	A	A
1	PU238	0.250	0.029	0.257	0.046	0.974	A	
2	PU238	0.210	0.038	0.257	0.046	0.818	A	
1	PU239	3.080	0.150	3.543	0.377	0.869	A	A
2	PU239	3.900	0.240	3.543	0.377	1.101	A	A
2	SR90	458.000	9.000	586.280	11.140	0.781	A	A
1	SR90	458.000	9.000	586.280	11.140	0.781	A	A

**Matrix:** WA Water Bq / L

2	AM241	1.480	0.059	1.474	0.021	1.004	A	A
1	AM241	1.440	0.074	1.474	0.021	0.977	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 56 Results by Laboratory****Lab:** SE Swedish Defence Research Agency (FOI)

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	CO60	325.000	5.700	347.330	12.400	0.936	A	A
1	CS134	3.600	0.600	3.357	0.200	1.072	A	
1	CS137	57.100	1.400	56.067	2.929	1.018	A	A
1	PU238	0.490	0.026	0.490	0.032	0.999	A	W
2	PU238	0.550	0.058	0.490	0.032	1.122	W	W
2	PU239	4.320	0.320	4.219	0.172	1.024	A	A
1	PU239	4.120	0.170	4.219	0.172	0.977	A	A
2	SR90	6.350	0.140	7.579	0.176	0.838	W	A
1	SR90	6.220	0.140	7.579	0.176	0.821	W	A
2	U234	1.090	0.080	1.402	0.056	0.778	N	N
1	U234	0.940	0.084	1.402	0.056	0.671	N	N
2	U238	0.960	0.073	1.381	0.079	0.695	N	N
1	U238	0.930	0.083	1.381	0.079	0.673	N	N

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

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

**QAP 56 Results by Laboratory****Lab:** SI Jozef Stefan Institute, Slovenia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.090	0.011	0.088	0.005	1.019	A	A
1	CO60	31.200	0.500	30.520	0.652	1.022	A	A
1	CS137	29.200	0.600	28.230	0.701	1.034	A	A
1	MN54	38.200	0.800	38.530	0.867	0.991	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	51.400	1.200	51.167	1.941	1.005	A	A
1	AM241	12.400	0.700	10.927	0.373	1.135	A	A
1	BI212	48.400	1.200	53.430	5.215	0.906	A	A
2	BI214	63.400	2.500	53.933	2.249	1.176	A	A
1	BI214	48.100	1.100	53.933	2.249	0.892	A	A
1	CS137	1308.000	28.000	1326.670	66.510	0.986	A	A
1	K40	563.000	15.000	621.670	33.860	0.906	A	W
1	PB212	53.000	1.400	51.100	2.753	1.037	A	A
2	PB214	65.600	1.800	54.367	2.249	1.207	A	A
1	PB214	50.000	1.000	54.367	2.249	0.920	A	A
1	U238	93.000	7.000	96.778	8.410	0.961	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.200	0.200	2.228	0.216	0.987	A	A
1	CO60	12.000	0.300	11.230	0.677	1.069	A	A
1	CS137	324.000	7.000	313.667	15.910	1.033	A	A
1	K40	856.000	23.000	864.330	47.220	0.990	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.780	0.130	1.474	0.021	1.208	W	A
1	CO60	354.000	7.000	347.330	12.400	1.019	A	A
1	CS134	3.600	0.200	3.357	0.200	1.072	A	
1	CS137	57.000	1.300	56.067	2.929	1.017	A	A
1	H3	320.000	23.000	283.700	3.380	1.128	A	
1	SR90	6.060	0.420	7.579	0.176	0.800	W	

**Values for elemental uranium are reported in  $\mu\text{g/filter, g, or mL}$ .  $\text{pCi/g or mL} = \text{Bq} \times 0.027$** **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 56 Results by Laboratory****Lab:** SK Savannah River Plant

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	51.300	2.400	51.167	1.941	1.003	A	A
1	AM241	13.100	0.900	10.927	0.373	1.199	A	A
2	AM241	11.390	0.880	10.927	0.373	1.042	A	A
1	BI212	50.800	2.100	53.430	5.215	0.951	A	A
1	BI214	50.000	2.100	53.933	2.249	0.927	A	A
1	CS137	1425.000	72.000	1326.670	66.510	1.074	A	A
1	K40	602.000	30.000	621.670	33.860	0.968	A	A
1	PB212	51.200	2.300	51.100	2.753	1.002	A	A
1	PB214	53.700	2.500	54.367	2.249	0.988	A	A
1	PU238	0.677	0.095	0.691	0.105	0.980	A	
2	PU238	0.940	0.140	0.691	0.105	1.361	A	
2	PU239	19.700	1.200	19.098	0.706	1.032	A	
1	PU239	19.800	1.200	19.098	0.706	1.037	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	1.760	0.410	2.228	0.216	0.790	W
1	CO60	10.800	0.500	11.230	0.677	0.962	A
1	CS137	341.000	18.000	313.667	15.910	1.087	A
1	K40	859.000	43.000	864.330	47.220	0.994	A

**Matrix:** WA Water Bq / L

1	AM241	1.470	0.130	1.474	0.021	0.997	A	A
2	AM241	1.510	0.100	1.474	0.021	1.025	A	A
3	AM241	1.470	0.090	1.474	0.021	0.997	A	A
1	CO60	343.000	18.000	347.330	12.400	0.988	A	A
1	CS134	3.250	0.340	3.357	0.200	0.968	A	
1	CS137	57.400	3.400	56.067	2.929	1.024	A	A
1	H3	282.000	14.000	283.700	3.380	0.994	A	A
1	PU238	0.478	0.063	0.490	0.032	0.975	A	A
2	PU238	0.563	0.060	0.490	0.032	1.148	W	A
2	PU239	4.680	0.340	4.219	0.172	1.109	W	A
1	PU239	4.890	0.360	4.219	0.172	1.159	W	A

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

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

**QAP 56 Results by Laboratory****Lab:** SL Stanford Linear Accelerator Center

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	CS137	1847.980	13.280	1326.670	66.510	1.393	N	N
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**Matrix:** WA Water Bq / L

1	CO60	315.430	4.290	347.330	12.400	0.908	A	A
1	CS137	53.510	2.070	56.067	2.929	0.954	A	N
1	H3	****.***	313.810	283.700	3.380	55.307	N	

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

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

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

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**QAP 56 Results by Laboratory****Lab:** SN Sanford Cohen Associates, Inc., Montgomery, AL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.074	0.012	0.088	0.005	0.838	W	A
1	Bq U	0.591	0.068	0.608	0.005	0.973	A	
1	GROSS ALPHA	0.677	0.045	0.534	0.053	1.268	W	W
1	GROSS BETA	1.396	0.048	1.300	0.130	1.074	A	A
1	PU238	0.054	0.010	0.057	0.001	0.940	A	
1	PU239	0.179	0.026	0.187	0.003	0.955	A	A
1	U234	0.283	0.031	0.297	0.004	0.952	A	A
1	U238	0.299	0.033	0.298	0.004	1.003	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	51.600	11.400	51.167	1.941	1.008	A	A
1	AM241	11.600	3.790	10.927	0.373	1.062	A	A
1	BI212	37.700	19.600	53.430	5.215	0.706	A	A
1	BI214	45.100	8.290	53.933	2.249	0.836	W	A
1	Bq U	178.000	23.900	194.769	15.642	0.914	A	
1	CS137	1341.000	131.400	1326.670	66.510	1.011	A	A
1	K40	693.000	86.000	621.670	33.860	1.115	A	A
1	PB212	55.000	7.250	51.100	2.753	1.076	A	A
1	PB214	50.800	9.800	54.367	2.249	0.934	A	A
1	PU239	20.500	5.150	19.098	0.706	1.073	A	A
1	SR90	40.800	8.630	53.756	1.446	0.759	W	A
1	U234	81.700	10.400	93.885	7.767	0.870	A	A
1	U238	91.500	11.100	96.778	8.410	0.945	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	1.890	0.925	2.228	0.216	0.848	W	A
1	CM244	1.320	0.750	1.320	0.164	1.000	A	W
1	CO60	13.900	3.750	11.230	0.677	1.238	W	A
1	CS137	315.000	31.800	313.667	15.910	1.004	A	A
1	K40	1029.000	121.400	864.330	47.220	1.191	A	A
1	PU239	2.820	1.060	3.543	0.377	0.796	W	A
1	SR90	544.000	17.100	586.280	11.140	0.928	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.500	0.234	1.474	0.021	1.018	A	A
1	Bq U	2.590	0.345	2.836	0.121	0.913	A	
1	CO60	338.000	34.900	347.330	12.400	0.973	A	A
1	CS134	3.040	0.869	3.357	0.200	0.906	A	
1	CS137	51.200	5.280	56.067	2.929	0.913	A	A
1	GROSS ALPHA	573.000	46.000	375.000	37.500	1.528	N	W
1	GROSS BETA	1782.000	59.300	1030.000	103.000	1.730	N	A
1	H3	296.000	14.500	283.700	3.380	1.043	A	A
1	PU238	0.474	0.093	0.490	0.032	0.967	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** SN Sanford Cohen Associates, Inc., Montgomery, AL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU239	4.450	0.596	4.219	0.172	1.055	A	A
1	SR90	6.720	0.429	7.579	0.176	0.887	A	A
1	U234	1.220	0.155	1.402	0.056	0.870	W	A
1	U238	1.310	0.163	1.381	0.079	0.948	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** SR Savannah River Environmental Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.093	0.012	0.088	0.005	1.053	A	N
1	CO60	30.300	2.300	30.520	0.652	0.993	A	A
1	CS137	28.200	3.000	28.230	0.701	0.999	A	W
1	GROSS ALPHA	0.580	0.106	0.534	0.053	1.086	A	W
1	GROSS BETA	1.230	0.103	1.300	0.130	0.946	A	A
1	MN54	37.700	3.770	38.530	0.867	0.978	A	A
1	PU238	0.060	0.007	0.057	0.001	1.045	A	A
1	PU239	0.190	0.020	0.187	0.003	1.014	A	A
1	SR90	4.580	0.240	4.832	0.184	0.948	A	A
1	U234	0.318	0.037	0.297	0.004	1.069	A	A
1	U238	0.316	0.037	0.298	0.004	1.060	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	38.400	10.700	51.167	1.941	0.750	N	A
1	AM241	6.330	0.950	10.927	0.373	0.579	N	A
1	BI212	36.000	9.700	53.430	5.215	0.674	A	A
1	BI214	49.000	4.800	53.933	2.249	0.909	A	A
1	CS137	1260.000	122.000	1326.670	66.510	0.950	A	A
1	K40	605.000	68.000	621.670	33.860	0.973	A	A
1	PB212	31.500	7.900	51.100	2.753	0.616	N	A
1	PB214	44.700	5.600	54.367	2.249	0.822	W	A
1	PU239	16.400	1.300	19.098	0.706	0.859	W	A
1	SR90	45.000	19.000	53.756	1.446	0.837	A	A
1	TH234	109.000	37.000	89.300	6.837	1.221	A	A
1	U234	18.400	1.500	93.885	7.767	0.196	N	A
1	U238	17.900	1.500	96.778	8.410	0.185	N	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	1.560	0.240	2.228	0.216	0.700	N	W
1	CM244	0.840	0.170	1.320	0.164	0.636	W	W
1	CO60	9.960	3.750	11.230	0.677	0.887	W	A
1	CS137	307.000	32.000	313.667	15.910	0.979	A	A
1	K40	890.000	120.000	864.330	47.220	1.030	A	A
1	PU239	2.380	0.340	3.543	0.377	0.672	N	A
1	SR90	451.000	38.000	586.280	11.140	0.769	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.390	0.250	1.474	0.021	0.943	A	A
1	CO60	352.000	25.000	347.330	12.400	1.013	A	A
1	CS134	3.000	0.800	3.357	0.200	0.894	W	
1	CS137	56.200	6.000	56.067	2.929	1.002	A	A
1	GROSS ALPHA	351.000	81.000	375.000	37.500	0.936	A	A
1	GROSS BETA	826.000	125.000	1030.000	103.000	0.802	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 56 Results by Laboratory****Lab:** SR Savannah River Environmental Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	H3	291.000	17.000	283.700	3.380	1.026	A	A
1	PU238	0.470	0.100	0.490	0.032	0.958	A	A
1	PU239	3.970	0.630	4.219	0.172	0.941	A	A
1	SR90	6.200	1.300	7.579	0.176	0.818	W	W
1	U234	1.390	0.280	1.402	0.056	0.992	A	W
1	U238	1.370	0.280	1.381	0.079	0.992	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** ST SC DHEC, Aiken, South Carolina

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	H3	278.200	9.300	283.700	3.380	0.981	A	A
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**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** SX Saxton Nuclear Experimental Corp., Saxton, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	CO60	30.070	1.160	30.520	0.652	0.985	A	A
1	CO60	30.290	1.160	30.520	0.652	0.992	A	A
1	CS137	28.280	1.610	28.230	0.701	1.002	A	A
2	CS137	28.390	1.620	28.230	0.701	1.006	A	A
2	MN54	36.940	5.770	38.530	0.867	0.959	A	A
1	MN54	37.040	5.790	38.530	0.867	0.961	A	A

**Matrix:** SO Soil Bq / kg

1	CS137	1051.170	55.100	1326.670	66.510	0.792	N	W
2	CS137	1081.140	55.500	1326.670	66.510	0.815	W	W
1	K40	499.130	30.320	621.670	33.860	0.803	W	A
2	K40	515.040	33.190	621.670	33.860	0.828	W	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	8.520	0.920	11.230	0.677	0.759	N	W
2	CO60	9.740	0.800	11.230	0.677	0.867	W	W
1	CS137	283.660	15.290	313.667	15.910	0.904	A	W
2	CS137	284.430	15.100	313.667	15.910	0.907	A	W
2	K40	799.570	49.250	864.330	47.220	0.925	A	W
1	K40	745.550	55.400	864.330	47.220	0.863	W	W

**Matrix:** WA Water Bq / L

1	CO60	390.040	15.080	347.330	12.400	1.123	W	W
2	CO60	337.880	13.090	347.330	12.400	0.973	A	W
2	CS134	2.540	0.550	3.357	0.200	0.757	N	
1	CS134	3.450	0.400	3.357	0.200	1.028	A	
2	CS137	56.030	3.100	56.067	2.929	0.999	A	A
1	CS137	61.720	3.410	56.067	2.929	1.101	A	A
1	H3	307.360	13.100	283.700	3.380	1.083	A	A
2	H3	321.860	13.520	283.700	3.380	1.135	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** SY Syrian Arab Republic Atomic Energy Commission

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	AC228	48.200	5.200	51.167	1.941	0.942	A	A
1	AM241	15.400	4.400	10.927	0.373	1.409	A	N
1	BI212	54.600	14.700	53.430	5.215	1.022	A	A
1	BI214	47.800	4.900	53.933	2.249	0.886	A	A
1	CS137	1390.000	63.000	1326.670	66.510	1.048	A	A
1	K40	632.000	40.000	621.670	33.860	1.017	A	A
1	PB212	54.100	3.800	51.100	2.753	1.059	A	A
1	PB214	54.100	4.500	54.367	2.249	0.995	A	A
1	TH234	96.300	12.000	89.300	6.837	1.078	A	A
1	Ug U	6.840	0.220	7.829	0.755	0.874	A	W

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.630	1.420	11.230	0.677	1.036	A	A
1	CS137	345.000	17.000	313.667	15.910	1.100	A	A
1	K40	900.000	57.000	864.330	47.220	1.041	A	A

**Matrix:** WA Water Bq / L

1	CO60	352.000	15.000	347.330	12.400	1.013	A	A
1	CS134	3.410	0.300	3.357	0.200	1.016	A	
1	CS137	58.200	2.600	56.067	2.929	1.038	A	A
1	H3	421.000	3.000	283.700	3.380	1.484	W	A
1	Ug U	0.110	0.010	0.112	0.007	0.985	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** TE Environmental Inc., Northbrook, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.085	0.046	0.088	0.005	0.963	A	A
1	Bq U	0.800	0.200	0.608	0.005	1.317	W	A
1	CO60	30.100	0.300	30.520	0.652	0.986	A	A
1	CS137	29.900	0.300	28.230	0.701	1.059	A	A
1	GROSS ALPHA	0.430	0.040	0.534	0.053	0.805	W	A
1	GROSS BETA	1.340	0.050	1.300	0.130	1.031	A	A
1	MN54	40.400	0.400	38.530	0.867	1.049	A	A
1	PU238	0.047	0.019	0.057	0.001	0.819	W	W
1	PU239	0.150	0.020	0.187	0.003	0.800	W	A
1	SR90	3.400	0.400	4.832	0.184	0.704	W	A

**Matrix:** SO Soil Bq / kg

1	AC228	55.000	5.500	51.167	1.941	1.075	A	A
1	AM241	8.300	3.300	10.927	0.373	0.760	W	A
1	BI212	49.200	12.400	53.430	5.215	0.921	A	A
1	BI214	46.600	3.100	53.933	2.249	0.864	W	W
1	Bq U	143.400	9.400	194.769	15.642	0.736	W	A
1	CS137	1401.600	9.100	1326.670	66.510	1.056	A	A
1	K40	613.100	28.100	621.670	33.860	0.986	A	A
1	PB212	51.600	2.600	51.100	2.753	1.010	A	A
1	PB214	52.000	3.600	54.367	2.249	0.956	A	W
1	PU239	14.700	3.500	19.098	0.706	0.770	W	A
1	SR90	52.100	6.300	53.756	1.446	0.969	A	A
1	TH234	122.400	6.300	89.300	6.837	1.371	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	3.100	2.200	2.228	0.216	1.391	A	A
1	CM244	0.900	0.800	1.320	0.164	0.682	W	A
1	CO60	13.500	2.100	11.230	0.677	1.202	A	A
1	CS137	350.400	6.300	313.667	15.910	1.117	A	A
1	K40	940.800	45.600	864.330	47.220	1.088	A	A
1	PU239	16.900	0.700	3.543	0.377	4.770	N	W
1	SR90	543.400	24.900	586.280	11.140	0.927	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.680	0.140	1.474	0.021	1.140	A	A
1	Bq U	3.270	0.430	2.836	0.121	1.153	A	A
1	CO60	349.200	2.600	347.330	12.400	1.005	A	A
1	CS134	3.400	0.600	3.357	0.200	1.013	A	
1	CS137	57.200	1.700	56.067	2.929	1.020	A	A
1	GROSS ALPHA	265.400	7.700	375.000	37.500	0.708	W	A
1	GROSS BETA	930.600	12.000	1030.000	103.000	0.903	A	A
1	H3	226.300	32.700	283.700	3.380	0.798	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 56 Results by Laboratory****Lab:** TE Environmental Inc., Northbrook, IL

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU238	0.450	0.110	0.490	0.032	0.918	A	A
1	PU239	4.470	0.280	4.219	0.172	1.059	A	A
1	SR90	7.400	1.300	7.579	0.176	0.976	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** TI Teledyne Brown Engineering Environmental Services, Knoxville, TN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.078	0.017	0.088	0.005	0.882	A	A
1	CO60	31.700	0.770	30.520	0.652	1.039	A	A
1	CS137	30.400	1.010	28.230	0.701	1.077	A	W
1	GROSS ALPHA	0.545	0.049	0.534	0.053	1.021	A	A
1	GROSS BETA	1.210	0.070	1.300	0.130	0.931	A	A
1	MN54	38.300	1.230	38.530	0.867	0.994	A	A
1	PU238	0.062	0.019	0.057	0.001	1.076	A	W
1	PU239	0.187	0.066	0.187	0.003	0.998	A	W
1	SR90	4.680	0.440	4.832	0.184	0.969	A	W
1	U234	0.299	0.039	0.297	0.004	1.005	A	
1	U238	0.339	0.042	0.298	0.004	1.137	A	

**Matrix:** SO Soil Bq / kg

1	AC228	50.000	2.430	51.167	1.941	0.977	A	
1	AM241	11.300	4.500	10.927	0.373	1.034	A	
1	BI212	35.900	4.210	53.430	5.215	0.672	A	
1	BI214	46.300	2.240	53.933	2.249	0.858	W	
1	CS137	1300.000	32.000	1326.670	66.510	0.980	A	A
1	K40	608.000	25.800	621.670	33.860	0.978	A	A
1	PB212	49.400	3.380	51.100	2.753	0.967	A	
1	PB214	49.100	2.150	54.367	2.249	0.903	A	
1	PU239	25.900	6.700	19.098	0.706	1.356	N	W
1	SR90	46.600	7.900	53.756	1.446	0.867	A	A
1	TH234	90.100	9.970	89.300	6.837	1.009	A	
1	U234	90.500	13.600	93.885	7.767	0.964	A	
1	U238	102.000	14.800	96.778	8.410	1.054	A	

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.730	0.700	2.228	0.216	1.225	A	
1	CM244	2.430	0.680	1.320	0.164	1.841	N	
1	CO60	11.700	0.730	11.230	0.677	1.042	A	A
1	CS137	346.000	8.600	313.667	15.910	1.103	A	A
1	K40	952.000	38.400	864.330	47.220	1.101	A	A
1	PU239	3.620	0.980	3.543	0.377	1.022	A	A
1	SR90	477.000	22.000	586.280	11.140	0.814	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.440	0.170	1.474	0.021	0.977	A	A
1	CO60	367.000	5.800	347.330	12.400	1.057	A	A
1	CS134	2.930	0.321	3.357	0.200	0.873	W	
1	CS137	59.600	1.770	56.067	2.929	1.063	A	A
1	GROSS ALPHA	427.000	38.000	375.000	37.500	1.139	W	W
1	GROSS BETA	895.000	38.000	1030.000	103.000	0.869	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 56 Results by Laboratory****Lab:** TI Teledyne Brown Engineering Environmental Services, Knoxville, TN

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	H3	285.000	20.000	283.700	3.380	1.005	A	A
1	PU238	0.540	0.110	0.490	0.032	1.101	W	W
1	PU239	4.730	0.610	4.219	0.172	1.121	W	W
1	SR90	5.780	0.190	7.579	0.176	0.763	W	W
1	U234	1.300	0.150	1.402	0.056	0.927	A	
1	U238	1.290	0.150	1.381	0.079	0.934	A	

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

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

**QAP 56 Results by Laboratory****Lab:** TM Eberline Services Albuquerque Lab, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.085	0.012	0.088	0.005	0.963	A	A
1	CO60	32.000	0.990	30.520	0.652	1.048	A	W
1	CS137	29.000	0.940	28.230	0.701	1.027	A	W
1	GROSS ALPHA	0.740	0.050	0.534	0.053	1.386	W	W
1	GROSS BETA	1.300	0.050	1.300	0.130	1.000	A	A
1	MN54	39.000	1.100	38.530	0.867	1.012	A	W
1	PU238	0.028	0.006	0.057	0.001	0.488	N	A
1	PU239	0.098	0.011	0.187	0.003	0.523	N	W
1	SR90	5.140	0.482	4.832	0.184	1.064	A	A
1	U234	0.279	0.017	0.297	0.004	0.938	A	A
1	U238	0.274	0.017	0.298	0.004	0.919	A	A
1	Ug U	22.000	2.500	24.105	0.103	0.913	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	65.900	9.020	51.167	1.941	1.288	W	A
1	AM241	10.500	2.500	10.927	0.373	0.961	A	A
1	BI212	42.700	19.900	53.430	5.215	0.799	A	A
1	BI214	60.200	7.120	53.933	2.249	1.116	A	A
1	CS137	1370.000	69.400	1326.670	66.510	1.033	A	A
1	K40	562.000	75.200	621.670	33.860	0.904	A	A
1	PB212	63.900	5.500	51.100	2.753	1.250	W	A
1	PB214	58.400	8.290	54.367	2.249	1.074	A	A
1	PU239	18.900	2.620	19.098	0.706	0.990	A	A
1	SR90	59.500	9.060	53.756	1.446	1.107	A	W
1	U234	86.400	5.040	93.885	7.767	0.920	A	A
1	U238	91.500	5.170	96.778	8.410	0.945	A	A
1	Ug U	7.940	0.092	7.829	0.755	1.014	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.260	0.725	2.228	0.216	1.014	A	A
1	CM244	1.460	0.553	1.320	0.164	1.106	A	W
1	CO60	14.100	2.240	11.230	0.677	1.256	W	A
1	CS137	488.000	13.700	313.667	15.910	1.556	N	A
1	K40	1100.000	101.000	864.330	47.220	1.273	W	A
1	PU239	2.180	0.479	3.543	0.377	0.615	N	A
1	SR90	1640.000	45.200	586.280	11.140	2.797	N	A

**Matrix:** WA Water Bq / L

1	AM241	1.660	0.089	1.474	0.021	1.126	A	A
1	CO60	338.000	7.230	347.330	12.400	0.973	A	A
1	CS134	2.620	0.182	3.357	0.200	0.780	N	
1	CS137	52.000	1.790	56.067	2.929	0.927	A	A
1	GROSS ALPHA	425.000	18.300	375.000	37.500	1.133	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 56 Results by Laboratory****Lab:** TM Eberline Services Albuquerque Lab, NM

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS BETA	969.000	19.200	1030.000	103.000	0.941	A	A
1	H3	278.000	36.800	283.700	3.380	0.980	A	A
1	PU238	0.513	0.051	0.490	0.032	1.046	A	W
1	PU239	4.340	0.140	4.219	0.172	1.029	A	W
1	SR90	7.710	0.444	7.579	0.176	1.017	A	A
1	U234	1.310	0.075	1.402	0.056	0.935	A	A
1	U238	1.350	0.076	1.381	0.079	0.977	A	A
1	Ug U	101.000	1.210	0.112	0.007	904.208	N	A

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

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

**QAP 56 Results by Laboratory****Lab:** TN Eberline Services, Richmond, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.071	0.010	0.088	0.005	0.806	W	A
1	CO60	26.490	1.900	30.520	0.652	0.868	W	A
1	CS137	25.950	2.340	28.230	0.701	0.919	A	A
1	GROSS ALPHA	0.428	0.029	0.534	0.053	0.801	W	W
1	GROSS BETA	1.082	0.045	1.300	0.130	0.832	W	A
1	MN54	34.710	2.700	38.530	0.867	0.901	A	A
1	PU238	0.051	0.006	0.057	0.001	0.888	A	A
1	PU239	0.163	0.012	0.187	0.003	0.870	W	A
1	SR90	4.290	0.089	4.832	0.184	0.888	A	A
1	U234	0.236	0.013	0.297	0.004	0.794	N	W
1	U238	0.237	0.013	0.298	0.004	0.795	N	W
1	Ug U	20.700	2.500	24.105	0.103	0.859	W	W

**Matrix:** SO Soil Bq / kg

1	AM241	9.140	1.490	10.927	0.373	0.836	W	A
1	BI212	33.420	19.600	53.430	5.215	0.625	A	W
1	BI214	41.660	4.880	53.933	2.249	0.772	N	W
1	CS137	1158.000	60.000	1326.670	66.510	0.873	W	W
1	K40	498.100	38.000	621.670	33.860	0.801	W	W
1	PB212	43.970	5.000	51.100	2.753	0.860	W	A
1	PB214	48.250	6.960	54.367	2.249	0.887	A	A
1	PU239	19.090	1.890	19.098	0.706	1.000	A	A
1	SR90	48.660	6.220	53.756	1.446	0.905	A	A
1	U234	73.480	3.510	93.885	7.767	0.783	W	A
1	U238	79.410	3.670	96.778	8.410	0.821	A	A
1	Ug U	6.440	0.740	7.829	0.755	0.823	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.278	0.900	2.228	0.216	1.022	A	A
1	CM244	1.347	0.597	1.320	0.164	1.020	A	A
1	CO60	11.690	3.160	11.230	0.677	1.041	A	W
1	CS137	316.000	10.000	313.667	15.910	1.007	A	A
1	K40	767.000	61.400	864.330	47.220	0.887	W	A
1	PU239	2.990	0.660	3.543	0.377	0.844	A	A
1	SR90	534.400	15.740	586.280	11.140	0.912	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.495	0.070	1.474	0.021	1.014	A	A
1	CO60	372.700	4.000	347.330	12.400	1.073	A	A
1	CS134	3.770	0.940	3.357	0.200	1.123	A	
1	CS137	62.280	4.240	56.067	2.929	1.111	A	W
1	GROSS ALPHA	379.800	18.100	375.000	37.500	1.013	A	A
1	GROSS BETA	917.100	21.300	1030.000	103.000	0.890	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 56 Results by Laboratory****Lab:** TN Eberline Services, Richmond, CA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	H3	294.900	10.660	283.700	3.380	1.039	A	A
1	PU238	0.505	0.042	0.490	0.032	1.030	A	A
1	PU239	4.438	0.154	4.219	0.172	1.052	A	W
1	SR90	8.229	0.197	7.579	0.176	1.086	A	A
1	U234	1.300	0.050	1.402	0.056	0.927	A	A
1	U238	1.280	0.060	1.381	0.079	0.927	A	W
1	Ug U	0.094	0.011	0.112	0.007	0.837	W	W

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

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

**QAP 56 Results by Laboratory****Lab:** TO Eberline Services Oak Ridge Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.124	0.039	0.088	0.005	1.404	W	A
1	CO60	28.272	3.419	30.520	0.652	0.926	A	A
1	CS137	30.128	4.894	28.230	0.701	1.067	A	W
1	GROSS ALPHA	0.491	0.027	0.534	0.053	0.919	A	W
1	GROSS BETA	1.315	0.041	1.300	0.130	1.012	A	A
1	MN54	38.946	6.569	38.530	0.867	1.011	A	A
1	PU238	0.078	0.033	0.057	0.001	1.358	N	W
1	PU239	0.228	0.064	0.187	0.003	1.217	W	A
1	SR90	4.343	0.094	4.832	0.184	0.899	A	A
1	U234	0.319	0.074	0.297	0.004	1.073	A	A
1	U238	0.283	0.068	0.298	0.004	0.949	A	A
1	Ug U	25.691	0.836	24.105	0.103	1.066	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	40.768	8.303	51.167	1.941	0.797	N	A
1	AM241	8.272	2.116	10.927	0.373	0.757	W	A
1	BI212	43.579	7.318	53.430	5.215	0.816	A	A
1	BI214	43.579	7.318	53.933	2.249	0.808	W	A
1	CS137	1096.000	117.036	1326.670	66.510	0.826	W	W
1	K40	504.912	67.641	621.670	33.860	0.812	W	A
1	PB212	46.380	6.333	51.100	2.753	0.908	A	A
1	PB214	43.827	7.914	54.367	2.249	0.806	W	A
1	PU239	18.014	3.639	19.098	0.706	0.943	A	A
1	SR90	40.191	1.344	53.756	1.446	0.748	W	A
1	TH234	87.926	37.516	89.300	6.837	0.985	A	A
1	U234	53.502	10.821	93.885	7.767	0.570	N	A
1	U238	60.557	12.153	96.778	8.410	0.626	N	A
1	Ug U	4.424	0.237	7.829	0.755	0.565	W	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	1.617	0.754	2.228	0.216	0.726	N	A
1	CM244	1.390	0.698	1.320	0.164	1.053	A	W
1	CO60	10.481	2.958	11.230	0.677	0.933	A	A
1	CS137	276.497	31.075	313.667	15.910	0.881	W	A
1	K40	753.321	102.684	864.330	47.220	0.872	W	W
1	PU239	2.594	0.907	3.543	0.377	0.732	W	A
1	SR90	501.000	8.710	586.280	11.140	0.855	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.919	0.316	1.474	0.021	1.302	W	A
1	CO60	380.397	26.694	347.330	12.400	1.095	A	A
1	CS134	3.639	0.929	3.357	0.200	1.084	A	
1	CS137	64.334	6.983	56.067	2.929	1.147	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 56 Results by Laboratory****Lab:** TO Eberline Services Oak Ridge Laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	GROSS ALPHA	401.256	30.228	375.000	37.500	1.070	A	A
1	GROSS BETA	1123.048	40.204	1030.000	103.000	1.090	A	A
1	H3	311.835	30.398	283.700	3.380	1.099	A	A
1	PU238	0.503	0.138	0.490	0.032	1.026	A	A
1	PU239	4.542	0.847	4.219	0.172	1.077	A	A
1	SR90	6.360	0.390	7.579	0.176	0.839	W	A
1	U234	1.286	0.257	1.402	0.056	0.917	A	A
1	U238	1.251	0.250	1.381	0.079	0.906	A	A
1	Ug U	0.112	0.004	0.112	0.007	1.003	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** TP Taiwan Power Company, Taipei, Taiwan

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.570	0.290	30.520	0.652	1.002	A	A
1	CS137	27.270	0.560	28.230	0.701	0.966	A	A
1	MN54	37.780	0.610	38.530	0.867	0.981	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	59.820	1.510	51.167	1.941	1.169	A	A
1	BI212	63.480	5.070	53.430	5.215	1.188	W	A
1	BI214	54.360	2.040	53.933	2.249	1.008	A	A
1	CS137	1390.150	39.850	1326.670	66.510	1.048	A	A
1	K40	620.350	9.470	621.670	33.860	0.998	A	A
1	PB212	58.760	2.930	51.100	2.753	1.150	A	A
1	PB214	57.650	1.560	54.367	2.249	1.060	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.360	0.140	11.230	0.677	1.012	A	A
1	CS137	324.360	2.140	313.667	15.910	1.034	A	A
1	K40	908.680	21.790	864.330	47.220	1.051	A	A

**Matrix:** WA Water Bq / L

1	CO60	340.670	3.990	347.330	12.400	0.981	A	A
1	CS137	54.250	0.630	56.067	2.929	0.968	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** TQ Institute of Nuclear Energy Research, Taiwan

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	30.690	0.510	30.520	0.652	1.006	A	A
1	CS137	30.290	0.600	28.230	0.701	1.073	A	W
1	GROSS ALPHA	0.620	0.020	0.534	0.053	1.161	A	A
1	GROSS BETA	1.380	0.030	1.300	0.130	1.062	A	W
1	MN54	38.380	0.720	38.530	0.867	0.996	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	50.500	1.500	51.167	1.941	0.987	A	A
1	BI212	60.500	3.400	53.430	5.215	1.132	A	A
1	BI214	53.000	1.500	53.933	2.249	0.983	A	A
1	CS137	1333.000	31.000	1326.670	66.510	1.005	A	A
1	K40	625.000	17.000	621.670	33.860	1.005	A	A
1	PB212	60.000	1.700	51.100	2.753	1.174	A	A
1	PB214	60.400	1.700	54.367	2.249	1.111	A	A
1	SR90	58.500	2.800	53.756	1.446	1.088	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	12.500	0.700	11.230	0.677	1.113	A	A
1	CS137	336.000	9.000	313.667	15.910	1.071	A	A
1	K40	1009.000	35.000	864.330	47.220	1.167	A	A
1	SR90	579.400	6.600	586.280	11.140	0.988	A	A

**Matrix:** WA Water Bq / L

1	CO60	338.800	9.800	347.330	12.400	0.975	A	A
1	CS137	59.400	1.700	56.067	2.929	1.059	A	A
1	GROSS ALPHA	383.000	18.000	375.000	37.500	1.021	A	A
1	GROSS BETA	1051.000	23.000	1030.000	103.000	1.020	A	A
1	H3	296.330	12.000	283.700	3.380	1.045	A	A
1	SR90	5.470	0.130	7.579	0.176	0.722	W	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** TW Taiwan Radiation Monitoring Center

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	29.900	0.220	30.520	0.652	0.980	A	A
1	CS137	28.700	0.310	28.230	0.701	1.017	A	A
1	GROSS ALPHA	0.690	0.020	0.534	0.053	1.292	W	A
1	GROSS BETA	1.390	0.040	1.300	0.130	1.069	A	W
1	MN54	39.100	0.380	38.530	0.867	1.015	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	54.900	1.880	51.167	1.941	1.073	A	A
1	BI212	53.100	5.300	53.430	5.215	0.994	A	A
1	BI214	50.400	1.490	53.933	2.249	0.934	A	A
1	CS137	1348.000	10.780	1326.670	66.510	1.016	A	A
1	K40	618.000	15.140	621.670	33.860	0.994	A	A
1	PB212	53.600	2.340	51.100	2.753	1.049	A	A
1	PB214	54.000	2.330	54.367	2.249	0.993	A	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	12.000	0.050	11.230	0.677	1.069	A	A
1	CS137	336.000	4.970	313.667	15.910	1.071	A	A
1	K40	924.000	25.500	864.330	47.220	1.069	A	A

**Matrix:** WA Water Bq / L

1	CO60	327.000	2.260	347.330	12.400	0.941	A	A
1	CS134	3.010	0.290	3.357	0.200	0.897	W	
1	CS137	53.300	0.850	56.067	2.929	0.951	A	A
1	GROSS ALPHA	360.450	28.070	375.000	37.500	0.961	A	A
1	GROSS BETA	1021.240	47.760	1030.000	103.000	0.991	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** TX Texas Dept. of Health/Laboratories, Austin

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.095	0.003	0.088	0.005	1.076	A	W
1	CO60	28.100	0.300	30.520	0.652	0.921	A	A
1	CS137	26.500	0.400	28.230	0.701	0.939	A	A
1	GROSS ALPHA	0.400	0.020	0.534	0.053	0.749	W	A
1	GROSS BETA	1.150	0.050	1.300	0.130	0.885	A	A
1	MN54	35.900	0.500	38.530	0.867	0.932	A	A
1	PU238	0.060	0.002	0.057	0.001	1.045	A	A
1	PU239	0.193	0.004	0.187	0.003	1.030	A	A
1	U234	0.282	0.006	0.297	0.004	0.948	A	W
1	U238	0.287	0.006	0.298	0.004	0.963	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	51.400	1.400	51.167	1.941	1.005	A	A
1	AM241	7.730	0.360	10.927	0.373	0.707	W	A
1	BI212	29.800	3.700	53.430	5.215	0.558	W	W
1	BI214	48.400	1.400	53.933	2.249	0.897	A	A
1	CS137	1320.000	17.000	1326.670	66.510	0.995	A	A
1	K40	577.000	14.000	621.670	33.860	0.928	A	A
1	PB212	46.300	1.200	51.100	2.753	0.906	A	A
1	PB214	48.100	1.400	54.367	2.249	0.885	A	A
1	PU239	20.700	0.500	19.098	0.706	1.084	A	A
1	SR90	46.000	7.000	53.756	1.446	0.856	A	A
1	TH234	70.300	6.600	89.300	6.837	0.787	W	W
1	U234	83.400	2.000	93.885	7.767	0.888	A	A
1	U238	89.300	2.100	96.778	8.410	0.923	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	1.100	0.110	2.228	0.216	0.494	N	A
1	CO60	15.200	0.900	11.230	0.677	1.354	W	A
1	CS137	354.000	6.000	313.667	15.910	1.129	A	A
1	K40	988.000	30.000	864.330	47.220	1.143	A	A
1	PU239	3.360	0.180	3.543	0.377	0.948	A	A
1	SR90	504.000	19.000	586.280	11.140	0.860	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.240	0.020	1.474	0.021	0.841	W	A
1	CO60	361.000	3.000	347.330	12.400	1.039	A	A
1	CS134	2.990	0.240	3.357	0.200	0.891	W	
1	CS137	59.100	1.000	56.067	2.929	1.054	A	A
1	GROSS ALPHA	418.000	19.000	375.000	37.500	1.115	A	A
1	GROSS BETA	917.000	29.000	1030.000	103.000	0.890	A	A
1	H3	294.000	21.000	283.700	3.380	1.036	A	A
1	PU238	0.554	0.017	0.490	0.032	1.130	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 56 Results by Laboratory****Lab:** TX Texas Dept. of Health/Laboratories, Austin

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU239	4.400	0.040	4.219	0.172	1.043	A	A
1	SR90	6.580	0.700	7.579	0.176	0.868	A	W
1	U234	1.250	0.040	1.402	0.056	0.892	W	A
1	U238	1.230	0.040	1.381	0.079	0.891	W	A

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

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

**QAP 56 Results by Laboratory****Lab:** TY Scientific Production Association, Russia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	32.000	3.200	30.520	0.652	1.048	A
1	CS137	30.000	3.000	28.230	0.701	1.063	A
1	GROSS ALPHA	1.330	0.130	0.534	0.053	2.491	N
1	GROSS BETA	1.370	0.140	1.300	0.130	1.054	A
1	MN54	40.000	4.000	38.530	0.867	1.038	A

**Matrix:** SO Soil Bq / kg

1	AC228	38.000	3.800	51.167	1.941	0.743	N
1	AM241	6.600	2.200	10.927	0.373	0.604	N
1	BI214	40.000	4.000	53.933	2.249	0.742	N
1	CS137	1140.000	100.000	1326.670	66.510	0.859	W
1	K40	470.000	47.000	621.670	33.860	0.756	N

**Matrix:** VE Vegetation Bq / kg

1	AM241	3.900	0.700	2.228	0.216	1.750	W
1	CO60	11.000	2.200	11.230	0.677	0.980	A
1	CS137	278.000	28.000	313.667	15.910	0.886	W
1	K40	79.000	7.900	864.330	47.220	0.091	N

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

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

**QAP 56 Results by Laboratory****Lab:** UC United States Enrichment Corporation, Paducah, KY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	GROSS ALPHA	0.650	0.040	0.534	0.053	1.217	W
1	GROSS BETA	1.045	0.030	1.300	0.130	0.804	W
1	PU239	0.184	0.029	0.187	0.003	0.982	A

**Matrix:** SO Soil Bq / kg

1	CS137	1440.000	15.300	1326.670	66.510	1.085	A	A
1	K40	669.000	77.600	621.670	33.860	1.076	A	A
1	PU239	20.200	1.480	19.098	0.706	1.058	A	A
1	Ug U	3.330		7.829	0.755	0.425	N	

**Matrix:** VE Vegetation Bq / kg

1	CO60	15.500	5.680	11.230	0.677	1.380	W	A
1	CS137	368.000	16.500	313.667	15.910	1.173	A	A
1	K40	1010.000	146.000	864.330	47.220	1.169	A	W

**Matrix:** WA Water Bq / L

1	CO60	362.000	3.730	347.330	12.400	1.042	A	A
1	CS137	59.400	3.060	56.067	2.929	1.059	A	A
1	GROSS ALPHA	407.800	7.500	375.000	37.500	1.087	A	
1	GROSS BETA	916.800	32.200	1030.000	103.000	0.890	A	
1	PU238	0.473	0.072	0.490	0.032	0.965	A	A
1	PU239	4.260	0.181	4.219	0.172	1.010	A	A
1	Ug U	0.120		0.112	0.007	1.074	A	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** UG USGS Menlo Park WRD sediment radioisotope laboratory

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	CS137	1281.400	50.200	1326.670	66.510	0.966	A	A
2	CS137	1271.600	11.300	1326.670	66.510	0.958	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** UP BWXT Y-12, L.L.C. Analytical Chemistry Organization Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1 Ug U 7.040 7.829 0.755 0.899 A A

**Matrix:** WA Water Bq / L

1 Ug U 0.106 0.112 0.007 0.949 A A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** US Unitech, Springfield, MA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	CO60	353.000	50.800	347.330	12.400	1.016	A
1	CS134	3.997	1.721	3.357	0.200	1.191	W
1	CS137	61.460	6.965	56.067	2.929	1.096	A

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

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

**QAP 56 Results by Laboratory****Lab:** UY BWXT Y-12, L.L.C. Analytical Chemistry Organization Oak Ridge

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.095	0.010	0.088	0.005	1.074	A	A
1	Bq U	0.570	0.059	0.608	0.005	0.938	A	A
1	CO60	29.400	2.900	30.520	0.652	0.963	A	A
1	CS137	26.500	2.000	28.230	0.701	0.939	A	A
1	GROSS ALPHA	0.498	0.025	0.534	0.053	0.933	A	A
1	GROSS BETA	1.180	0.036	1.300	0.130	0.908	A	W
1	MN54	37.400	3.700	38.530	0.867	0.971	A	A
1	PU238	0.059	0.007	0.057	0.001	1.029	A	A
1	PU239	0.187	0.019	0.187	0.003	0.998	A	A
1	SR90	4.140	0.060	4.832	0.184	0.857	A	W

**Matrix:** SO Soil Bq / kg

1	AM241	13.600	2.400	10.927	0.373	1.245	A	
1	Bq U	179.000	21.000	194.769	15.642	0.919	A	W
1	CS137	1130.000	115.000	1326.670	66.510	0.852	W	A
1	K40	529.000	64.000	621.670	33.860	0.851	W	A
1	PU239	20.900	2.800	19.098	0.706	1.094	A	A
1	SR90	36.700	5.200	53.756	1.446	0.683	W	A
1	TH234	91.000	25.000	89.300	6.837	1.019	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.480	0.370	2.228	0.216	1.113	A	A
1	CM244	0.982	0.210	1.320	0.164	0.744	W	A
1	CO60	10.400	2.300	11.230	0.677	0.926	A	A
1	CS137	286.000	30.000	313.667	15.910	0.912	A	A
1	K40	824.000	103.000	864.330	47.220	0.953	A	A
1	PU239	3.230	0.430	3.543	0.377	0.912	A	A
1	SR90	437.000	7.000	586.280	11.140	0.745	A	W

**Matrix:** WA Water Bq / L

1	AM241	1.490	0.130	1.474	0.021	1.011	A	W
1	Bq U	2.560	0.270	2.836	0.121	0.903	A	A
1	CO60	350.000	25.000	347.330	12.400	1.008	A	A
1	CS134	3.310	0.490	3.357	0.200	0.986	A	
1	CS137	58.600	6.200	56.067	2.929	1.045	A	A
1	GROSS ALPHA	369.000	18.000	375.000	37.500	0.984	A	A
1	GROSS BETA	878.000	22.000	1030.000	103.000	0.852	A	A
1	H3	277.000	18.000	283.700	3.380	0.976	A	A
1	PU238	0.476	0.050	0.490	0.032	0.971	A	A
1	PU239	4.160	0.390	4.219	0.172	0.986	A	A
1	SR90	6.860	0.160	7.579	0.176	0.905	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 56 Results by Laboratory****Lab:** WA Environmental Radiation Lab, Off. of Public Health Labs. Seattle

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.082	0.015	0.088	0.005	0.929	A	W
1	Bq U	0.640	0.060	0.608	0.005	1.053	A	A
1	CO60	33.000	0.400	30.520	0.652	1.081	A	A
1	CS137	31.000	1.400	28.230	0.701	1.098	A	W
1	GROSS ALPHA	0.680	0.100	0.534	0.053	1.273	W	A
1	GROSS BETA	1.230	0.060	1.300	0.130	0.946	A	A
1	MN54	46.300	3.200	38.530	0.867	1.202	W	W
1	SR90	4.000	0.200	4.832	0.184	0.828	A	A
1	U234	0.310	0.040	0.297	0.004	1.042	A	A
1	U238	0.300	0.040	0.298	0.004	1.006	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	63.000	3.000	51.167	1.941	1.231	W	
1	AM241	27.400	2.200	10.927	0.373	2.508	N	A
1	BI212	36.000	6.000	53.430	5.215	0.674	A	W
1	BI214	48.000	2.000	53.933	2.249	0.890	A	A
1	Bq U	185.000	7.000	194.769	15.642	0.950	A	A
1	CS137	1350.000	20.000	1326.670	66.510	1.018	A	A
1	K40	687.000	17.000	621.670	33.860	1.105	A	A
1	PB212	51.000	2.000	51.100	2.753	0.998	A	A
1	PB214	52.000	3.000	54.367	2.249	0.956	A	N
1	PU239	17.100	1.200	19.098	0.706	0.895	A	A
1	SR90	53.000	3.000	53.756	1.446	0.986	A	A
1	TH234	84.000	12.000	89.300	6.837	0.941	A	A
1	U234	85.100	3.700	93.885	7.767	0.906	A	A
1	U238	96.200	7.400	96.778	8.410	0.994	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.320	0.310	2.228	0.216	1.041	A	A
1	CM244	1.080	0.200	1.320	0.164	0.818	A	A
1	CO60	12.400	0.900	11.230	0.677	1.104	A	A
1	CS137	333.000	21.000	313.667	15.910	1.062	A	A
1	K40	992.000	41.000	864.330	47.220	1.148	A	A
1	PU239	2.220	0.350	3.543	0.377	0.627	N	A
1	SR90	477.000	19.000	586.280	11.140	0.814	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.600	0.110	1.474	0.021	1.086	A	A
1	Bq U	2.580	0.180	2.836	0.121	0.910	A	W
1	CO60	349.000	6.000	347.330	12.400	1.005	A	A
1	CS134	3.060	0.700	3.357	0.200	0.911	A	
1	CS137	57.700	4.000	56.067	2.929	1.029	A	A
1	H3	277.000	6.000	283.700	3.380	0.976	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 56 Results by Laboratory****Lab:** WA Environmental Radiation Lab, Off. of Public Health Labs. Seattle

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
1	PU238	0.420	0.600	0.490	0.032	0.856	W	A
1	PU239	3.810	0.150	4.219	0.172	0.903	A	A
1	SR90	7.810	0.740	7.579	0.176	1.031	A	A
1	U234	1.240	0.110	1.402	0.056	0.885	W	W
1	U238	1.260	0.110	1.381	0.079	0.912	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** WC Fluor Hanford WSCF, Waste Sampling and Characterization Facility

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.093	0.025	0.088	0.005	1.053	A	A
1	CO60	30.000	2.360	30.520	0.652	0.983	A	A
1	CS137	29.100	3.970	28.230	0.701	1.031	A	A
1	GROSS ALPHA	0.598	0.065	0.534	0.053	1.120	A	A
1	GROSS BETA	1.370	0.140	1.300	0.130	1.054	A	W
1	MN54	38.400	5.410	38.530	0.867	0.997	A	A
1	PU238	0.058	0.016	0.057	0.001	1.010	A	W
1	PU239	0.182	0.040	0.187	0.003	0.971	A	A
1	SR90	0.824	0.103	4.832	0.184	0.171	N	A
1	U234	0.265	0.050	0.297	0.004	0.891	W	A
1	U238	0.268	0.050	0.298	0.004	0.899	W	A

**Matrix:** SO Soil Bq / kg

1	AM241	14.400	3.500	10.927	0.373	1.318	A	A
1	CS137	1300.000	194.000	1326.670	66.510	0.980	A	A
1	K40	660.000	85.200	621.670	33.860	1.062	A	A
1	PU239	22.000	4.600	19.098	0.706	1.152	W	A
1	SR90	74.100	14.600	53.756	1.446	1.378	W	W
1	U234	69.700	13.500	93.885	7.767	0.742	W	W
1	U238	72.000	14.000	96.778	8.410	0.744	W	W

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.370	1.340	2.228	0.216	1.064	A	A
1	CM244	1.410	0.970	1.320	0.164	1.068	A	A
1	CO60	12.800	2.400	11.230	0.677	1.140	A	A
1	CS137	336.000	50.300	313.667	15.910	1.071	A	A
1	K40	1060.000	13.400	864.330	47.220	1.226	W	A
1	PU239	3.450	0.970	3.543	0.377	0.974	A	A
1	SR90	496.000	62.800	586.280	11.140	0.846	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.390	0.250	1.474	0.021	0.943	A	A
1	CO60	365.000	28.300	347.330	12.400	1.051	A	A
1	CS134	3.380	0.390	3.357	0.200	1.007	A	
1	CS137	61.200	8.220	56.067	2.929	1.092	A	A
1	GROSS ALPHA	482.000	54.900	375.000	37.500	1.285	W	A
1	GROSS BETA	982.000	102.000	1030.000	103.000	0.953	A	A
1	H3	266.000	54.300	283.700	3.380	0.938	A	A
1	PU238	0.490	0.100	0.490	0.032	0.999	A	A
1	PU239	4.320	0.820	4.219	0.172	1.024	A	A
1	SR90	7.930	1.120	7.579	0.176	1.046	A	A
1	U234	1.240	0.240	1.402	0.056	0.885	W	A
1	U238	1.250	0.240	1.381	0.079	0.905	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 56 Results by Laboratory****Lab:** WE Antech Ltd.-Waltz Mill Site, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	AM241	0.080	0.010	0.088	0.005	0.906	A	A
3	AM241	0.110	0.010	0.088	0.005	1.246	A	A
1	AM241	0.090	0.010	0.088	0.005	1.019	A	A
3	CO60	30.050	0.250	30.520	0.652	0.985	A	A
1	CO60	29.670	0.300	30.520	0.652	0.972	A	A
2	CO60	29.100	0.250	30.520	0.652	0.953	A	A
1	CS137	29.040	1.400	28.230	0.701	1.029	A	A
2	CS137	28.270	1.400	28.230	0.701	1.001	A	A
3	CS137	28.870	1.400	28.230	0.701	1.023	A	A
3	GROSS ALPHA	0.608	0.023	0.534	0.053	1.139	A	A
2	GROSS ALPHA	0.578	0.023	0.534	0.053	1.082	A	A
1	GROSS ALPHA	0.582	0.023	0.534	0.053	1.090	A	A
3	GROSS BETA	1.430	0.033	1.300	0.130	1.100	A	A
1	GROSS BETA	1.390	0.034	1.300	0.130	1.069	A	A
2	GROSS BETA	1.320	0.033	1.300	0.130	1.015	A	A
1	MN54	37.910	1.250	38.530	0.867	0.984	A	A
2	MN54	38.580	1.500	38.530	0.867	1.001	A	A
3	MN54	39.830	1.500	38.530	0.867	1.034	A	A
3	PU238	0.090	0.010	0.057	0.001	1.567	N	A
2	PU238	0.090	0.010	0.057	0.001	1.567	N	A
1	PU238	0.050	0.010	0.057	0.001	0.871	W	A
1	PU239	0.170	0.020	0.187	0.003	0.907	A	W
3	PU239	0.220	0.030	0.187	0.003	1.174	W	W
2	PU239	0.210	0.030	0.187	0.003	1.121	W	W
2	SR90	4.920	0.300	4.832	0.184	1.018	A	A
3	SR90	5.180	0.300	4.832	0.184	1.072	A	A
1	SR90	4.030	0.260	4.832	0.184	0.834	A	A
3	U234	0.320	0.040	0.297	0.004	1.076	A	A
2	U234	0.330	0.040	0.297	0.004	1.110	A	A
1	U234	0.370	0.040	0.297	0.004	1.244	A	A
2	U238	0.330	0.040	0.298	0.004	1.107	A	W
1	U238	0.300	0.030	0.298	0.004	1.006	A	W
3	U238	0.360	0.040	0.298	0.004	1.208	A	W

**Matrix:** SO Soil Bq / kg

3	AC228	49.020	1.900	51.167	1.941	0.958	A	W
2	AC228	51.040	1.950	51.167	1.941	0.998	A	W
1	AC228	50.250	1.680	51.167	1.941	0.982	A	W
1	AM241	14.020	1.930	10.927	0.373	1.283	A	W
3	AM241	12.710	1.800	10.927	0.373	1.163	A	W
2	AM241	13.430	1.800	10.927	0.373	1.229	A	W
1	BI212	59.300	7.800	53.430	5.215	1.110	A	A
2	BI212	60.690	7.000	53.430	5.215	1.136	A	A
3	BI212	59.010	5.900	53.430	5.215	1.104	A	A
3	BI214	49.400	1.900	53.933	2.249	0.916	A	A
2	BI214	48.150	1.600	53.933	2.249	0.893	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 56 Results by Laboratory****Lab:** WE Antech Ltd.-Waltz Mill Site, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

1	BI214	46.580	1.500	53.933	2.249	0.864	W	A
2	CS137	1322.000	28.400	1326.670	66.510	0.996	A	A
3	CS137	1340.000	46.000	1326.670	66.510	1.010	A	A
1	CS137	1331.000	46.300	1326.670	66.510	1.003	A	A
1	K40	598.500	14.400	621.670	33.860	0.963	A	A
2	K40	551.300	16.500	621.670	33.860	0.887	W	A
3	K40	594.400	16.300	621.670	33.860	0.956	A	A
2	PB212	51.340	2.630	51.100	2.753	1.005	A	A
3	PB212	51.900	2.930	51.100	2.753	1.016	A	A
1	PB212	50.730	3.100	51.100	2.753	0.993	A	A
1	PB214	50.400	2.000	54.367	2.249	0.927	A	W
2	PB214	49.130	1.750	54.367	2.249	0.904	A	W
3	PB214	51.800	1.700	54.367	2.249	0.953	A	W
2	PU239	20.090	2.230	19.098	0.706	1.052	A	A
1	PU239	23.480	2.530	19.098	0.706	1.229	W	A
3	SR90	52.910	5.590	53.756	1.446	0.984	A	A
2	SR90	55.130	6.110	53.756	1.446	1.026	A	A
1	SR90	59.570	6.110	53.756	1.446	1.108	A	A
1	TH234	98.500	14.650	89.300	6.837	1.103	A	W
3	TH234	102.000	17.950	89.300	6.837	1.142	A	W
2	TH234	103.400	17.950	89.300	6.837	1.158	A	W
2	U234	68.380	7.080	93.885	7.767	0.728	N	A
1	U234	72.930	7.520	93.885	7.767	0.777	W	A
1	U238	67.890	7.050	96.778	8.410	0.702	W	A
2	U238	78.070	7.940	96.778	8.410	0.807	W	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	5.440	1.100	2.228	0.216	2.441	N	A
3	AM241	2.470	0.600	2.228	0.216	1.108	A	A
2	AM241	2.480	0.900	2.228	0.216	1.113	A	A
2	CM244	1.080	0.400	1.320	0.164	0.818	A	W
1	CM244	1.330	0.500	1.320	0.164	1.008	A	W
2	CO60	7.570	0.600	11.230	0.677	0.674	N	A
1	CO60	11.950	0.500	11.230	0.677	1.064	A	A
3	CO60	11.400	0.700	11.230	0.677	1.015	A	A
2	CS137	338.900	14.600	313.667	15.910	1.080	A	A
1	CS137	334.800	13.500	313.667	15.910	1.067	A	A
3	CS137	330.300	12.600	313.667	15.910	1.053	A	A
1	K40	879.800	20.500	864.330	47.220	1.018	A	A
2	K40	955.900	22.500	864.330	47.220	1.106	A	A
3	K40	915.200	24.800	864.330	47.220	1.059	A	A
2	PU239	2.700	0.700	3.543	0.377	0.762	W	A
1	PU239	3.000	0.800	3.543	0.377	0.847	A	A
1	SR90	614.200	25.900	586.280	11.140	1.048	A	W
2	SR90	636.400	27.800	586.280	11.140	1.085	A	W
3	SR90	706.700	31.500	586.280	11.140	1.205	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 56 Results by Laboratory****Lab:** WE Antech Ltd.-Waltz Mill Site, PA

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> WA Water Bq / L								
3	AM241	1.530	0.100	1.474	0.021	1.038	A	A
2	AM241	1.580	0.110	1.474	0.021	1.072	A	A
1	AM241	1.550	0.110	1.474	0.021	1.052	A	A
1	CO60	357.600	4.800	347.330	12.400	1.030	A	A
3	CO60	348.700	7.500	347.330	12.400	1.004	A	A
2	CO60	352.600	4.800	347.330	12.400	1.015	A	A
1	CS134	2.690	0.160	3.357	0.200	0.801	W	
3	CS134	3.320	0.250	3.357	0.200	0.989	A	
2	CS134	3.430	0.250	3.357	0.200	1.022	A	
3	CS137	59.460	2.000	56.067	2.929	1.061	A	A
2	CS137	58.100	1.300	56.067	2.929	1.036	A	A
1	CS137	59.300	1.200	56.067	2.929	1.058	A	A
3	GROSS ALPHA	316.000	38.900	375.000	37.500	0.843	A	W
1	GROSS ALPHA	291.000	35.200	375.000	37.500	0.776	W	W
2	GROSS ALPHA	309.000	37.000	375.000	37.500	0.824	A	W
3	GROSS BETA	969.000	130.000	1030.000	103.000	0.941	A	A
1	GROSS BETA	951.000	128.000	1030.000	103.000	0.923	A	A
2	GROSS BETA	984.000	131.000	1030.000	103.000	0.955	A	A
1	H3	214.200	12.400	283.700	3.380	0.755	N	W
2	H3	225.700	13.000	283.700	3.380	0.796	W	W
3	PU238	0.520	0.060	0.490	0.032	1.060	A	A
1	PU238	0.440	0.060	0.490	0.032	0.897	W	A
2	PU238	0.550	0.070	0.490	0.032	1.122	W	A
2	PU239	4.270	0.450	4.219	0.172	1.012	A	W
3	PU239	4.000	0.390	4.219	0.172	0.948	A	W
1	PU239	3.880	0.400	4.219	0.172	0.920	A	W
3	SR90	7.250	0.540	7.579	0.176	0.957	A	A
1	SR90	8.070	0.560	7.579	0.176	1.065	A	A
2	SR90	8.470	0.560	7.579	0.176	1.118	A	A
2	U234	1.320	0.080	1.402	0.056	0.942	A	A
1	U234	1.290	0.070	1.402	0.056	0.920	A	A
3	U234	1.270	0.070	1.402	0.056	0.906	A	A
1	U238	1.360	0.080	1.381	0.079	0.985	A	A
2	U238	1.460	0.090	1.381	0.079	1.057	A	A
3	U238	1.320	0.080	1.381	0.079	0.956	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** WI WIPP Site, Westinghouse Electric Corp.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	AM241	0.095	0.018	0.088	0.005	1.080	A	A
1	AM241	0.096	0.017	0.088	0.005	1.083	A	A
2	Bq U	0.550	0.061	0.608	0.005	0.905	A	A
1	Bq U	0.574	0.065	0.608	0.005	0.945	A	A
1	CO60	30.800	4.140	30.520	0.652	1.009	A	A
3	CO60	32.200	4.300	30.520	0.652	1.055	A	A
2	CO60	31.000	4.160	30.520	0.652	1.016	A	A
1	CS137	27.800	3.810	28.230	0.701	0.985	A	A
3	CS137	28.900	3.930	28.230	0.701	1.024	A	A
2	CS137	28.000	3.850	28.230	0.701	0.992	A	A
3	GROSS ALPHA	0.590	0.063	0.534	0.053	1.105	A	A
2	GROSS ALPHA	0.560	0.064	0.534	0.053	1.049	A	A
1	GROSS ALPHA	0.548	0.063	0.534	0.053	1.026	A	A
2	GROSS BETA	1.160	0.121	1.300	0.130	0.892	A	W
3	GROSS BETA	1.140	0.119	1.300	0.130	0.877	A	W
1	GROSS BETA	1.180	0.123	1.300	0.130	0.908	A	W
2	MN54	39.200	5.330	38.530	0.867	1.017	A	A
3	MN54	39.900	5.410	38.530	0.867	1.036	A	A
1	MN54	39.000	5.310	38.530	0.867	1.012	A	A
1	PU238	0.053	0.009	0.057	0.001	0.930	A	A
2	PU238	0.057	0.010	0.057	0.001	0.998	A	A
2	PU239	0.185	0.031	0.187	0.003	0.987	A	A
1	PU239	0.181	0.029	0.187	0.003	0.966	A	A
1	SR90	4.200	0.220	4.832	0.184	0.869	A	N
2	SR90	4.130	0.225	4.832	0.184	0.855	A	N

**Matrix:** SO Soil Bq / kg

1	AC228	43.700	7.010	51.167	1.941	0.854	W	A
2	AC228	43.800	6.820	51.167	1.941	0.856	W	A
3	AC228	43.100	6.860	51.167	1.941	0.842	W	A
1	AM241	12.000	2.230	10.927	0.373	1.098	A	A
2	AM241	13.100	2.050	10.927	0.373	1.199	A	A
3	AM241	12.100	2.030	10.927	0.373	1.107	A	A
2	BI212	49.800	11.300	53.430	5.215	0.932	A	A
1	BI212	53.400	12.500	53.430	5.215	0.999	A	A
3	BI212	52.200	11.300	53.430	5.215	0.977	A	A
1	Bq U	172.000	16.400	194.769	15.642	0.883	A	A
2	Bq U	168.000	16.500	194.769	15.642	0.863	A	A
3	Bq U	173.000	17.200	194.769	15.642	0.888	A	A
1	CS137	1150.000	145.000	1326.670	66.510	0.867	W	A
2	CS137	1150.000	145.000	1326.670	66.510	0.867	W	A
3	CS137	1150.000	145.000	1326.670	66.510	0.867	W	A
3	K40	628.000	83.600	621.670	33.860	1.010	A	A
2	K40	628.000	83.600	621.670	33.860	1.010	A	A
1	K40	631.000	84.100	621.670	33.860	1.015	A	A
1	PB212	56.900	8.130	51.100	2.753	1.114	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 56 Results by Laboratory****Lab:** WI WIPP Site, Westinghouse Electric Corp.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** SO Soil Bq / kg

2	PB212	56.000	8.000	51.100	2.753	1.096	A	W
3	PB212	59.200	8.440	51.100	2.753	1.159	A	W
2	PB214	53.800	7.690	54.367	2.249	0.990	A	A
3	PB214	59.500	8.520	54.367	2.249	1.094	A	A
1	PB214	53.900	7.830	54.367	2.249	0.991	A	A
1	PU239	21.700	3.680	19.098	0.706	1.136	W	W
2	PU239	20.800	3.230	19.098	0.706	1.089	A	W
3	PU239	23.000	3.800	19.098	0.706	1.204	W	W
2	SR90	40.700	7.920	53.756	1.446	0.757	W	A
3	SR90	43.800	7.970	53.756	1.446	0.815	W	A
1	SR90	42.500	7.900	53.756	1.446	0.791	W	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.490	0.525	2.228	0.216	1.117	A	A
2	AM241	2.350	0.500	2.228	0.216	1.055	A	A
3	AM241	2.190	0.480	2.228	0.216	0.983	A	A
1	CM244	1.470	0.373	1.320	0.164	1.114	A	
2	CM244	1.270	0.330	1.320	0.164	0.962	A	
3	CM244	1.390	0.354	1.320	0.164	1.053	A	
3	CO60	10.100	1.640	11.230	0.677	0.899	W	A
1	CO60	9.240	1.440	11.230	0.677	0.823	W	A
2	CO60	9.420	1.480	11.230	0.677	0.839	W	A
1	CS137	258.000	32.700	313.667	15.910	0.823	W	W
2	CS137	257.000	32.400	313.667	15.910	0.819	W	W
3	CS137	257.000	32.500	313.667	15.910	0.819	W	W
3	K40	869.000	115.000	864.330	47.220	1.005	A	A
1	K40	868.000	115.000	864.330	47.220	1.004	A	A
2	K40	860.000	114.000	864.330	47.220	0.995	A	A
1	PU239	3.510	0.719	3.543	0.377	0.991	A	A
2	PU239	3.600	0.699	3.543	0.377	1.016	A	A
3	PU239	3.530	0.701	3.543	0.377	0.996	A	A
3	SR90	503.000	75.100	586.280	11.140	0.858	A	A
2	SR90	446.000	45.500	586.280	11.140	0.761	A	A
1	SR90	452.000	41.000	586.280	11.140	0.771	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.690	0.232	1.474	0.021	1.147	A	A
3	AM241	1.610	0.226	1.474	0.021	1.092	A	A
2	AM241	1.430	0.210	1.474	0.021	0.970	A	A
1	Bq U	2.530	0.240	2.836	0.121	0.892	A	A
2	Bq U	2.560	0.256	2.836	0.121	0.903	A	A
3	Bq U	2.550	0.254	2.836	0.121	0.899	A	A
2	CO60	353.000	47.000	347.330	12.400	1.016	A	A
3	CO60	365.000	48.300	347.330	12.400	1.051	A	A
1	CO60	348.000	46.400	347.330	12.400	1.002	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 56 Results by Laboratory****Lab:** WI WIPP Site, Westinghouse Electric Corp.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

2	CS134	2.640	0.678	3.357	0.200	0.786	N	
1	CS134	3.070	0.835	3.357	0.200	0.914	A	
3	CS134	3.310	0.789	3.357	0.200	0.986	A	
2	CS137	55.500	7.660	56.067	2.929	0.990	A	A
1	CS137	55.300	7.700	56.067	2.929	0.986	A	A
3	CS137	57.400	7.850	56.067	2.929	1.024	A	A
1	PU238	0.545	0.086	0.490	0.032	1.111	W	A
2	PU238	0.528	0.083	0.490	0.032	1.077	A	A
3	PU238	0.483	0.078	0.490	0.032	0.985	A	A
3	PU239	4.380	0.581	4.219	0.172	1.038	A	A
2	PU239	4.400	0.578	4.219	0.172	1.043	A	A
1	PU239	4.740	0.628	4.219	0.172	1.123	W	A
1	SR90	6.840	0.442	7.579	0.176	0.903	A	A
2	SR90	7.170	0.456	7.579	0.176	0.946	A	A
3	SR90	7.140	0.441	7.579	0.176	0.942	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** WN State Health Radiation Protection Section, Madison, WI

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	CO60	31.900	0.800	30.520	0.652	1.045	A	A
3	CO60	32.000	0.800	30.520	0.652	1.048	A	A
1	CO60	31.500	0.800	30.520	0.652	1.032	A	A
3	CS137	30.600	1.200	28.230	0.701	1.084	A	A
2	CS137	30.100	1.200	28.230	0.701	1.066	A	A
1	CS137	30.800	1.200	28.230	0.701	1.091	A	A
3	MN54	43.700	1.500	38.530	0.867	1.134	A	A
2	MN54	44.400	1.600	38.530	0.867	1.152	A	A
1	MN54	48.900	1.500	38.530	0.867	1.269	W	A

**Matrix:** SO Soil Bq / kg

1	AC228	47.300	3.700	51.167	1.941	0.924	A	A
2	AC228	54.100	1.600	51.167	1.941	1.057	A	A
3	AC228	50.000	2.400	51.167	1.941	0.977	A	A
3	AM241	8.100	3.500	10.927	0.373	0.741	W	A
1	AM241	14.600	5.700	10.927	0.373	1.336	A	A
2	AM241	10.500	4.100	10.927	0.373	0.961	A	A
2	BI212	40.000	5.400	53.430	5.215	0.749	A	A
1	BI212	36.800	3.300	53.430	5.215	0.689	A	A
3	BI212	30.000	4.600	53.430	5.215	0.561	W	A
1	BI214	48.200	1.700	53.933	2.249	0.894	A	A
2	BI214	50.400	2.400	53.933	2.249	0.934	A	A
3	BI214	52.600	2.500	53.933	2.249	0.975	A	A
1	CS137	1418.000	52.000	1326.670	66.510	1.069	A	A
2	CS137	1426.000	52.000	1326.670	66.510	1.075	A	A
3	CS137	1400.000	51.000	1326.670	66.510	1.055	A	A
3	K40	585.000	30.000	621.670	33.860	0.941	A	A
2	K40	652.000	28.000	621.670	33.860	1.049	A	A
1	K40	620.000	38.000	621.670	33.860	0.997	A	A
1	PB212	47.400	2.700	51.100	2.753	0.928	A	A
2	PB212	51.100	2.300	51.100	2.753	1.000	A	A
3	PB212	50.700	2.500	51.100	2.753	0.992	A	A
1	PB214	55.500	3.300	54.367	2.249	1.021	A	A
2	PB214	55.900	1.900	54.367	2.249	1.028	A	A
3	PB214	55.600	2.300	54.367	2.249	1.023	A	A

**Matrix:** VE Vegetation Bq / kg

2	CO60	13.000	0.800	11.230	0.677	1.158	A	W
3	CO60	14.100	0.800	11.230	0.677	1.256	W	W
1	CO60	13.100	1.400	11.230	0.677	1.167	A	W
1	CS137	348.000	14.000	313.667	15.910	1.109	A	W
3	CS137	346.000	13.000	313.667	15.910	1.103	A	W
2	CS137	344.000	13.000	313.667	15.910	1.097	A	W
2	K40	933.000	44.000	864.330	47.220	1.079	A	W
1	K40	943.000	61.000	864.330	47.220	1.091	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 56 Results by Laboratory****Lab:** WN State Health Radiation Protection Section, Madison, WI

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> VE Vegetation Bq / kg								
3	K40	933.000	44.000	864.330	47.220	1.079	A	W
<b>Matrix:</b> WA Water Bq / L								
3	CO60	356.000	9.000	347.330	12.400	1.025	A	A
2	CO60	353.000	8.000	347.330	12.400	1.016	A	A
1	CO60	356.000	9.000	347.330	12.400	1.025	A	A
3	CS134	3.100	0.200	3.357	0.200	0.923	A	
2	CS134	3.000	0.300	3.357	0.200	0.894	W	
1	CS134	2.800	0.400	3.357	0.200	0.834	W	
3	CS137	57.400	2.500	56.067	2.929	1.024	A	A
2	CS137	57.800	2.500	56.067	2.929	1.031	A	A
1	CS137	56.700	2.700	56.067	2.929	1.011	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** WO Wisconsin State Lab of Hygiene

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.700	6.700	30.520	0.652	1.039	A	W
2	CO60	31.000	3.900	30.520	0.652	1.016	A	W
1	CS137	29.700	5.000	28.230	0.701	1.052	A	W
2	CS137	30.500	3.000	28.230	0.701	1.080	A	W
2	GROSS ALPHA	0.516	0.046	0.534	0.053	0.966	A	W
1	GROSS ALPHA	0.537	0.048	0.534	0.053	1.006	A	W
2	GROSS BETA	1.174	0.058	1.300	0.130	0.903	A	W
1	GROSS BETA	1.159	0.090	1.300	0.130	0.892	A	W
1	MN54	41.100	7.400	38.530	0.867	1.067	A	W
2	MN54	41.800	4.500	38.530	0.867	1.085	A	W

**Matrix:** SO Soil Bq / kg

2	AC228	52.400	8.890	51.167	1.941	1.024	A	W
1	AC228	47.170	10.000	51.167	1.941	0.922	A	W
1	BI212	58.660	15.300	53.430	5.215	1.098	A	A
2	BI212	61.320	13.870	53.430	5.215	1.148	A	A
1	BI214	65.890	11.800	53.933	2.249	1.222	A	A
2	BI214	65.970	9.540	53.933	2.249	1.223	A	A
1	Bq U	188.000	6.200	194.769	15.642	0.965	A	A
2	Bq U	182.500	6.300	194.769	15.642	0.937	A	A
1	CS137	1343.000	152.500	1326.670	66.510	1.012	A	A
2	CS137	1376.000	106.500	1326.670	66.510	1.037	A	A
2	K40	629.800	73.670	621.670	33.860	1.013	A	A
1	K40	618.800	101.000	621.670	33.860	0.995	A	A
1	PB212	49.000	4.620	51.100	2.753	0.959	A	A
2	PB212	49.870	4.320	51.100	2.753	0.976	A	A
2	PB214	73.540	8.090	54.367	2.249	1.353	W	A
1	PB214	70.750	8.470	54.367	2.249	1.301	W	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	13.450	3.600	11.230	0.677	1.198	A	A
2	CO60	10.740	2.370	11.230	0.677	0.956	A	A
1	CS137	351.000	40.500	313.667	15.910	1.119	A	A
2	CS137	364.100	29.100	313.667	15.910	1.161	A	A
2	K40	959.800	114.100	864.330	47.220	1.110	A	A
1	K40	1042.000	172.000	864.330	47.220	1.206	A	A

**Matrix:** WA Water Bq / L

2	Bq U	2.750	0.260	2.836	0.121	0.970	A	A
1	Bq U	2.280	0.250	2.836	0.121	0.804	W	A
2	CO60	360.800	56.200	347.330	12.400	1.039	A	A
1	CO60	359.900	71.330	347.330	12.400	1.036	A	A
2	CS134	2.090	1.040	3.357	0.200	0.623	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 56 Results by Laboratory****Lab:** WO Wisconsin State Lab of Hygiene

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** WA Water Bq / L

1	CS134	3.230	1.500	3.357	0.200	0.962	A	
1	CS137	58.310	9.530	56.067	2.929	1.040	A	A
2	CS137	56.880	7.480	56.067	2.929	1.015	A	A
1	GROSS ALPHA	365.500	40.800	375.000	37.500	0.975	A	A
2	GROSS ALPHA	404.410	46.990	375.000	37.500	1.078	A	A
2	GROSS BETA	951.900	53.700	1030.000	103.000	0.924	A	A
1	GROSS BETA	910.000	48.900	1030.000	103.000	0.883	A	A
2	H3	298.180	10.770	283.700	3.380	1.051	A	A
1	H3	280.460	10.580	283.700	3.380	0.989	A	A
1	SR90	7.540	0.490	7.579	0.176	0.995	A	W

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

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

**QAP 56 Results by Laboratory****Lab:** WT Waste Stream Technology, Buffalo, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	CO60	31.200	1.910	30.520	0.652	1.022	A	W
1	CS137	26.700	1.820	28.230	0.701	0.946	A	A
1	GROSS ALPHA	0.664	0.039	0.534	0.053	1.243	W	W
1	GROSS BETA	1.515	0.059	1.300	0.130	1.165	A	N
1	MN54	36.000	2.260	38.530	0.867	0.934	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	58.900	11.400	51.167	1.941	1.151	A	N
1	BI212	40.300	16.400	53.430	5.215	0.754	A	A
1	BI214	66.600	9.270	53.933	2.249	1.235	W	A
1	Bq U	174.000	31.000	194.769	15.642	0.893	A	
1	CS137	1360.000	58.100	1326.670	66.510	1.025	A	A
1	K40	606.000	64.500	621.670	33.860	0.975	A	A
1	PB212	60.400	6.970	51.100	2.753	1.182	A	W
1	PB214	65.300	11.200	54.367	2.249	1.201	A	A
1	TH234	168.000	62.600	89.300	6.837	1.881	W	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	15.000	3.640	11.230	0.677	1.336	W	A
1	CS137	352.000	21.900	313.667	15.910	1.122	A	A
1	K40	950.000	111.000	864.330	47.220	1.099	A	A

**Matrix:** WA Water Bq / L

1	Bq U	2.643	0.429	2.836	0.121	0.932	A	A
1	CO60	343.000	14.800	347.330	12.400	0.988	A	A
1	CS137	59.100	4.440	56.067	2.929	1.054	A	N
1	GROSS ALPHA	318.000	28.000	375.000	37.500	0.848	A	A
1	GROSS BETA	1140.000	42.900	1030.000	103.000	1.107	A	A

**Values for elemental uranium are reported in  $\mu\text{g/filter, g, or mL}$ .  $\text{pCi/g or mL} = \text{Bq} \times 0.027$** **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 56 Results by Laboratory****Lab:** WV West Valley Nuclear Services, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	CO60	30.770	0.362	30.520	0.652	1.008	A	A
1	CO60	31.280	0.362	30.520	0.652	1.025	A	A
2	CS137	28.330	0.284	28.230	0.701	1.004	A	A
1	CS137	29.240	0.302	28.230	0.701	1.036	A	A
1	GROSS ALPHA	0.570	0.036	0.534	0.053	1.067	A	W
1	GROSS BETA	1.300	0.045	1.300	0.130	1.000	A	W
1	MN54	44.180	0.389	38.530	0.867	1.147	A	A
2	MN54	42.510	0.369	38.530	0.867	1.103	A	A

**Matrix:** WA Water Bq / L

1	CO60	366.400	2.920	347.330	12.400	1.055	A	A
1	CS134	3.000	0.640	3.357	0.200	0.894	W	
1	CS137	59.700	1.340	56.067	2.929	1.065	A	A
1	GROSS ALPHA	429.000	48.700	375.000	37.500	1.144	W	A
1	GROSS BETA	998.000	54.800	1030.000	103.000	0.969	A	A
1	H3	285.100	10.170	283.700	3.380	1.005	A	A
1	SR90	7.060	0.322	7.579	0.176	0.932	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** WWWest Valley Radiation Protection, NY

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

2	CO60	30.300	1.400	30.520	0.652	0.993	A	A
1	CO60	29.800	1.300	30.520	0.652	0.976	A	A
1	CS137	28.800	2.100	28.230	0.701	1.020	A	A
2	CS137	29.200	2.600	28.230	0.701	1.034	A	A
1	GROSS ALPHA	0.524	0.022	0.534	0.053	0.981	A	A
1	GROSS BETA	1.228	0.029	1.300	0.130	0.945	A	A
2	MN54	41.400	4.300	38.530	0.867	1.074	A	A
1	MN54	40.600	3.500	38.530	0.867	1.054	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	41.600	1.200	51.167	1.941	0.813	W	W
1	AM241	9.400	1.200	10.927	0.373	0.860	W	A
1	BI212	26.200	1.700	53.430	5.215	0.490	N	W
1	BI214	43.500	1.200	53.933	2.249	0.807	W	A
1	CS137	1110.000	80.900	1326.670	66.510	0.837	W	A
1	K40	565.000	37.000	621.670	33.860	0.909	A	A
1	PB212	36.800	2.000	51.100	2.753	0.720	N	W
1	PB214	49.900	1.500	54.367	2.249	0.918	A	A
1	TH234	82.400	7.500	89.300	6.837	0.923	A	A

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

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

**QAP 56 Results by Laboratory****Lab:** YA Duke Engineering & Services Environmental Lab.

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.094	0.002	0.088	0.005	1.061	A	A
1	Bq U	0.600	0.009	0.608	0.005	0.987	A	
1	CO60	29.700	1.500	30.520	0.652	0.973	A	A
1	CS137	28.400	1.400	28.230	0.701	1.006	A	A
1	GROSS ALPHA	0.504	0.007	0.534	0.053	0.944	A	A
1	GROSS BETA	1.174	0.012	1.300	0.130	0.903	A	A
1	MN54	38.700	1.900	38.530	0.867	1.004	A	A
1	PU238	0.056	0.001	0.057	0.001	0.975	A	W
1	PU239	0.183	0.002	0.187	0.003	0.977	A	A
1	SR90	4.100	0.185	4.832	0.184	0.849	A	A

**Matrix:** SO Soil Bq / kg

1	AC228	46.700	1.600	51.167	1.941	0.913	A	A
1	AM241	13.000	0.316	10.927	0.373	1.190	A	A
1	CS137	1321.600	38.000	1326.670	66.510	0.996	A	A
1	K40	586.500	18.000	621.670	33.860	0.943	A	A
1	PU239	20.860	0.410	19.098	0.706	1.092	A	A
1	SR90	50.700	2.100	53.756	1.446	0.943	A	A
1	U234	87.200	1.870	93.885	7.767	0.929	A	A
1	U238	91.700	1.940	96.778	8.410	0.948	A	A

**Matrix:** VE Vegetation Bq / kg

1	AM241	2.230	0.041	2.228	0.216	1.001	A	A
1	CM244	1.190	0.029	1.320	0.164	0.902	A	A
1	CO60	10.650	0.390	11.230	0.677	0.948	A	A
1	CS137	317.100	9.200	313.667	15.910	1.011	A	A
1	K40	855.000	26.000	864.330	47.220	0.989	A	A
1	PU239	3.310	0.060	3.543	0.377	0.934	A	A
1	SR90	517.000	22.000	586.280	11.140	0.882	A	A

**Matrix:** WA Water Bq / L

1	AM241	1.507	0.015	1.474	0.021	1.023	A	A
1	CO60	350.300	10.000	347.330	12.400	1.009	A	A
1	CS137	55.300	1.700	56.067	2.929	0.986	A	A
1	GROSS ALPHA	281.000	6.580	375.000	37.500	0.749	W	A
1	GROSS BETA	951.000	15.200	1030.000	103.000	0.923	A	A
1	H3	309.000	11.000	283.700	3.380	1.089	A	A
1	PU238	0.676	0.017	0.490	0.032	1.378	N	W
1	PU239	4.476	0.055	4.219	0.172	1.061	A	A
1	SR90	6.260	0.270	7.579	0.176	0.826	W	A
1	U234	1.310	0.026	1.402	0.056	0.935	A	A
1	U238	1.310	0.027	1.381	0.079	0.948	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 56 Results by Laboratory****Lab:** YP US Army Proving Ground, Yuma, AZ

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
<b>Matrix:</b> AI Air Filter Bq / filter								
1	Ug U	21.400	1.320	24.105	0.103	0.888	W	A
<b>Matrix:</b> SO Soil Bq / kg								
1	Ug U	7.980	1.004	7.829	0.755	1.019	A	N
<b>Matrix:</b> WA Water Bq / L								
1	Ug U	0.100	0.002	0.112	0.007	0.897	W	A

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Laboratory****Lab:** YU Institute of Occupational and Radiological Health, Serbia

No. Test	Radionuclide	Reported Value	Reported Error	EML Value	EML Error	<u>Reported</u> <u>EML</u>	Evaluation	QAP 55 Evaluation
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**Matrix:** AI Air Filter Bq / filter

1	AM241	0.120	0.020	0.088	0.005	1.359	W
1	CO60	29.500	1.100	30.520	0.652	0.967	A
1	CS137	28.300	1.300	28.230	0.701	1.002	A
1	GROSS ALPHA	0.560	0.060	0.534	0.053	1.049	A
1	GROSS BETA	1.260	0.130	1.300	0.130	0.969	A
1	MN54	35.800	1.500	38.530	0.867	0.929	A

**Matrix:** SO Soil Bq / kg

1	AC228	55.400	3.500	51.167	1.941	1.083	A
1	BI214	54.000	2.000	53.933	2.249	1.001	A
1	CS137	1380.000	50.000	1326.670	66.510	1.040	A
1	K40	630.000	60.000	621.670	33.860	1.013	A
1	PB212	58.200	1.200	51.100	2.753	1.139	A
1	PB214	53.900	2.300	54.367	2.249	0.991	A

**Matrix:** VE Vegetation Bq / kg

1	CO60	11.400	0.800	11.230	0.677	1.015	A
1	CS137	319.000	17.000	313.667	15.910	1.017	A
1	K40	830.000	56.000	864.330	47.220	0.960	A

**Matrix:** WA Water Bq / L

1	CO60	308.800	9.600	347.330	12.400	0.889	W	A
1	CS134	3.200	0.200	3.357	0.200	0.953	A	
1	CS137	48.800	2.200	56.067	2.929	0.870	W	A
1	GROSS ALPHA	358.000	9.000	375.000	37.500	0.955	A	
1	GROSS BETA	916.000	7.000	1030.000	103.000	0.889	A	

**Values for elemental uranium are reported in  $\mu\text{g/filter}$ , g, or mL.      pCi/g or mL=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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** AM241

**EML Value:** 0.0883  
**EML Error:** 0.0046

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	0.1000	0.0100	1.13	A	A
AG	1	0.0987	0.0222	1.12	A	A
AI	1	0.0760	0.0030	0.86	A	W
AM	1	0.0926	0.0220	1.05	A	A
AN	1	0.0900	0.0100	1.02	A	A
AT	1	0.0930	0.0340	1.05	A	A
BE	1	0.0874	0.0053	0.99	A	A
BM	1	0.0928	0.0149	1.05	A	A
BP	1	0.0820	0.0040	0.93		A
BX	1	0.0823	0.0168	0.93	A	A
CB	1	0.1033	0.0243	1.17	A	A
CH	1	0.0271	0.0105	0.31	A	N
CL	1	0.1100	0.0300	1.25	A	A
CW	1	0.0920	0.0020	1.04	A	A
EC	2	0.1000	0.0600	1.13	A	A
EC	5	0.1300	0.0700	1.47	A	W
EC	3	0.1400	0.0600	1.59	A	W
EC	1	0.1500	0.0700	1.70	A	W
EC	4	0.1400	0.0800	1.59	A	W
EG	1	0.0920	0.0070	1.04		A
EI	1	0.0290	0.0180	0.33		N
FL	1	0.1100	0.0260	1.25	W	A
FM	1	0.1200	0.0400	1.36		W
FM	3	0.1700	0.0500	1.92		W
FM	2	0.1600	0.0600	1.81		W
GA	1	0.1100	0.0150	1.25	A	A
GE	1	0.0970	0.0190	1.10	A	A
GT	1	0.0900	0.0200	1.02	A	A
IS	1	0.0928	0.0181	1.05	A	A
IT	1	0.0880	0.0086	1.00	A	A
KO	1	0.1120	0.0049	1.27		A
KR	5	0.1000	0.0500	1.13		A
KR	4	0.1000	0.0400	1.13		A
KR	3	0.1000	0.0600	1.13		A
KR	2	0.1000	0.0600	1.13		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** AM241

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**EML Value:** 0.0883  
**EML Error:** 0.0046

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
KR	1	0.1000	0.0400	1.13		A
KS	1	0.1000	0.8000	1.13		A
LM	1	0.0980	0.0320	1.11		A
LV	1	0.1280	0.0210	1.45	W	W
NJ	2	0.1960	0.0530	2.22	N	W
NJ	1	0.1620	0.0570	1.84	N	W
NJ	3	0.2000	0.0430	2.27	N	W
NM	1	0.0910	0.0030	1.03	A	A
NQ	1	0.0896	0.0059	1.01	A	A
OT	1	0.0880	0.0080	1.00	A	A
RI	1	0.1020	0.0136	1.15	A	A
RS	1	0.2800	0.1800	3.17		N
SD	1	0.1120	0.0110	1.27	A	A
SE	1	0.1050	0.0090	1.19		A
SI	1	0.0900	0.0110	1.02	A	A
SN	1	0.0740	0.0120	0.84	A	W
SR	1	0.0930	0.0120	1.05	N	A
TE	1	0.0850	0.0460	0.96	A	A
TI	1	0.0779	0.0169	0.88	A	A
TM	1	0.0850	0.0120	0.96	A	A
TN	1	0.0712	0.0096	0.81	A	W
TO	1	0.1240	0.0390	1.40	A	W
TX	1	0.0950	0.0030	1.08	W	A
UY	1	0.0948	0.0096	1.07	A	A
WA	1	0.0820	0.0150	0.93	W	A
WC	1	0.0930	0.0250	1.05	A	A
WE	1	0.0900	0.0100	1.02	A	A
WE	2	0.0800	0.0100	0.91	A	A
WE	3	0.1100	0.0100	1.25	A	A
WI	1	0.0956	0.0172	1.08	A	A
WI	2	0.0954	0.0183	1.08	A	A
YA	1	0.0937	0.0017	1.06	A	A
YU	1	0.1200	0.0200	1.36		W

**Total Number Reported:** 68

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

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

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**EML Value:** 0.6076  
**EML Error:** 0.0053

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AG	1	0.5940	0.0613	0.98		A
AI	1	0.6200	0.0180	1.02	W	A
AM	1	0.7660	0.0700	1.26	N	A
AT	1	0.5570	0.0520	0.92	A	A
BU	1	0.5800	0.0300	0.95	A	A
KO	1	0.5880	0.0170	0.97		A
OT	1	0.5100	0.1000	0.84	A	W
SD	1	0.6070	0.0410	1.00		A
SN	1	0.5910	0.0680	0.97		A
TE	1	0.8000	0.2000	1.32	A	W
UY	1	0.5700	0.0590	0.94	A	A
WA	1	0.6400	0.0600	1.05	A	A
WI	2	0.5500	0.0609	0.90	A	A
WI	1	0.5740	0.0651	0.94	A	A
YA	1	0.5999	0.0092	0.99		A

**Total Number Reported:** 15

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** CO60

**EML Value:** 30.5200  
**EML Error:** 0.6520

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	31.7000	0.9000	1.04	A	A
AG	1	28.1000	4.6400	0.92	A	A
AI	1	32.0000	4.8000	1.05	A	A
AM	1	30.4600	0.0900	1.00	A	A
AN	1	31.5000	0.9000	1.03	A	A
AS	1	30.2000	0.3000	0.99	A	A
AT	1	31.2900	3.2350	1.02	A	A
AU	1	30.9000	1.4000	1.01	A	A
AW	1	29.0000	4.6000	0.95	A	A
BA	1	30.9400	2.6000	1.01	W	A
BE	1	36.0000	2.0000	1.18	A	W
BM	1	31.5000	3.0400	1.03	A	A
BN	1	30.2000	1.0000	0.99	A	A
BP	1	32.0000	0.3000	1.05		A
BQ	1	30.0000	2.0000	0.98	N	A
BU	1	30.0000	1.5000	0.98	A	A
BX	1	30.0000	1.6000	0.98	A	A
CA	1	31.6000	3.2000	1.03	A	A
CB	1	32.6000	0.8000	1.07	A	A
CD	1	32.0000	1.0000	1.05	A	A
CE	1	29.0000	1.2000	0.95	A	A
CG	1	30.6000	0.9000	1.00	W	A
CH	1	32.0500	0.3380	1.05	A	A
CL	1	29.9000	0.1000	0.98	A	A
CN	1	29.5800	1.9100	0.97	A	A
CU	1	30.2000	0.3000	0.99	A	A
CW	1	31.0800	0.9200	1.02	A	A
EC	2	31.1000	0.9800	1.02	W	A
EC	5	30.6800	1.5600	1.00	W	A
EC	4	32.0000	1.0900	1.05	W	A
EC	3	33.1000	1.1500	1.09	W	A
EC	1	26.5000	3.0000	0.87	W	W
EG	1	33.3000	2.0000	1.09	A	A
EP	1	31.4400	1.5700	1.03	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** CO60

**EML Value:** 30.5200  
**EML Error:** 0.6520

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FL	1	34.3700	0.1800	1.13	W	W
FM	1	32.3000	0.5000	1.06	A	A
FM	2	31.5000	0.5000	1.03	A	A
FM	3	31.3000	0.5000	1.03	A	A
FN	1	32.4000	1.7000	1.06	A	A
GA	1	30.0000	1.4000	0.98	A	A
GC	1	29.0400	1.3300	0.95	A	A
GC	2	30.6300	1.4500	1.00	A	A
GE	1	31.9000	3.7300	1.04	A	A
GT	1	31.0000	3.0000	1.02	A	A
HU	1	28.4000	1.1000	0.93	A	A
IL	1	33.0000	0.3000	1.08	A	A
IN	1	32.9000	1.1800	1.08	A	A
IO	1	30.3000	4.2000	0.99	A	A
IS	1	30.1000	2.7700	0.99	A	A
IT	1	31.9000	1.9000	1.04	A	A
KE	1	31.7000	0.2700	1.04	A	A
KO	1	28.9500	0.1200	0.95		A
KR	1	31.5000	1.2000	1.03	A	A
KR	5	31.3000	1.2000	1.03	A	A
KR	4	30.9000	1.2000	1.01	A	A
KR	3	31.0000	1.2000	1.02	A	A
KR	2	30.8000	1.2000	1.01	A	A
KS	1	31.7000	2.2000	1.04	A	A
LM	1	31.1200	0.1100	1.02	A	A
LN	1	29.8000	1.1900	0.98	A	A
LV	1	30.6000	0.6000	1.00	A	A
ME	3	33.8000	0.6000	1.11	A	A
ME	2	31.3000	0.5000	1.03	A	A
ME	1	31.8000	0.6000	1.04	A	A
MH	1	32.6000	0.8800	1.07	A	A
MI	1	31.5000	0.9000	1.03		A
MS	1	32.9000	3.3000	1.08	A	A
MZ	3	22.8000	0.4600	0.75		N
MZ	2	23.0100	0.4600	0.75		N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** Al Air Filter Bq / filter  
**Radionuclide:** CO60

**EML Value:** 30.5200  
**EML Error:** 0.6520

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
MZ	1	22.1800	0.4500	0.73		N
NA	1	30.1000	1.0000	0.99	A	A
ND	1	30.6390	0.9190	1.00	A	A
NJ	3	28.7000	1.7000	0.94	A	A
NJ	1	28.9000	1.8000	0.95	A	A
NJ	2	28.8000	1.7000	0.94	A	A
NL	1	31.3000	0.8000	1.03	A	A
NP	1	29.3000	0.2000	0.96	A	A
NQ	1	30.0000	3.2000	0.98	A	A
NR	1	28.2300	5.6100	0.93	A	A
NS	3	28.1850	0.1740	0.92		A
NS	1	28.1810	0.1740	0.92		A
NS	2	28.2960	0.1740	0.93		A
NZ	1	30.5000	3.6000	1.00		A
OB	1	21.1000	2.8200	0.69		N
OD	1	31.0000	0.4100	1.02	A	A
OH	1	34.7000	0.3000	1.14	A	W
OT	1	31.0000	1.0000	1.02	A	A
OU	1	32.8000	1.6800	1.08	A	A
PR	1	31.6000	0.4550	1.03	N	A
PS	1	32.4800	0.3800	1.06	A	A
RA	1	32.5000	1.6000	1.07	A	A
RB	1	31.1000	2.1000	1.02		A
RC	1	31.1000	1.1000	1.02	A	A
RI	1	30.9000	0.7880	1.01	W	A
RM	1	30.1000	1.0000	0.99	A	A
RS	1	26.2600	1.5700	0.86		W
RU	1	28.7000	3.2000	0.94	A	A
SA	1	32.0000	2.9000	1.05	A	A
SB	1	31.2800	3.3940	1.02	A	A
SD	1	36.9200	1.3600	1.21	A	W
SE	1	27.8000	0.5000	0.91	A	A
SI	1	31.2000	0.5000	1.02	A	A
SR	1	30.3000	2.3000	0.99	A	A
SX	1	30.2900	1.1600	0.99	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** Al Air Filter Bq / filter  
**Radionuclide:** CO60

**EML Value:** 30.5200  
**EML Error:** 0.6520

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SX	2	30.0700	1.1600	0.99	A	A
TE	1	30.1000	0.3000	0.99	A	A
TI	1	31.7000	0.7700	1.04	A	A
TM	1	32.0000	0.9900	1.05	W	A
TN	1	26.4900	1.9000	0.87	A	W
TO	1	28.2720	3.4190	0.93	A	A
TP	1	30.5700	0.2900	1.00	A	A
TQ	1	30.6900	0.5100	1.01	A	A
TW	1	29.9000	0.2200	0.98	A	A
TX	1	28.1000	0.3000	0.92	A	A
TY	1	32.0000	3.2000	1.05		A
UY	1	29.4000	2.9000	0.96	A	A
WA	1	33.0000	0.4000	1.08	A	A
WC	1	30.0000	2.3600	0.98	A	A
WE	3	30.0500	0.2500	0.99	A	A
WE	1	29.6700	0.3000	0.97	A	A
WE	2	29.1000	0.2500	0.95	A	A
WI	1	30.8000	4.1400	1.01	A	A
WI	3	32.2000	4.3000	1.05	A	A
WI	2	31.0000	4.1600	1.02	A	A
WN	1	31.5000	0.8000	1.03	A	A
WN	2	31.9000	0.8000	1.04	A	A
WN	3	32.0000	0.8000	1.05	A	A
WO	1	31.7000	6.7000	1.04	W	A
WO	2	31.0000	3.9000	1.02	W	A
WT	1	31.2000	1.9100	1.02	W	A
WV	1	31.2800	0.3620	1.02	A	A
WV	2	30.7700	0.3620	1.01	A	A
WW	2	30.3000	1.4000	0.99	A	A
WW	1	29.8000	1.3000	0.98	A	A
YA	1	29.7000	1.5000	0.97	A	A
YU	1	29.5000	1.1000	0.97		A

**Total Number Reported:** 136

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** CS137

**EML Value:** 28.2300  
**EML Error:** 0.7010

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	29.3000	0.6000	1.04	A	A
AG	1	30.1000	4.9800	1.07	A	A
AI	1	30.4000	4.5000	1.08	A	A
AM	1	29.3000	0.1000	1.04	A	A
AN	1	29.1000	0.8000	1.03	A	A
AS	1	30.7000	0.2000	1.09	A	A
AT	1	29.3350	4.3200	1.04	A	A
AU	1	29.2000	1.5000	1.03	A	A
AW	1	28.0000	4.5000	0.99	A	A
BA	1	30.2300	6.0400	1.07	W	A
BE	1	31.0000	2.0000	1.10	A	A
BM	1	29.4000	3.6300	1.04	A	A
BN	1	32.9000	2.1000	1.16	A	A
BP	1	30.5000	0.5000	1.08		A
BQ	1	33.0000	2.0000	1.17	N	A
BU	1	28.0000	1.4000	0.99	A	A
BX	1	27.3000	1.2000	0.97	A	A
CA	1	31.2000	3.1000	1.11	A	A
CB	1	32.4000	1.1000	1.15	A	A
CD	1	32.0000	2.0000	1.13	W	A
CE	1	28.0000	1.6000	0.99	A	A
CG	1	28.2000	0.8000	1.00	W	A
CH	1	29.6600	0.2640	1.05	A	A
CL	1	28.2000	0.1000	1.00	A	A
CN	1	29.2600	1.8900	1.04	A	A
CU	1	28.6000	0.3000	1.01	A	A
CW	1	29.4000	1.0000	1.04	A	A
EC	4	33.4000	1.4500	1.18	W	W
EC	3	34.8000	2.1300	1.23	W	W
EC	2	31.7000	1.7600	1.12	W	A
EC	1	29.2000	2.8800	1.03	W	A
EC	5	32.2800	2.8600	1.14	W	A
EG	1	31.0000	2.0000	1.10	A	A
EP	1	29.3700	1.6700	1.04	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** CS137

**EML Value:** 28.2300  
**EML Error:** 0.7010

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FL	1	29.2100	0.1600	1.03	N	A
FM	3	30.9000	0.7000	1.10	A	A
FM	2	31.5000	0.7000	1.12	A	A
FM	1	31.7000	0.7000	1.12	A	A
FN	1	30.1000	2.3000	1.07	A	A
GA	1	28.0000	2.0000	0.99	A	A
GC	1	29.4500	1.3900	1.04	A	A
GC	2	29.8000	1.4800	1.06	A	A
GE	1	29.8000	2.9500	1.06	A	A
GT	1	30.0000	5.0000	1.06	W	A
HU	1	26.8500	1.6500	0.95	A	A
IL	1	31.1000	0.5000	1.10	A	A
IN	1	33.4000	1.1300	1.18	A	W
IO	1	28.7000	6.0000	1.02	A	A
IS	1	28.2000	2.7300	1.00	A	A
IT	1	30.6000	1.8000	1.08	W	A
KE	1	34.5500	0.3000	1.22	A	W
KO	1	27.0100	0.1000	0.96		A
KR	5	30.3000	1.2000	1.07	A	A
KR	4	29.6000	1.1000	1.05	A	A
KR	3	29.9000	1.2000	1.06	A	A
KR	2	29.4000	1.1000	1.04	A	A
KR	1	29.9000	1.2000	1.06	A	A
KS	1	28.5000	1.3000	1.01	A	A
LM	1	28.2500	0.1100	1.00	A	A
LN	1	29.0000	1.4500	1.03	A	A
LV	1	39.9000	1.4000	1.41	W	N
ME	3	33.8000	0.9000	1.20	A	W
ME	2	30.5000	0.8000	1.08	A	A
ME	1	31.2000	0.7000	1.11	A	A
MH	1	34.1200	1.3200	1.21	W	W
MI	1	29.6000	1.2000	1.05		A
MS	1	30.3000	3.0000	1.07	A	A
MZ	1	20.6700	0.3300	0.73		N
MZ	3	21.7100	0.3400	0.77		N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** CS137

**EML Value:** 28.2300  
**EML Error:** 0.7010

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
MZ	2	21.8800	0.3400	0.77		N
NA	1	31.0000	1.1000	1.10	A	A
ND	1	29.8950	1.4580	1.06	A	A
NJ	3	26.3000	2.3000	0.93	A	A
NJ	2	26.2000	2.7000	0.93	A	A
NJ	1	26.4000	2.4000	0.94	A	A
NL	1	33.3000	2.0000	1.18	A	W
NM	1	31.3000	1.4000	1.11		A
NP	1	27.9000	0.2000	0.99	A	A
NQ	1	28.7000	3.2000	1.02	A	A
NR	1	28.7000	5.7000	1.02	A	A
NS	1	25.8960	0.1300	0.92		A
NS	2	26.0740	0.1330	0.92		A
NS	3	26.1480	0.1330	0.93		A
NZ	1	31.3000	2.0000	1.11		A
OB	1	15.7000	3.0000	0.56		N
OD	1	29.2000	0.6900	1.03	A	A
OH	1	36.0000	0.3000	1.27	A	W
OT	1	30.0000	1.0000	1.06	A	A
OU	1	29.4000	1.8200	1.04	A	A
PR	1	24.2200	0.7760	0.86	N	W
PS	1	31.7000	0.3100	1.12	A	A
RA	1	30.0000	2.0000	1.06	A	A
RB	1	29.8000	2.9000	1.06		A
RC	1	28.5000	1.1000	1.01	A	A
RI	1	30.7000	0.9880	1.09	A	A
RM	1	29.3000	1.2000	1.04	A	A
RS	1	26.9400	1.4900	0.95		A
RU	1	36.6000	4.0000	1.30	N	W
SA	1	31.0000	2.6000	1.10	A	A
SB	1	29.0800	3.2840	1.03	A	A
SD	1	32.3000	1.6000	1.14	A	A
SE	1	28.7000	0.5000	1.02	A	A
SI	1	29.2000	0.6000	1.03	A	A
SR	1	28.2000	3.0000	1.00	W	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** CS137

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**EML Value:** 28.2300  
**EML Error:** 0.7010

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SX	1	28.2800	1.6100	1.00	A	A
SX	2	28.3900	1.6200	1.01	A	A
TE	1	29.9000	0.3000	1.06	A	A
TI	1	30.4000	1.0100	1.08	W	A
TM	1	29.0000	0.9400	1.03	W	A
TN	1	25.9500	2.3400	0.92	A	A
TO	1	30.1280	4.8940	1.07	W	A
TP	1	27.2700	0.5600	0.97	A	A
TQ	1	30.2900	0.6000	1.07	W	A
TW	1	28.7000	0.3100	1.02	A	A
TX	1	26.5000	0.4000	0.94	A	A
TY	1	30.0000	3.0000	1.06		A
UY	1	26.5000	2.0000	0.94	A	A
WA	1	31.0000	1.4000	1.10	W	A
WC	1	29.1000	3.9700	1.03	A	A
WE	1	29.0400	1.4000	1.03	A	A
WE	2	28.2700	1.4000	1.00	A	A
WE	3	28.8700	1.4000	1.02	A	A
WI	2	28.0000	3.8500	0.99	A	A
WI	1	27.8000	3.8100	0.99	A	A
WI	3	28.9000	3.9300	1.02	A	A
WN	3	30.6000	1.2000	1.08	A	A
WN	1	30.8000	1.2000	1.09	A	A
WN	2	30.1000	1.2000	1.07	A	A
WO	1	29.7000	5.0000	1.05	W	A
WO	2	30.5000	3.0000	1.08	W	A
WT	1	26.7000	1.8200	0.95	A	A
WV	1	29.2400	0.3020	1.04	A	A
WV	2	28.3300	0.2840	1.00	A	A
WW	2	29.2000	2.6000	1.03	A	A
WW	1	28.8000	2.1000	1.02	A	A
YA	1	28.4000	1.4000	1.01	A	A
YU	1	28.3000	1.3000	1.00		A

**Total Number Reported:** 137

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

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

**EML Value:** 0.5340  
**EML Error:** 0.0534

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AI	1	0.5400	0.0300	1.01	A	A
AM	1	0.5100	0.0100	0.95	A	A
AS	1	0.4880	0.0310	0.91	A	A
AT	1	0.4980	0.0300	0.93	A	A
AU	1	0.8400	0.0400	1.57	W	N
BE	1	0.5420	0.0560	1.01	A	A
BN	1	0.4700	0.0400	0.88		A
BP	1	0.5400	0.0200	1.01		A
BQ	1	0.5500	0.0400	1.03	A	A
BU	1	0.5300	0.0150	0.99		A
BX	1	0.5390	0.0340	1.01	A	A
CA	1	0.4800	0.0500	0.90	A	A
CE	1	0.4800	0.0300	0.90	A	A
CG	1	0.6700	0.0200	1.25		W
CH	1	0.5470	0.0355	1.02	N	A
CL	1	0.6300	0.0200	1.18		A
CP	1	0.5200	0.0400	0.97		A
CU	1	0.5600	0.0500	1.05	A	A
EC	1	0.5500	0.0500	1.03	A	A
EC	2	0.4800	0.0500	0.90	A	A
EC	4	0.6200	0.0600	1.16	A	A
EC	5	0.7900	0.0800	1.48	A	N
EC	3	0.6100	0.0600	1.14	A	A
FL	1	0.4400	0.0200	0.82	W	W
FN	1	0.5500	0.0800	1.03	A	A
GE	1	0.5350	0.0130	1.00	A	A
GT	1	0.5600	0.1000	1.05	A	A
HC	1	0.6700	0.0300	1.25	A	W
IL	1	0.5100	0.0100	0.95	A	A
IO	1	0.5800	0.1000	1.09	A	A
IS	1	0.5846	0.0700	1.10	A	A
IT	1	0.5670	0.0580	1.06	A	A
KA	1	0.4900	0.0600	0.92	A	A
KO	1	0.5180	0.0490	0.97		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

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

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**EML Value:** 0.5340  
**EML Error:** 0.0534

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
KR	1	0.5500	0.0300	1.03	A	A
LN	1	0.6000	0.0360	1.12	A	A
LV	1	0.5130	0.0300	0.96	A	A
ME	3	0.7700	0.0300	1.44	W	N
ME	1	0.7900	0.0200	1.48	W	N
ME	2	0.7400	0.0300	1.39	W	W
MI	1	0.5500	0.0300	1.03	A	A
MS	1	0.6200	0.0600	1.16	A	A
MZ	1	1.1239	0.0333	2.11		N
ND	1	0.5430	0.0580	1.02	A	A
NQ	1	0.5770	0.0870	1.08	A	A
OB	1	0.5460	0.0591	1.02	A	A
OD	1	0.4900	0.0300	0.92	A	A
OH	1	0.6020	0.1900	1.13	A	A
OK	1	40.0000	3.0000	74.91		N
OT	1	1.3000	0.1000	2.43	W	N
OU	1	0.6930	0.0720	1.30	W	W
PA	4	0.4900	0.0800	0.92		A
PA	3	0.5200	0.0800	0.97		A
PA	2	0.4900	0.0800	0.92		A
PA	1	0.4800	0.0800	0.90		A
PA	5	0.5000	0.0800	0.94		A
PC	1	0.6800	0.0500	1.27		W
PS	1	0.5800	0.0410	1.09	A	A
RB	1	0.6200	0.0900	1.16		A
RC	1	0.6500	0.0400	1.22	A	W
RI	1	0.5900	0.0372	1.11	A	A
RK	1	0.4500	0.0300	0.84	W	A
RS	1	0.7500	0.0700	1.40		W
SA	1	0.6100	0.1300	1.14	A	A
SA	2	0.5500	0.1100	1.03	A	A
SB	1	0.6020	0.0520	1.13	A	A
SB	2	0.5990	0.0520	1.12	A	A
SB	3	0.5780	0.0510	1.08	A	A
SD	1	0.5790	0.0050	1.08	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

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

**EML Value:** 0.5340  
**EML Error:** 0.0534

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SN	1	0.6770	0.0450	1.27	W	W
SR	1	0.5800	0.1060	1.09	W	A
TE	1	0.4300	0.0400	0.81	A	W
TI	1	0.5450	0.0490	1.02	A	A
TM	1	0.7400	0.0500	1.39	W	W
TN	1	0.4280	0.0290	0.80	W	W
TO	1	0.4910	0.0270	0.92	W	A
TQ	1	0.6200	0.0200	1.16	A	A
TW	1	0.6900	0.0200	1.29	A	W
TX	1	0.4000	0.0200	0.75	A	W
TY	1	1.3300	0.1300	2.49		N
UC	1	0.6500	0.0400	1.22		W
UY	1	0.4980	0.0250	0.93	A	A
WA	1	0.6800	0.1000	1.27	A	W
WC	1	0.5980	0.0650	1.12	A	A
WE	1	0.5820	0.0230	1.09	A	A
WE	3	0.6080	0.0230	1.14	A	A
WE	2	0.5780	0.0230	1.08	A	A
WI	2	0.5600	0.0637	1.05	A	A
WI	3	0.5900	0.0626	1.11	A	A
WI	1	0.5480	0.0625	1.03	A	A
WO	1	0.5370	0.0480	1.01	W	A
WO	2	0.5160	0.0460	0.97	W	A
WT	1	0.6640	0.0390	1.24	W	W
WV	1	0.5700	0.0360	1.07	W	A
WW	1	0.5240	0.0220	0.98	A	A
YA	1	0.5040	0.0075	0.94	A	A
YU	1	0.5600	0.0600	1.05		A

**Total Number Reported:** 97

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

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

**EML Value:** 1.3000  
**EML Error:** 0.1300

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AI	1	1.3800	0.0400	1.06	A	A
AM	1	1.2000	0.0100	0.92	A	A
AS	1	1.2600	0.0500	0.97	A	A
AT	1	1.2580	0.0410	0.97	A	A
AU	1	1.2900	0.0800	0.99	A	A
BE	1	1.2900	0.1300	0.99	A	A
BN	1	1.1400	0.0500	0.88		A
BP	1	1.1800	0.0300	0.91		A
BQ	1	1.2200	0.0800	0.94	N	A
BX	1	1.1800	0.0400	0.91	W	A
CA	1	1.3000	0.1000	1.00	A	A
CD	1	1.3000	0.2000	1.00	W	A
CE	1	1.2000	0.0500	0.92	A	A
CG	1	1.0800	0.0500	0.83		W
CH	1	1.1113	0.0402	0.86	N	A
CL	1	1.6600	0.0600	1.28		W
CP	1	1.0100	0.0400	0.78		W
EC	4	2.9100	0.3000	2.24	N	N
EC	5	2.8000	0.3000	2.15	N	N
EC	2	2.9000	0.3000	2.23	N	N
EC	1	2.7000	0.3000	2.08	N	N
EC	3	2.5700	0.3000	1.98	N	N
FL	1	1.2200	0.0300	0.94	A	A
FN	1	1.4300	0.2100	1.10	A	A
GE	1	1.0800	0.0160	0.83	W	W
GT	1	1.1100	0.2000	0.85	W	A
HC	1	1.3500	0.0400	1.04	A	A
IL	1	1.2400	0.0200	0.95	W	A
IO	1	1.3400	0.1400	1.03	A	A
IS	1	1.2423	0.1299	0.96	A	A
IT	1	1.3300	0.1100	1.02	A	A
KA	1	1.2300	0.0700	0.95	A	A
KO	1	1.2200	0.0700	0.94		A
KR	1	1.1400	0.1000	0.88	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

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

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**EML Value:** 1.3000  
**EML Error:** 0.1300

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LN	1	1.1000	0.0495	0.85	W	W
LV	1	1.2400	0.0300	0.95	W	A
ME	3	1.1900	0.0200	0.92	A	A
ME	2	1.2400	0.0300	0.95	A	A
ME	1	1.2600	0.0300	0.97	A	A
MI	1	1.6100	0.0400	1.24		W
MS	1	0.9500	0.1000	0.73	N	N
MZ	1	0.8082	0.0407	0.62		N
ND	1	1.3520	0.1380	1.04	W	A
NP	1	1.2000	0.0200	0.92	A	A
NQ	1	1.4000	0.2100	1.08	A	A
OB	1	1.1400	0.1150	0.88	W	A
OD	1	1.3800	0.0390	1.06	A	A
OH	1	1.1800	0.0190	0.91	W	A
OK	1	93.0000	4.0000	71.54		N
OT	1	0.6300	0.0400	0.49	A	N
OU	1	1.1300	0.0800	0.87	W	A
PA	2	1.4800	0.1400	1.14		A
PA	1	1.4700	0.1400	1.13		A
PA	3	1.4900	0.1400	1.15		A
PA	4	1.4500	0.1400	1.12		A
PA	5	1.4800	0.1400	1.14		A
PC	1	1.0800	0.0400	0.83		W
PS	1	1.4800	0.0500	1.14	W	A
RB	1	1.4200	0.3600	1.09		A
RC	1	1.1700	0.0600	0.90	A	A
RI	1	1.1800	0.0497	0.91	A	A
RK	1	1.2200	0.0500	0.94	W	A
RS	1	1.4500	0.1000	1.12		A
SA	1	1.3000	0.0300	1.00	A	A
SA	2	1.0500	0.1500	0.81	A	W
SB	2	1.2410	0.0620	0.95	A	A
SB	3	1.2270	0.0610	0.94	A	A
SB	1	1.2600	0.0620	0.97	A	A
SD	1	1.4900	0.0090	1.15	W	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

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

**EML Value:** 1.3000  
**EML Error:** 0.1300

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SN	1	1.3960	0.0480	1.07	A	A
SR	1	1.2300	0.1030	0.95	A	A
TE	1	1.3400	0.0500	1.03	A	A
TI	1	1.2100	0.0700	0.93	A	A
TM	1	1.3000	0.0500	1.00	A	A
TN	1	1.0820	0.0450	0.83	A	W
TO	1	1.3150	0.0410	1.01	A	A
TQ	1	1.3800	0.0300	1.06	W	A
TW	1	1.3900	0.0400	1.07	W	A
TX	1	1.1500	0.0500	0.88	A	A
TY	1	1.3700	0.1400	1.05		A
UC	1	1.0450	0.0300	0.80		W
UY	1	1.1800	0.0360	0.91	W	A
WA	1	1.2300	0.0600	0.95	A	A
WC	1	1.3700	0.1400	1.05	W	A
WE	2	1.3200	0.0330	1.01	A	A
WE	3	1.4300	0.0330	1.10	A	A
WE	1	1.3900	0.0340	1.07	A	A
WI	1	1.1800	0.1230	0.91	W	A
WI	2	1.1600	0.1210	0.89	W	A
WI	3	1.1400	0.1190	0.88	W	A
WO	1	1.1590	0.0900	0.89	W	A
WO	2	1.1740	0.0580	0.90	W	A
WT	1	1.5150	0.0590	1.16	N	A
WV	1	1.3000	0.0448	1.00	W	A
WW	1	1.2280	0.0290	0.94	A	A
YA	1	1.1740	0.0120	0.90	A	A
YU	1	1.2600	0.1300	0.97		A

**Total Number Reported:** 97

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** MN54

**EML Value:** 38.5300  
**EML Error:** 0.8670

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	40.1000	0.5000	1.04	N	A
AG	1	39.6000	6.5400	1.03	A	A
AI	1	40.5000	6.0000	1.05	A	A
AM	1	40.0500	0.1500	1.04	A	A
AN	1	38.0000	0.8000	0.99	A	A
AS	1	41.2000	0.3000	1.07	A	A
AT	1	40.3650	7.0800	1.05	A	A
AU	1	40.8000	1.8000	1.06	A	A
AW	1	30.0000	5.0000	0.78	A	N
BA	1	42.1900	6.7800	1.10	W	A
BE	1	43.0000	8.0000	1.12	A	A
BN	1	43.0000	2.1000	1.12	A	A
BP	1	40.1000	0.5000	1.04		A
BQ	1	35.0000	2.0000	0.91	N	A
BU	1	38.0000	1.7000	0.99	A	A
BX	1	38.1000	3.0000	0.99	A	A
CA	1	41.7000	4.2000	1.08	A	A
CB	1	44.3000	1.4000	1.15	A	A
CD	1	43.0000	2.0000	1.12	A	A
CE	1	39.0000	2.3000	1.01	A	A
CG	1	42.2000	1.4000	1.10	W	A
CH	1	40.9600	0.3320	1.06	A	A
CL	1	39.4000	0.1000	1.02	A	A
CN	1	42.2400	2.7200	1.10	A	A
CU	1	39.2000	0.4000	1.02	A	A
CW	1	38.5000	1.2000	1.00	A	A
EC	1	38.5000	4.7100	1.00	W	A
EC	2	43.2000	2.0100	1.12	W	A
EC	3	46.0000	2.2600	1.19	W	W
EC	5	43.3300	2.7100	1.13	W	A
EC	4	45.6000	1.8700	1.18	W	A
EG	1	43.7000	3.0000	1.13	A	A
EP	1	39.6500	2.1500	1.03	A	A
FL	1	87.8700	0.2900	2.28	W	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** MN54

**EML Value:** 38.5300  
**EML Error:** 0.8670

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FM	3	42.0000	0.9000	1.09	A	A
FM	1	43.2000	0.9000	1.12	A	A
FM	2	43.1000	0.9000	1.12	A	A
FN	1	39.4000	3.0000	1.02	A	A
GA	1	38.2000	2.8000	0.99	A	A
GC	2	39.3000	1.9500	1.02	A	A
GC	1	39.2000	1.8400	1.02	A	A
GE	1	40.2000	4.9000	1.04	A	A
GT	1	44.0000	10.0000	1.14	A	A
HU	1	37.1000	1.7000	0.96	A	A
IL	1	41.4000	0.6000	1.07	A	A
IN	1	45.7000	1.6900	1.19	A	A
IO	1	37.7000	6.9000	0.98	A	A
IS	1	37.7100	3.8000	0.98	A	A
IT	1	41.4000	2.5000	1.07	A	A
KE	1	45.7600	0.4000	1.19	A	A
KO	1	36.0200	0.1100	0.94		A
KR	5	39.8000	1.5000	1.03	A	A
KR	2	39.8000	1.6000	1.03	A	A
KR	1	39.9000	1.5000	1.04	A	A
KR	4	39.4000	1.5000	1.02	A	A
KR	3	39.6000	1.5000	1.03	A	A
KS	1	40.9000	15.1000	1.06	A	A
LM	1	47.2500	0.2100	1.23	A	W
LN	1	40.0000	1.6000	1.04	A	A
LV	1	38.9000	1.1400	1.01	A	A
ME	3	44.0000	1.0000	1.14	A	A
ME	1	41.4000	0.9000	1.07	A	A
ME	2	40.7000	0.8000	1.06	A	A
MH	1	45.1600	1.7500	1.17	W	A
MI	1	38.7000	1.4000	1.00		A
MS	1	41.0000	4.1000	1.06	A	A
MZ	2	27.3400	0.4100	0.71		N
MZ	1	25.2200	0.3900	0.65		N
MZ	3	27.1400	0.4100	0.70		N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** MN54

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**EML Value:** 38.5300  
**EML Error:** 0.8670

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
NA	1	40.7000	1.4000	1.06	A	A
ND	1	39.6330	1.6650	1.03	A	A
NJ	1	35.6000	10.8000	0.92	A	A
NJ	3	35.4000	7.8000	0.92	A	A
NJ	2	35.4000	12.6000	0.92	A	A
NL	1	43.0000	1.8000	1.12	A	A
NP	1	40.0000	0.3000	1.04	A	A
NQ	1	39.6000	4.5000	1.03	A	A
NR	1	38.5000	7.7000	1.00	A	A
NS	3	37.5930	0.1850	0.98		A
NS	1	37.6300	0.1850	0.98		A
NS	2	37.9260	0.1850	0.98		A
NZ	1	40.8000	2.6000	1.06		A
OB	1	26.7000	4.9200	0.69		N
OD	1	39.3600	0.8000	1.02	A	A
OH	1	48.9000	0.4000	1.27	A	W
OT	1	41.0000	1.0000	1.06	A	A
OU	1	41.3000	1.9900	1.07	A	A
PR	1	36.1600	0.5010	0.94	N	A
PS	1	42.9600	0.3600	1.12	A	A
RA	1	39.7000	2.4000	1.03	A	A
RB	1	40.2000	3.5000	1.04		A
RC	1	38.8000	1.1000	1.01	A	A
RI	1	40.3000	1.2200	1.05	A	A
RM	1	38.1000	2.5000	0.99	A	A
RS	1	28.7400	1.8900	0.75		N
RU	1	37.0000	4.1000	0.96	A	A
SA	1	44.0000	3.9000	1.14	A	A
SB	1	39.1500	4.8620	1.02	A	A
SD	1	83.3300	3.7000	2.16	A	N
SE	1	35.2000	0.6000	0.91	A	A
SI	1	38.2000	0.8000	0.99	A	A
SR	1	37.7000	3.7700	0.98	A	A
SX	1	37.0400	5.7900	0.96	A	A
SX	2	36.9400	5.7700	0.96	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** MN54

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**EML Value:** 38.5300  
**EML Error:** 0.8670

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TE	1	40.4000	0.4000	1.05	A	A
TI	1	38.3000	1.2300	0.99	A	A
TM	1	39.0000	1.1000	1.01	W	A
TN	1	34.7100	2.7000	0.90	A	A
TO	1	38.9460	6.5690	1.01	A	A
TP	1	37.7800	0.6100	0.98	A	A
TQ	1	38.3800	0.7200	1.00	A	A
TW	1	39.1000	0.3800	1.01	A	A
TX	1	35.9000	0.5000	0.93	A	A
TY	1	40.0000	4.0000	1.04		A
UY	1	37.4000	3.7000	0.97	A	A
WA	1	46.3000	3.2000	1.20	W	W
WC	1	38.4000	5.4100	1.00	A	A
WE	2	38.5800	1.5000	1.00	A	A
WE	1	37.9100	1.2500	0.98	A	A
WE	3	39.8300	1.5000	1.03	A	A
WI	1	39.0000	5.3100	1.01	A	A
WI	2	39.2000	5.3300	1.02	A	A
WI	3	39.9000	5.4100	1.04	A	A
WN	3	43.7000	1.5000	1.13	A	A
WN	1	48.9000	1.5000	1.27	A	W
WN	2	44.4000	1.6000	1.15	A	A
WO	1	41.1000	7.4000	1.07	W	A
WO	2	41.8000	4.5000	1.09	W	A
WT	1	36.0000	2.2600	0.93	A	A
WV	2	42.5100	0.3690	1.10	A	A
WV	1	44.1800	0.3890	1.15	A	A
WW	2	41.4000	4.3000	1.07	A	A
WW	1	40.6000	3.5000	1.05	A	A
YA	1	38.7000	1.9000	1.00	A	A
YU	1	35.8000	1.5000	0.93		A

**Total Number Reported:** 135

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** PU238

**EML Value:** 0.0574  
**EML Error:** 0.0014

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	0.0600	0.0100	1.04	W	A
AG	1	0.0604	0.0129	1.05	A	A
AI	1	0.0530	0.0030	0.92	W	A
AM	1	0.0470	0.0180	0.82	A	W
AN	1	0.0700	0.0100	1.22	A	W
AT	1	0.0590	0.0080	1.03	A	A
BE	1	0.0572	0.0047	1.00	A	A
BM	1	0.0589	0.0089	1.03	A	A
BP	1	0.0590	0.0030	1.03		A
BU	1	0.0460	0.0050	0.80	A	W
BX	1	0.0591	0.0090	1.03	A	A
CH	1	0.0123	0.0081	0.22	A	N
CL	1	0.0100	0.0300	0.17	W	N
CW	1	0.0610	0.0020	1.06	A	A
EG	1	0.0630	0.0050	1.10		A
GA	1	0.0520	0.0094	0.91	A	A
GE	1	0.0550	0.0140	0.96	A	A
IS	1	0.0721	0.0147	1.26	A	W
IT	1	0.0610	0.0061	1.06	A	A
KO	1	0.0660	0.0036	1.15		W
ML	1	0.0550	0.0080	0.96	A	A
NA	1	0.0610	0.0110	1.06	A	A
NL	1	0.0570	0.0070	0.99	A	A
NM	1	0.0600	0.0030	1.04	W	A
NQ	1	0.0581	0.0041	1.01	A	A
OB	1	0.0510	0.0160	0.89		A
OT	1	0.1800	0.0100	3.13	A	N
PS	1	0.0630	0.0170	1.10	A	A
RA	1	0.0600	0.0200	1.04	W	A
RI	1	0.0792	0.0098	1.38	W	N
SD	1	0.0720	0.0100	1.25	A	W
SE	1	0.0510	0.0120	0.89		A
SN	1	0.0540	0.0100	0.94		A
SR	1	0.0600	0.0070	1.04	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** PU238

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**EML Value:** 0.0574  
**EML Error:** 0.0014

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TE	1	0.0470	0.0190	0.82	W	W
TI	1	0.0618	0.0190	1.08	W	A
TM	1	0.0280	0.0060	0.49	A	N
TN	1	0.0510	0.0060	0.89	A	A
TO	1	0.0780	0.0330	1.36	W	N
TX	1	0.0600	0.0020	1.04	A	A
UY	1	0.0591	0.0070	1.03	A	A
WC	1	0.0580	0.0160	1.01	W	A
WE	3	0.0900	0.0100	1.57	A	N
WE	2	0.0900	0.0100	1.57	A	N
WE	1	0.0500	0.0100	0.87	A	W
WI	1	0.0534	0.0095	0.93	A	A
WI	2	0.0573	0.0105	1.00	A	A
YA	1	0.0560	0.0012	0.98	W	A

**Total Number Reported:** 48

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** PU239

**EML Value:** 0.1874  
**EML Error:** 0.0031

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	0.1700	0.0200	0.91	W	A
AG	1	0.1850	0.0289	0.99	A	A
AI	1	0.1600	0.0060	0.85	W	W
AM	1	0.1880	0.0330	1.00	A	A
AN	1	0.1800	0.0100	0.96	A	A
AT	1	0.1880	0.0230	1.00	A	A
BE	1	0.1910	0.0140	1.02	A	A
BM	1	0.1940	0.0271	1.03	A	A
BP	1	0.1670	0.0050	0.89		A
BU	1	0.1800	0.0090	0.96	A	A
BX	1	0.1920	0.0200	1.02	A	A
CH	1	0.0433	0.0044	0.23	A	N
CL	1	0.1500	0.0400	0.80	W	W
CW	1	0.1950	0.0040	1.04	A	A
EG	1	0.2080	0.0130	1.11		A
EI	1	0.2200	0.0100	1.17		W
GA	1	0.2100	0.0022	1.12	W	W
GE	1	0.1920	0.0290	1.02	A	A
IS	1	0.1976	0.0382	1.05	A	A
IT	1	0.1730	0.0150	0.92	A	A
KO	1	0.2050	0.0099	1.09		A
ML	1	0.1860	0.0260	0.99	A	A
NA	1	0.1940	0.0200	1.03	A	A
NL	1	0.1860	0.0220	0.99	A	A
NM	1	0.1980	0.0080	1.06	A	A
NQ	1	0.1950	0.0120	1.04	A	A
OB	1	0.1780	0.0523	0.95		A
OT	1	0.0550	0.0090	0.29	A	N
PS	1	0.2000	0.0400	1.07	A	A
RA	1	0.2000	0.0400	1.07	A	A
RI	1	0.1800	0.0182	0.96	A	A
SD	1	0.1730	0.0150	0.92	A	A
SE	1	0.1800	0.0120	0.96		A
SN	1	0.1790	0.0260	0.95	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** PU239

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**EML Value:** 0.1874  
**EML Error:** 0.0031

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SR	1	0.1900	0.0200	1.01	A	A
TE	1	0.1500	0.0200	0.80	A	W
TI	1	0.1870	0.0660	1.00	W	A
TM	1	0.0980	0.0110	0.52	W	N
TN	1	0.1630	0.0120	0.87	A	W
TO	1	0.2280	0.0640	1.22	A	W
TX	1	0.1930	0.0040	1.03	A	A
UC	1	0.1840	0.0292	0.98		A
UY	1	0.1870	0.0190	1.00	A	A
WC	1	0.1820	0.0400	0.97	A	A
WE	2	0.2100	0.0300	1.12	W	W
WE	1	0.1700	0.0200	0.91	W	A
WE	3	0.2200	0.0300	1.17	W	W
WI	2	0.1850	0.0308	0.99	A	A
WI	1	0.1810	0.0292	0.97	A	A
YA	1	0.1830	0.0025	0.98	A	A

**Total Number Reported:** 50

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** SR90

**EML Value:** 4.8317  
**EML Error:** 0.1838

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	4.9000	0.2000	1.01	W	A
AG	1	4.5200	0.8160	0.94		A
AI	1	5.8400	0.8800	1.21	A	W
AM	1	4.6030	0.3840	0.95	A	A
AN	1	4.2500	0.1700	0.88	A	A
AT	1	4.4310	0.2410	0.92	W	A
BE	1	4.2600	0.2500	0.88	A	A
BM	1	4.4700	0.0800	0.93	A	A
BQ	1	1.1800	0.0800	0.24		N
BX	1	4.1400	0.2100	0.86	A	A
CE	1	3.6000	0.0700	0.75	A	W
CH	1	12.1900	0.6830	2.52	A	N
CL	1	4.3000	0.5000	0.89	A	A
CW	1	4.2600	0.0900	0.88		A
EG	1	4.0800	0.1300	0.84		A
GA	1	4.7250	0.3350	0.98	A	A
GE	1	5.2400	0.0900	1.09	A	A
GT	1	4.2000	0.3000	0.87	A	A
IO	1	4.5000	0.1000	0.93	A	A
IS	1	4.9600	0.7700	1.03		A
IT	1	4.5600	0.4800	0.94	A	A
KE	1	5.0710	0.0480	1.05	A	A
KO	1	4.1200	0.0500	0.85		A
MZ	1	0.5000	0.0040	0.10		N
NA	1	4.5600	0.2800	0.94		A
NM	1	4.7000	0.5600	0.97		A
OT	1	4.0000	0.2000	0.83	A	A
PS	1	4.5100	0.0970	0.93	A	A
RA	1	4.3000	0.9000	0.89	A	A
RI	1	7.4300	0.1110	1.54	A	W
SD	1	4.0400	0.1000	0.84		A
SE	1	3.9400	0.0800	0.81	A	A
SR	1	4.5800	0.2400	0.95	A	A
TE	1	3.4000	0.4000	0.70	A	W

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** SR90

**EML Value:** 4.8317  
**EML Error:** 0.1838

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TI	1	4.6800	0.4400	0.97	W	A
TM	1	5.1400	0.4820	1.06	A	A
TN	1	4.2900	0.0890	0.89	A	A
TO	1	4.3430	0.0940	0.90	A	A
UY	1	4.1400	0.0600	0.86	W	A
WA	1	4.0000	0.2000	0.83	A	A
WC	1	0.8240	0.1030	0.17	A	N
WE	3	5.1800	0.3000	1.07	A	A
WE	1	4.0300	0.2600	0.83	A	A
WE	2	4.9200	0.3000	1.02	A	A
WI	1	4.2000	0.2200	0.87	N	A
WI	2	4.1300	0.2250	0.86	N	A
YA	1	4.1000	0.1850	0.85	A	A

**Total Number Reported:** 47

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** U234

**EML Value:** 0.2974  
**EML Error:** 0.0035

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	0.2900	0.0100	0.98	W	A
AI	1	0.3010	0.0120	1.01	N	A
AM	1	0.3820	0.0580	1.28	N	A
AN	1	0.2900	0.0100	0.98	W	A
AT	1	0.2730	0.0370	0.92	A	A
AU	1	0.2900	0.0400	0.98	A	A
BE	1	0.2850	0.0260	0.96	A	A
BM	1	0.3040	0.0393	1.02	A	A
BQ	1	0.2300	0.0200	0.77		N
BU	1	0.2700	0.0140	0.91	A	A
BX	1	0.3580	0.0360	1.20	A	A
CH	1	0.0565	0.0164	0.19	A	N
CL	1	0.2900	0.0500	0.98	A	A
CW	1	0.2960	0.0080	1.00	A	A
EG	1	0.2890	0.0200	0.97		A
EI	1	0.3060	0.0190	1.03		A
FE	1	0.3018	0.0202	1.01	A	A
GA	1	0.2800	0.0240	0.94		A
GE	1	0.2770	0.0480	0.93	A	A
IS	1	0.2735	0.0517	0.92	W	A
KO	1	0.2870	0.0081	0.96		A
ML	1	0.3000	0.0420	1.01	A	A
NA	1	0.3030	0.0280	1.02	A	A
NL	1	0.2870	0.0340	0.96	A	A
NQ	1	0.2880	0.0160	0.97	A	A
OB	1	0.2320	0.0707	0.78		N
PS	1	0.2700	0.0230	0.91		A
SD	1	0.2910	0.0200	0.98	A	A
SE	1	0.2900	0.0130	0.98		A
SN	1	0.2830	0.0310	0.95	A	A
SR	1	0.3180	0.0370	1.07	A	A
TI	1	0.2990	0.0390	1.00		A
TM	1	0.2790	0.0170	0.94	A	A
TN	1	0.2360	0.0130	0.79	W	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** U234

**EML Value:** 0.2974  
**EML Error:** 0.0035

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TO	1	0.3190	0.0740	1.07	A	A
TX	1	0.2820	0.0060	0.95	W	A
WA	1	0.3100	0.0400	1.04	A	A
WC	1	0.2650	0.0500	0.89	A	W
WE	3	0.3200	0.0400	1.08	A	A
WE	1	0.3700	0.0400	1.24	A	A
WE	2	0.3300	0.0400	1.11	A	A

**Total Number Reported:** 41

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** U238

**EML Value:** 0.2981  
**EML Error:** 0.0039

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	0.2700	0.0100	0.91	W	A
AI	1	0.3050	0.0130	1.02	W	A
AM	1	0.3840	0.0550	1.29	N	W
AN	1	0.3000	0.0100	1.01	A	A
AT	1	0.2710	0.0370	0.91	A	A
AU	1	0.2900	0.0400	0.97	A	A
BE	1	0.2810	0.0260	0.94	A	A
BM	1	0.3020	0.0391	1.01	A	A
BQ	1	0.2400	0.0200	0.81		W
BU	1	0.2900	0.0140	0.97	A	A
BX	1	0.3580	0.0350	1.20	A	A
CH	1	0.0638	0.0160	0.21	W	N
CL	1	0.2700	0.0500	0.91	W	A
CW	1	0.2920	0.0080	0.98	A	A
EG	1	0.2940	0.0200	0.99		A
EI	1	0.2930	0.0180	0.98		A
FE	1	0.3113	0.0114	1.04	A	A
GA	1	0.3000	0.0340	1.01		A
GE	1	0.2740	0.0490	0.92	A	A
IS	1	0.2751	0.0523	0.92	W	A
KO	1	0.2900	0.0082	0.97		A
ML	1	0.3050	0.0440	1.02	A	A
NA	1	0.2730	0.0260	0.92	W	A
NL	1	0.2890	0.0340	0.97	A	A
NQ	1	0.2840	0.0160	0.95	A	A
OB	1	0.2220	0.0679	0.75		N
PS	1	0.2700	0.0230	0.91		A
SD	1	0.3160	0.0210	1.06	A	A
SE	1	0.2900	0.0120	0.97		A
SN	1	0.2990	0.0330	1.00	A	A
SR	1	0.3160	0.0370	1.06	A	A
TI	1	0.3390	0.0420	1.14		A
TM	1	0.2740	0.0170	0.92	A	A
TN	1	0.2370	0.0130	0.80	W	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** AI Air Filter Bq / filter  
**Radionuclide:** U238

**EML Value:** 0.2981  
**EML Error:** 0.0039

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TO	1	0.2830	0.0680	0.95	A	A
TX	1	0.2870	0.0060	0.96	A	A
WA	1	0.3000	0.0400	1.01	A	A
WC	1	0.2680	0.0500	0.90	A	W
WE	2	0.3300	0.0400	1.11	W	A
WE	1	0.3000	0.0300	1.01	W	A
WE	3	0.3600	0.0400	1.21	W	A

**Total Number Reported:** 41

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

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

**EML Value:** 24.1049  
**EML Error:** 0.1028

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AI	1	24.7000	3.0000	1.02		A
BE	1	22.7000		0.94	A	A
BP	1	22.4000	0.9000	0.93		A
BQ	1	25.0000	2.0000	1.04	N	A
CL	1	0.0260	0.0010	0.00		N
CW	1	22.3000	1.1000	0.93	A	A
GA	1	24.4000	2.7300	1.01	W	A
GE	1	25.0000	0.8320	1.04	A	A
IS	1	20.6000	2.3700	0.86	W	W
IT	1	25.0000	2.1000	1.04	A	A
KO	1	23.4248	0.6667	0.97		A
NL	1	21.0000		0.87		W
RA	1	21.6000	0.8000	0.90	A	W
RM	1	24.1000	2.4000	1.00	A	A
SD	1	25.4000	1.7000	1.05	A	A
TM	1	22.0000	2.5000	0.91	A	A
TN	1	20.7000	2.5000	0.86	W	W
TO	1	25.6910	0.8360	1.07	A	A
YP	1	21.4000	1.3200	0.89	A	W

**Total Number Reported:** 19

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AC228

**EML Value:** 51.1667  
**EML Error:** 1.9410

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	53.8000	8.0000	1.05	A	A
AF	1	41.8100	2.6100	0.82		W
AG	1	49.1000	9.7300	0.96	A	A
AI	1	49.7000	7.5000	0.97	A	A
AS	1	49.3000	3.0000	0.96	A	A
AT	1	47.8270	11.6600	0.94	W	A
AU	1	55.0000	6.9000	1.08	A	A
BE	1	46.0000	10.0000	0.90	A	A
BN	1	47.5000	5.8000	0.93	A	A
BQ	1	56.0000	8.0000	1.09	W	A
BU	1	54.0000	10.0000	1.05	A	A
BX	1	47.0000	6.8000	0.92	W	A
CD	1	45.0000	3.0000	0.88	A	A
CH	1	53.5000	4.1100	1.05	A	A
CL	1	55.7000	2.2000	1.09	A	A
CM	2	46.6000	1.1000	0.91	A	A
CM	1	46.6000	1.1000	0.91	A	A
CN	1	45.7900	4.3600	0.89	A	A
CP	1	74.0000	6.0000	1.45		N
CR	1	64.0000	1.0000	1.25		W
CS	1	35.1700	5.7000	0.69	A	N
CU	1	48.5000	5.0000	0.95	A	A
CW	1	48.1000	2.1000	0.94	A	A
EC	2	58.1000	2.1400	1.14	A	A
EC	4	59.6000	2.1200	1.16	A	A
EC	5	58.3000	2.1100	1.14	A	A
EC	1	58.9000	2.1600	1.15	A	A
EC	3	58.6000	2.1800	1.14	A	A
EG	1	58.0000	10.0000	1.13	W	A
FE	1	61.7900	2.0930	1.21	A	W
FG	1	58.9000	7.6000	1.15	A	A
FL	1	47.2000	0.8200	0.92	A	A
FN	1	47.2000	2.9000	0.92	W	A
FR	1	53.0000	8.0000	1.04	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AC228

**EML Value:** 51.1667  
**EML Error:** 1.9410

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FS	1	51.3000	2.2000	1.00	A	A
FU	1	48.3100	2.2900	0.94	A	A
FU	5	46.2100	2.0200	0.90	A	A
FU	4	48.9900	2.4300	0.96	A	A
FU	2	48.5900	2.8100	0.95	A	A
FU	3	47.6700	2.0100	0.93	A	A
GA	1	45.4000	9.5000	0.89	A	A
GE	1	51.2000	8.5400	1.00		A
HU	1	50.3000	1.2000	0.98	A	A
IO	1	56.2000	33.5000	1.10	A	A
IS	1	56.8300	15.5600	1.11	N	A
IT	1	56.1000	3.9000	1.10	A	A
KO	1	49.4000	1.7500	0.96		A
KS	1	52.0000	8.3000	1.02	A	A
LA	3	49.5000	6.3000	0.97		A
LA	2	50.6000	6.9000	0.99		A
LA	1	43.9000	5.5000	0.86		W
LL	1	40.0000	4.0200	0.78	W	N
LM	1	50.6900	2.0900	0.99	A	A
LV	1	46.2000	0.8000	0.90	A	A
ME	1	57.0000	1.9000	1.11	A	A
ME	2	54.8000	1.8000	1.07	A	A
ME	3	52.5000	2.1000	1.03	A	A
MH	1	48.1200	3.9900	0.94		A
MS	1	50.8000	5.1000	0.99	A	A
MY	1	62.6500	5.7500	1.22	A	W
NJ	1	50.3000	2.6000	0.98		A
NJ	2	47.0000	3.0000	0.92		A
NJ	3	49.6000	2.6000	0.97		A
NL	1	53.6000	1.5000	1.05	A	A
NQ	1	55.9000	6.3000	1.09	A	A
NZ	1	53.4000	5.5000	1.04	A	A
OB	1	54.8000	9.6800	1.07	A	A
OH	1	58.0000	4.0000	1.13	A	A
OT	1	47.0000	7.0000	0.92	W	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AC228

**EML Value:** 51.1667  
**EML Error:** 1.9410

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OU	1	52.3000	14.8000	1.02	A	A
PK	2	42.2600	7.0200	0.83	A	W
PK	1	42.2600	7.0200	0.83	A	W
PO	1	50.0000	4.0000	0.98		A
RA	1	55.5000	4.5000	1.09	A	A
RB	1	49.1000	6.8000	0.96		A
RI	1	59.9000	14.9000	1.17	A	A
RM	1	52.5000	6.7000	1.03	A	A
RS	1	56.2900	6.2100	1.10		A
RU	1	107.0000	12.8000	2.09		N
SD	1	48.2300	3.5100	0.94	A	A
SE	1	44.7000	2.5000	0.87	A	A
SI	1	51.4000	1.2000	1.00	A	A
SK	1	51.3000	2.4000	1.00	A	A
SN	1	51.6000	11.4000	1.01	A	A
SR	1	38.4000	10.7000	0.75	A	N
SY	1	48.2000	5.2000	0.94	A	A
TE	1	55.0000	5.5000	1.08	A	A
TI	1	50.0000	2.4300	0.98		A
TM	1	65.9000	9.0200	1.29	A	W
TO	1	40.7680	8.3030	0.80	A	N
TP	1	59.8200	1.5100	1.17	A	A
TQ	1	50.5000	1.5000	0.99	A	A
TW	1	54.9000	1.8800	1.07	A	A
TX	1	51.4000	1.4000	1.00	A	A
TY	1	38.0000	3.8000	0.74		N
WA	1	63.0000	3.0000	1.23		W
WE	1	50.2500	1.6800	0.98	W	A
WE	2	51.0400	1.9500	1.00	W	A
WE	3	49.0200	1.9000	0.96	W	A
WI	2	43.8000	6.8200	0.86	A	W
WI	1	43.7000	7.0100	0.85	A	W
WI	3	43.1000	6.8600	0.84	A	W
WN	3	50.0000	2.4000	0.98	A	A
WN	1	47.3000	3.7000	0.92	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AC228

**EML Value:** 51.1667  
**EML Error:** 1.9410

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WN	2	54.1000	1.6000	1.06	A	A
WO	2	52.4000	8.8900	1.02	W	A
WO	1	47.1700	10.0000	0.92	W	A
WT	1	58.9000	11.4000	1.15	N	A
WW	1	41.6000	1.2000	0.81	W	W
YA	1	46.7000	1.6000	0.91	A	A
YU	1	55.4000	3.5000	1.08		A

**Total Number Reported:** 111

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AM241

**EML Value:** 10.9267  
**EML Error:** 0.3732

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	13.3000	3.7000	1.22	A	A
AF	1	12.1800	3.0200	1.12		A
AG	1	11.9000	1.9600	1.09	A	A
AI	1	14.7000	2.3000	1.35	A	A
AM	1	11.3900	0.7400	1.04	A	A
AN	1	13.1000	1.0000	1.20	A	A
AT	1	14.2030	2.0080	1.30	A	A
AU	1	10.8000	1.6000	0.99	A	A
BE	1	11.6000	0.6400	1.06	A	A
BM	1	12.2600	2.8600	1.12	A	A
BU	1	9.5000	1.0000	0.87	A	W
BX	1	8.5800	0.8800	0.79	A	W
CH	1	12.0400	1.7560	1.10	A	A
CL	1	15.5000	8.1000	1.42	W	A
CS	1	9.1400	1.5600	0.84		W
CW	1	11.4900	0.3800	1.05	A	A
EC	1	15.6000	1.5600	1.43	A	A
EC	4	15.0000	1.5200	1.37	A	A
EC	2	15.3000	1.5600	1.40	A	A
EC	5	15.5000	1.5500	1.42	A	A
EC	3	15.9000	1.5800	1.46	A	A
EG	1	11.4000	0.9000	1.04		A
EI	1	12.2500	1.7000	1.12		A
FE	1	13.6900	1.2380	1.25		A
FL	1	0.6500	0.0100	0.06	A	N
FR	1	13.0000	4.0000	1.19	A	A
FS	1	11.3000	1.4000	1.03	A	A
FU	2	11.6500	1.3200	1.07		A
FU	1	13.1800	1.5500	1.21		A
GA	1	12.0000	3.0400	1.10	A	A
GE	1	13.1000	2.9800	1.20	A	A
GT	1	15.3000	3.8000	1.40	A	A
HU	1	7.6200	1.7000	0.70	W	W
IN	1	14.2100	3.2200	1.30	W	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AM241

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**EML Value:** 10.9267  
**EML Error:** 0.3732

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
IS	1	11.1500	2.1590	1.02	A	A
IT	1	11.5000	1.1000	1.05	A	A
KE	1	8.1400	3.3000	0.75		W
KO	1	11.5640	0.4882	1.06		A
KR	1	11.7000	3.7000	1.07		A
KR	2	10.3000	3.8000	0.94		A
KR	4	10.1000	2.3000	0.92		A
KR	5	10.0000	1.3000	0.92		A
KR	3	11.3000	3.8000	1.01		A
LA	2	11.0400	0.6500	1.01	A	A
LA	3	11.1300	0.6500	1.02	A	A
LA	1	11.2400	0.6500	1.03	A	A
LM	1	11.8600	1.1300	1.09	A	A
LV	1	3.8000	0.6500	0.35	W	N
LW	1	12.1000	3.3100	1.11	W	A
ME	1	13.0000	0.8000	1.19	W	A
ME	2	10.3000	1.0000	0.94	W	A
ME	3	11.1000	1.4000	1.02	W	A
MH	1	7.1600	0.8000	0.65		W
MY	1	19.1400	7.0100	1.75	A	W
NJ	1	8.4000	1.7000	0.77		W
NJ	2	11.8000	5.0000	1.08		A
NJ	3	8.9000	1.3000	0.81		W
NQ	1	12.1000	1.3000	1.11	W	A
NZ	1	14.8000	3.1000	1.35	A	A
OB	1	3.0300	0.8800	0.28	N	N
OK	1	9.8600	1.0000	0.90	A	A
OT	1	11.0000	1.0000	1.01	A	A
PK	1	12.0800	1.7500	1.11	A	A
PK	2	12.0800	1.7500	1.11	A	A
PO	1	13.0000	3.0000	1.19		A
PS	1	9.9300	6.5200	0.91		A
RB	1	9.4000	2.2000	0.86		W
RS	1	17.6200	2.7900	1.61		W
SB	1	9.4310	1.7640	0.86		W

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** AM241

**EML Value:** 10.9267  
**EML Error:** 0.3732

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SD	1	24.6000	7.0000	2.25	A	W
SE	1	11.0000	0.8600	1.01	A	A
SI	1	12.4000	0.7000	1.13	A	A
SK	1	13.1000	0.9000	1.20	A	A
SK	2	11.3900	0.8800	1.04	A	A
SN	1	11.6000	3.7900	1.06	A	A
SR	1	6.3300	0.9500	0.58	A	N
SY	1	15.4000	4.4000	1.41	N	A
TE	1	8.3000	3.3000	0.76	A	W
TI	1	11.3000	4.5000	1.03		A
TM	1	10.5000	2.5000	0.96	A	A
TN	1	9.1400	1.4900	0.84	A	W
TO	1	8.2720	2.1160	0.76	A	W
TX	1	7.7300	0.3600	0.71	A	W
TY	1	6.6000	2.2000	0.60		N
UY	1	13.6000	2.4000	1.25		A
WA	1	27.4000	2.2000	2.51	A	N
WC	1	14.4000	3.5000	1.32	A	A
WE	3	12.7100	1.8000	1.16	W	A
WE	2	13.4300	1.8000	1.23	W	A
WE	1	14.0200	1.9300	1.28	W	A
WI	3	12.1000	2.0300	1.11	A	A
WI	2	13.1000	2.0500	1.20	A	A
WI	1	12.0000	2.2300	1.10	A	A
WN	1	14.6000	5.7000	1.34	A	A
WN	2	10.5000	4.1000	0.96	A	A
WN	3	8.1000	3.5000	0.74	A	W
WW	1	9.4000	1.2000	0.86	A	W
YA	1	13.0000	0.3160	1.19	A	A

**Total Number Reported:** 98

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI212

**EML Value:** 53.4300  
**EML Error:** 5.2150

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	63.0000	12.7000	1.18	A	W
AG	1	48.1000	17.8000	0.90	A	A
AI	1	58.8000	8.8000	1.10	A	A
AM	1	48.5500	2.9600	0.91	A	A
AS	1	32.8000	4.9000	0.61	A	A
AU	1	57.0000	13.0000	1.07	A	A
BE	1	58.0000	22.0000	1.09	A	A
BN	1	30.6000	3.2000	0.57		W
BQ	1	88.0000	20.0000	1.65		N
BU	1	54.0000	10.0000	1.01	A	A
BX	1	38.1000	10.1000	0.71	A	A
CD	1	54.0000	8.0000	1.01	A	A
CH	1	56.3000	11.0500	1.05	W	A
CL	1	68.3000	9.5000	1.28	N	W
CM	2	29.3000	2.0000	0.55	W	W
CM	1	28.3000	1.9000	0.53	W	W
CP	1	77.0000	6.0000	1.44		N
CR	1	73.0000	7.0000	1.37		N
CS	1	21.6800	3.7400	0.41	W	N
CU	1	47.0000	4.0000	0.88	A	A
CW	1	46.4000	3.1000	0.87	A	A
EC	2	49.2000	7.3800	0.92	A	A
EC	1	46.9500	6.9200	0.88	A	A
EC	3	45.9800	6.9200	0.86	A	A
EC	4	48.6800	7.1600	0.91	A	A
EC	5	48.0000	7.1100	0.90	A	A
EG	1	61.0000	24.0000	1.14	A	A
FG	1	44.2500	14.1000	0.83	A	A
FL	1	59.5700	3.2800	1.12	W	A
FN	1	55.1000	17.0000	1.03	A	A
FR	1	50.0000	10.0000	0.94	A	A
FU	3	39.1900	4.9600	0.73	A	A
FU	4	52.2800	4.9400	0.98	A	A
FU	2	44.6000	6.6600	0.83	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI212

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**EML Value:** 53.4300  
**EML Error:** 5.2150

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FU	1	48.1700	6.8300	0.90	A	A
FU	5	51.3800	5.2700	0.96	A	A
GA	1	29.2000	17.5000	0.55		W
GE	1	35.3000	8.8900	0.66		A
HU	1	44.9000	4.7000	0.84	A	A
IS	1	47.5100	15.5700	0.89	N	A
KO	1	47.5300	3.7300	0.89		A
LA	3	52.1000	13.3000	0.98		A
LA	1	33.4000	10.8000	0.63		A
LA	2	48.4000	12.0000	0.91		A
LM	1	29.5900	4.2600	0.55	A	W
LV	1	46.4000	2.3000	0.87	A	A
ME	1	52.5000	5.0000	0.98	A	A
ME	2	51.4000	4.4000	0.96	A	A
ME	3	60.7000	5.1000	1.14	A	A
MH	1	26.4800	2.7800	0.50		N
MY	1	62.5400	5.0600	1.17	A	W
NA	1	46.3000	4.3000	0.87	A	A
NJ	2	55.5000	9.2000	1.04		A
NJ	1	56.6000	8.1000	1.06		A
NJ	3	53.3000	8.9000	1.00		A
NL	1	52.5000	1.9000	0.98	A	A
NQ	1	64.4000	10.0000	1.21	A	W
OB	1	69.3000	34.8000	1.30	N	W
OH	1	61.0000	13.0000	1.14	A	A
OT	1	47.0000	21.0000	0.88	N	A
PK	2	42.2000	4.5000	0.79	A	A
PK	1	42.2000	4.5000	0.79	A	A
RA	1	55.0000	5.0000	1.03	A	A
RB	1	53.2000	5.9000	1.00		A
RM	1	49.5000	4.5000	0.93	A	A
RS	1	39.3000	6.2300	0.74		A
RU	1	47.8000	8.6000	0.89	N	A
SI	1	48.4000	1.2000	0.91	A	A
SK	1	50.8000	2.1000	0.95	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI212

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**EML Value:** 53.4300  
**EML Error:** 5.2150

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SN	1	37.7000	19.6000	0.71	A	A
SR	1	36.0000	9.7000	0.67	A	A
SY	1	54.6000	14.7000	1.02	A	A
TE	1	49.2000	12.4000	0.92	A	A
TI	1	35.9000	4.2100	0.67		A
TM	1	42.7000	19.9000	0.80	A	A
TN	1	33.4200	19.6000	0.63	W	A
TO	1	43.5790	7.3180	0.82	A	A
TP	1	63.4800	5.0700	1.19	A	W
TQ	1	60.5000	3.4000	1.13	A	A
TW	1	53.1000	5.3000	0.99	A	A
TX	1	29.8000	3.7000	0.56	W	W
WA	1	36.0000	6.0000	0.67	W	A
WE	1	59.3000	7.8000	1.11	A	A
WE	2	60.6900	7.0000	1.14	A	A
WE	3	59.0100	5.9000	1.10	A	A
WI	2	49.8000	11.3000	0.93	A	A
WI	1	53.4000	12.5000	1.00	A	A
WI	3	52.2000	11.3000	0.98	A	A
WN	1	36.8000	3.3000	0.69	A	A
WN	3	30.0000	4.6000	0.56	A	W
WN	2	40.0000	5.4000	0.75	A	A
WO	1	58.6600	15.3000	1.10	A	A
WO	2	61.3200	13.8700	1.15	A	A
WT	1	40.3000	16.4000	0.75	A	A
WW	1	26.2000	1.7000	0.49	W	N

**Total Number Reported:** 95

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI214

**EML Value:** 53.9330  
**EML Error:** 2.2490

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	59.0000	9.6000	1.09	A	A
AG	1	42.9000	9.5100	0.80	W	W
AI	1	43.5000	6.5000	0.81	W	W
AM	1	55.2300	1.5200	1.02	W	A
AS	1	46.5000	3.4000	0.86	A	W
AT	1	50.5680	4.4900	0.94		A
AU	1	52.6000	5.4000	0.98	A	A
BE	1	55.0000	8.0000	1.02	A	A
BN	1	50.3000	5.4000	0.93	A	A
BQ	1	52.0000	5.0000	0.96	N	A
BX	1	46.6000	6.2000	0.86	A	W
CD	1	46.0000	2.0000	0.85	A	W
CF	2	45.1000	1.1000	0.84		W
CF	1	44.5000	1.5000	0.82		W
CH	1	52.0000	2.9900	0.96	A	A
CL	1	48.2000	2.2000	0.89	A	A
CM	2	50.8000	1.2000	0.94	A	A
CM	1	46.8000	1.1000	0.87	A	W
CN	1	50.8600	3.5800	0.94	A	A
CP	1	63.0000	5.0000	1.17		A
CR	1	62.0000	1.0000	1.15		A
CU	1	45.7000	3.0000	0.85	A	W
CW	1	50.5000	1.8000	0.94	A	A
EC	2	64.4000	2.5600	1.19	A	A
EC	3	67.4000	2.6500	1.25	A	W
EC	5	65.5000	2.5900	1.21	A	A
EC	4	65.4000	3.9200	1.21	A	A
EC	1	66.1000	2.6000	1.23	A	A
EG	1	39.0000	7.0000	0.72	A	N
FE	1	46.9280	4.7000	0.87	A	A
FG	1	55.5000	4.9000	1.03	A	A
FL	1	49.8500	0.4000	0.92	A	A
FN	1	55.8000	3.3000	1.03	A	A
FR	1	55.0000	8.0000	1.02	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI214

**EML Value:** 53.9330  
**EML Error:** 2.2490

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FS	1	57.6000	1.1000	1.07	A	A
FU	5	45.8100	1.7200	0.85	A	W
FU	1	44.7400	1.7700	0.83	A	W
FU	2	43.5800	1.8100	0.81	A	W
FU	4	49.2500	1.9800	0.91	A	A
FU	3	42.8400	1.5100	0.79	A	W
GA	1	43.0000	5.7000	0.80	N	W
GE	1	43.9000	6.8400	0.81		W
HU	1	51.6000	1.4000	0.96	A	A
IO	1	52.5000	25.8000	0.97	A	A
IS	1	43.3300	6.0870	0.80	A	W
IT	1	56.2000	3.6700	1.04	A	A
KE	1	31.7300	1.8600	0.59		N
KO	1	58.4800	1.7500	1.08	A	A
LA	1	40.8000	4.9000	0.76		N
LA	2	41.6000	5.3000	0.77		N
LA	3	40.5000	5.1000	0.75		N
LM	1	43.5700	1.6900	0.81	A	W
LV	1	45.8000	2.2000	0.85	A	W
ME	2	52.2000	1.5000	0.97	A	A
ME	3	53.6000	3.1000	0.99	A	A
ME	1	59.6000	2.4000	1.11	A	A
MH	1	43.4200	2.4600	0.81		W
MS	1	59.7000	6.0000	1.11	A	A
MY	1	60.1400	8.9400	1.12	A	A
NA	1	46.6000	1.9000	0.86	A	W
NJ	2	56.2000	3.3000	1.04		A
NJ	3	55.9000	3.3000	1.04		A
NJ	1	58.5000	3.3000	1.09		A
NL	1	56.8000	1.5000	1.05	A	A
NQ	1	49.6000	5.6000	0.92	A	A
NZ	1	64.9000	4.9000	1.20	W	A
OB	1	47.9000	11.9000	0.89	A	A
OH	1	42.5000	3.0000	0.79	A	W
OT	1	47.0000	10.0000	0.87	N	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI214

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**EML Value:** 53.9330  
**EML Error:** 2.2490

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OU	1	57.7000	5.5800	1.07	W	A
PK	1	46.6000	1.9000	0.86	A	W
PK	2	46.6000	1.9000	0.86	A	W
PO	1	54.0000	3.0000	1.00		A
RA	1	46.3000	3.5000	0.86	A	W
RB	1	47.8000	7.0000	0.89		A
RI	1	54.7000	10.8000	1.01	A	A
RM	1	52.3000	4.1000	0.97	A	A
RS	1	58.4400	3.5300	1.08		A
RU	1	39.5000	4.7000	0.73	W	N
SD	1	40.8100	2.5800	0.76	A	N
SE	1	49.3000	1.7000	0.91	A	A
SI	1	48.1000	1.1000	0.89	A	A
SI	2	63.4000	2.5000	1.18	A	A
SK	1	50.0000	2.1000	0.93	A	A
SN	1	45.1000	8.2900	0.84	A	W
SR	1	49.0000	4.8000	0.91	A	A
SY	1	47.8000	4.9000	0.89	A	A
TE	1	46.6000	3.1000	0.86	W	W
TI	1	46.3000	2.2400	0.86		W
TM	1	60.2000	7.1200	1.12	A	A
TN	1	41.6600	4.8800	0.77	W	N
TO	1	43.5790	7.3180	0.81	A	W
TP	1	54.3600	2.0400	1.01	A	A
TQ	1	53.0000	1.5000	0.98	A	A
TW	1	50.4000	1.4900	0.93	A	A
TX	1	48.4000	1.4000	0.90	A	A
TY	1	40.0000	4.0000	0.74		N
WA	1	48.0000	2.0000	0.89	A	A
WE	2	48.1500	1.6000	0.89	A	A
WE	3	49.4000	1.9000	0.92	A	A
WE	1	46.5800	1.5000	0.86	A	W
WN	2	50.4000	2.4000	0.93	A	A
WN	3	52.6000	2.5000	0.98	A	A
WN	1	48.2000	1.7000	0.89	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** BI214

**EML Value:** 53.9330  
**EML Error:** 2.2490

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WO	1	65.8900	11.8000	1.22	A	A
WO	2	65.9700	9.5400	1.22	A	A
WT	1	66.6000	9.2700	1.24	A	W
WW	1	43.5000	1.2000	0.81	A	W
YU	1	54.0000	2.0000	1.00		A

**Total Number Reported:** 109

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** Bq U

**EML Value:** 194.7690**EML Error:** 15.6420

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AF	1	154.7800	12.9900	0.80		W
AG	1	185.0000	16.2000	0.95		A
AI	1	196.0000	4.0000	1.01	N	A
AM	1	209.1600	20.9200	1.07	A	A
AT	1	176.9190	14.2990	0.91	A	A
BU	1	161.0000	8.0000	0.83	A	A
HT	1	181.3000	15.0000	0.93	W	A
KO	1	184.1010	3.2228	0.94		A
MX	1	283.8940	6.1190	1.46		N
MX	2	247.3010	6.1500	1.27		W
OT	1	208.0000	20.0000	1.07	A	A
SD	1	176.6000	5.9000	0.91		A
SN	1	178.0000	23.9000	0.91		A
TE	1	143.4000	9.4000	0.74	A	W
UY	1	179.0000	21.0000	0.92	W	A
WA	1	185.0000	7.0000	0.95	A	A
WI	3	173.0000	17.2000	0.89	A	A
WI	2	168.0000	16.5000	0.86	A	A
WI	1	172.0000	16.4000	0.88	A	A
WO	2	182.5000	6.3000	0.94	A	A
WO	1	188.0000	6.2000	0.96	A	A
WT	1	174.0000	31.0000	0.89		A

**Total Number Reported:** 22

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** CS137

**EML Value:** 1326.6700**EML Error:** 66.5100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	1310.0000	106.0000	0.99	A	A
AF	1	1143.3000	11.0700	0.86		W
AG	1	1320.0000	218.0000	1.00	A	A
AI	1	1200.0000	180.0000	0.90	A	A
AM	1	1243.1500	2.8220	0.94	W	A
AN	1	1396.0000	30.0000	1.05	A	A
AS	1	1271.0000	8.0000	0.96	A	A
AT	1	1332.7500	166.2500	1.00	A	A
AU	1	1330.0000	56.0000	1.00	A	A
BA	1	1434.4399	238.7300	1.08	N	A
BE	1	1240.0000	172.0000	0.94	W	A
BM	1	1540.0000	192.0000	1.16	A	W
BN	1	1394.9000	61.3000	1.05	A	A
BQ	1	1290.0000	90.0000	0.97	A	A
BU	1	1320.0000	60.0000	1.00	A	A
BX	1	1400.0000	140.0000	1.05	A	A
CD	1	1310.0000	40.0000	0.99	A	A
CE	1	1170.0000	68.0000	0.88	W	W
CF	1	1236.0000	3.7000	0.93	A	A
CF	2	1241.0000	3.7000	0.94	A	A
CF	3	1223.0000	2.7000	0.92	A	A
CG	1	1297.0000	61.0000	0.98	A	A
CH	1	1448.0000	6.3800	1.09	A	A
CL	1	1480.0000	4.2000	1.12	A	A
CM	1	1199.0000	28.0000	0.90	A	A
CM	2	1221.0000	29.0000	0.92	A	A
CN	1	1380.0000	88.0000	1.04	A	A
CP	1	1540.0000	80.0000	1.16		W
CR	1	1360.0000	20.0000	1.02		A
CS	1	1177.0000	184.8000	0.89	A	W
CU	1	1361.0000	50.0000	1.03	A	A
CW	1	1229.0000	28.0000	0.93	A	A
EC	5	1338.7500	60.4000	1.01	A	A
EC	4	1350.6500	60.9000	1.02	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** CS137

**EML Value:** 1326.6700

**EML Error:** 66.5100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
EC	3	1354.9000	61.1000	1.02	A	A
EC	2	1349.8000	60.8000	1.02	A	A
EC	1	1346.4000	60.7000	1.01	A	A
EG	1	1370.0000	100.0000	1.03	A	A
FE	1	1417.1000	47.2730	1.07	A	A
FG	1	1222.0000	59.3000	0.92	A	A
FL	1	1327.0000	4.0000	1.00	A	A
FN	1	1249.0000	110.0000	0.94	A	A
FR	1	1400.0000	170.0000	1.05	A	A
FS	1	1385.4000	2.2000	1.04	A	A
FU	5	1234.0000	38.4300	0.93	A	A
FU	4	1222.0000	38.1400	0.92	A	A
FU	3	1247.0000	38.8300	0.94	A	A
FU	2	1221.0000	38.1400	0.92	A	A
FU	1	1264.0000	39.4400	0.95	A	A
GA	1	1248.0000	88.0000	0.94	A	A
GC	3	1131.0000	47.9000	0.85	W	W
GC	2	1115.0000	45.9000	0.84	W	W
GC	1	1132.0000	45.6000	0.85	W	W
GE	1	1399.0000	192.0000	1.05	A	A
GT	1	1280.0000	360.0000	0.96	A	A
HU	1	1336.0000	38.0000	1.01	A	A
IN	1	1285.0000	45.9000	0.97	A	A
IO	1	1374.9000	279.9000	1.04	A	A
IS	1	1383.1000	158.2500	1.04	A	A
IT	1	1516.8000	89.9000	1.14	W	A
KA	1	1330.0000	71.4000	1.00	A	A
KE	1	1014.6000	9.8100	0.76	A	N
KO	1	1315.5699	30.1900	0.99		A
KR	1	1349.5000	53.2000	1.02	A	A
KR	2	1342.1000	51.9000	1.01	A	A
KR	3	1336.4000	51.8000	1.01	A	A
KR	4	1333.5000	50.6000	1.01	A	A
KR	5	1331.6000	52.0000	1.00	A	A
KS	1	1291.0000	52.0000	0.97	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** CS137

**EML Value:** 1326.6700**EML Error:** 66.5100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LA	3	1191.0000	131.0000	0.90		W
LA	1	1177.0000	130.0000	0.89		W
LA	2	1181.0000	130.0000	0.89		W
LL	1	1190.0000	151.6000	0.90	A	W
LM	1	1289.7000	3.8900	0.97	A	A
LV	1	1230.0000	40.0000	0.93	A	A
LW	1	1300.0000	58.9000	0.98	A	A
ME	3	1379.9000	34.6000	1.04	A	A
ME	2	1379.9000	32.8000	1.04	A	A
ME	1	1398.4000	34.5000	1.05	A	A
MH	1	1279.8000	81.1000	0.96		A
MS	1	1440.0000	144.0000	1.09	A	A
MY	1	1484.8900	48.8200	1.12	A	A
MZ	3	835.7400	9.2400	0.63		N
MZ	2	851.3200	9.3200	0.64		N
MZ	1	842.0200	9.2700	0.63		N
NA	1	1327.0000	43.0000	1.00	A	A
NJ	2	1340.0000	140.0000	1.01		A
NJ	1	1350.0000	140.0000	1.02		A
NJ	3	1370.0000	140.0000	1.03		A
NL	1	1470.0000	80.0000	1.11	A	A
NQ	1	1518.0000	167.0000	1.14	A	A
NR	1	1273.0000	255.0000	0.96	A	A
NZ	1	1421.0000	91.0000	1.07	A	A
OB	1	1300.0000	243.0000	0.98	A	A
OH	1	1259.0000	6.0000	0.95	A	A
OK	1	1531.8000	24.5000	1.15	W	A
OT	1	1283.0000	100.0000	0.97	A	A
OU	1	1310.0000	68.8000	0.99	W	A
PK	2	1286.0000	19.0000	0.97	A	A
PK	1	1286.0000	19.0000	0.97	A	A
PO	1	1280.0000	50.0000	0.96		A
PS	1	1522.2200	8.8100	1.15	A	A
RA	1	1290.0000	80.0000	0.97	A	A
RB	1	1255.5000	87.9000	0.95		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** CS137

**EML Value:** 1326.6700**EML Error:** 66.5100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
RC	1	1350.0000	45.0000	1.02	A	A
RI	1	1390.0000	16.1000	1.05	A	A
RM	1	1365.0000	34.0000	1.03	W	A
RS	1	1397.9000	38.4700	1.05		A
RU	1	1290.0000	154.8000	0.97	A	A
SA	1	1524.0000	244.0000	1.15	A	A
SB	1	1212.0000	130.8000	0.91	A	A
SD	1	1439.0000	75.0000	1.09	A	A
SE	1	1340.0000	23.0000	1.01	A	A
SI	1	1308.0000	28.0000	0.99	A	A
SK	1	1425.0000	72.0000	1.07	A	A
SL	1	1847.9800	13.2800	1.39	N	N
SN	1	1341.0000	131.4000	1.01	A	A
SR	1	1260.0000	122.0000	0.95	A	A
SX	1	1051.1700	55.1000	0.79	W	N
SX	2	1081.1400	55.5000	0.81	W	W
SY	1	1390.0000	63.0000	1.05	A	A
TE	1	1401.6000	9.1000	1.06	A	A
TI	1	1300.0000	32.0000	0.98	A	A
TM	1	1370.0000	69.4000	1.03	A	A
TN	1	1158.0000	60.0000	0.87	W	W
TO	1	1096.0000	117.0360	0.83	W	W
TP	1	1390.1500	39.8500	1.05	A	A
TQ	1	1333.0000	31.0000	1.00	A	A
TW	1	1348.0000	10.7800	1.02	A	A
TX	1	1320.0000	17.0000	1.00	A	A
TY	1	1140.0000	100.0000	0.86		W
UC	1	1440.0000	15.3000	1.09	A	A
UG	2	1271.6000	11.3000	0.96	A	A
UG	1	1281.4000	50.2000	0.97	A	A
UY	1	1130.0000	115.0000	0.85	A	W
WA	1	1350.0000	20.0000	1.02	A	A
WC	1	1300.0000	194.0000	0.98	A	A
WE	2	1322.0000	28.4000	1.00	A	A
WE	3	1340.0000	46.0000	1.01	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** CS137

**EML Value:** 1326.6700**EML Error:** 66.5100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WE	1	1331.0000	46.3000	1.00	A	A
WI	1	1150.0000	145.0000	0.87	A	W
WI	2	1150.0000	145.0000	0.87	A	W
WI	3	1150.0000	145.0000	0.87	A	W
WN	3	1400.0000	51.0000	1.05	A	A
WN	2	1426.0000	52.0000	1.08	A	A
WN	1	1418.0000	52.0000	1.07	A	A
WO	2	1376.0000	106.5000	1.04	A	A
WO	1	1343.0000	152.5000	1.01	A	A
WT	1	1360.0000	58.1000	1.02	A	A
WW	1	1110.0000	80.9000	0.84	A	W
YA	1	1321.6000	38.0000	1.00	A	A
YU	1	1380.0000	50.0000	1.04		A

**Total Number Reported:** 152

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** K40

**EML Value:** 621.6700  
**EML Error:** 33.8600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	724.0000	26.0000	1.16	A	A
AF	1	503.2000	5.4500	0.81		W
AG	1	582.0000	102.0000	0.94	A	A
AI	1	592.3000	88.8000	0.95	A	A
AM	1	598.6000	9.3600	0.96	A	A
AN	1	648.0000	80.0000	1.04	A	A
AS	1	565.0000	23.0000	0.91	A	A
AT	1	582.4750	55.8500	0.94	A	A
AU	1	568.0000	33.0000	0.91	A	A
BE	1	482.0000	70.0000	0.77	A	N
BN	1	536.5000	33.6000	0.86	A	W
BQ	1	619.0000	76.0000	1.00	A	A
BU	1	590.0000	30.0000	0.95	A	A
BX	1	592.0000	63.0000	0.95	A	A
CD	1	590.0000	20.0000	0.95	A	A
CE	1	567.0000	48.0000	0.91	A	A
CG	1	599.0000	168.0000	0.96	A	A
CH	1	659.0000	19.9000	1.06	A	A
CL	1	737.0000	18.3000	1.19	A	A
CM	1	577.0000	18.0000	0.93	A	A
CM	2	577.0000	18.0000	0.93	A	A
CN	1	558.8000	45.4000	0.90	A	W
CP	1	702.0000	48.0000	1.13		A
CR	1	700.0000	20.0000	1.13		A
CS	1	520.1000	82.3400	0.84	A	W
CU	1	605.0000	30.0000	0.97	A	A
CW	1	528.0000	18.0000	0.85	A	W
EC	1	585.3400	36.6000	0.94	A	A
EC	2	583.2800	36.5000	0.94	A	A
EC	3	588.8000	36.8000	0.95	A	A
EC	4	592.2400	36.9000	0.95	A	A
EC	5	589.7600	36.8000	0.95	A	A
EG	1	490.0000	80.0000	0.79	A	N
FE	1	614.8170	29.8230	0.99	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** K40

**EML Value:** 621.6700**EML Error:** 33.8600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FG	1	668.0000	86.5000	1.08	W	A
FL	1	603.5000	4.1600	0.97	A	A
FN	1	568.0000	51.0000	0.91	W	A
FR	1	670.0000	100.0000	1.08	A	A
FS	1	607.5000	4.5000	0.98	A	A
FU	3	604.5000	20.2400	0.97	A	A
FU	2	593.0000	21.9400	0.95	A	A
FU	4	597.4000	21.0400	0.96	A	A
FU	1	605.3000	21.1900	0.97	A	A
FU	5	608.5000	20.3800	0.98	A	A
GA	1	554.0000	50.0000	0.89	W	W
GC	3	597.0000	33.7000	0.96	A	A
GC	2	572.0000	45.4000	0.92	A	A
GC	1	587.0000	42.4000	0.94	A	A
GE	1	651.2000	74.4000	1.05	A	A
GT	1	640.0000	160.0000	1.03	A	A
HU	1	608.0000	25.0000	0.98	A	A
IN	1	667.0000	63.9000	1.07	A	A
IO	1	600.0000	212.2000	0.96	A	A
IS	1	609.7600	68.3020	0.98	A	A
IT	1	690.4000	42.5000	1.11	A	A
KA	1	575.3000	147.4000	0.93	A	A
KE	1	452.7500	9.2100	0.73	A	N
KO	1	621.9100	20.8700	1.00		A
KR	1	598.7000	66.2000	0.96	A	A
KR	4	626.0000	51.3000	0.98	A	A
KR	3	627.3000	57.3000	1.01	A	A
KR	2	607.3000	61.2000	1.01	A	A
KR	5	595.6000	29.7000	0.96	A	A
KS	1	639.0000	83.1000	1.03	A	A
LA	1	537.0000	61.0000	0.86		W
LA	2	539.0000	62.0000	0.87		W
LA	3	550.0000	63.0000	0.88		W
LL	1	587.0000	82.8000	0.94	A	A
LM	1	619.8500	12.5100	1.00	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** K40

**EML Value:** 621.6700**EML Error:** 33.8600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LV	1	549.0000	21.0000	0.88	A	W
LW	1	600.0000	41.7000	0.96	A	A
ME	1	577.1000	33.2000	0.93	A	A
ME	2	625.2000	28.2000	1.01	A	A
ME	3	551.2000	39.2000	0.89	A	W
MH	1	618.4000	37.0000	1.00		A
MS	1	657.0000	66.0000	1.06	A	A
MY	1	741.7000	50.6900	1.19	A	W
MZ	2	427.0800	26.0900	0.69		N
MZ	3	349.0000	23.5800	0.56		N
MZ	1	366.6000	24.1700	0.59		N
NA	1	579.0000	21.0000	0.93	A	A
NJ	1	603.0000	56.0000	0.97		A
NJ	2	599.0000	56.0000	0.96		A
NJ	3	603.0000	56.0000	0.97		A
NL	1	646.0000	23.0000	1.04	A	A
NQ	1	670.0000	74.0000	1.08	A	A
NZ	1	562.0000	68.0000	0.90	A	A
OB	1	604.0000	124.0000	0.97	A	A
OH	1	558.0000	21.0000	0.90	W	W
OK	1	691.9000	29.1000	1.11	A	A
OT	1	580.0000	36.0000	0.93	A	A
OU	1	548.0000	69.7000	0.88	W	W
PK	1	614.8000	23.0000	0.99	A	A
PK	2	614.8000	23.0000	0.99	A	A
PO	1	580.0000	20.0000	0.93		A
PS	1	670.3700	25.3700	1.08	A	A
RA	1	610.0000	100.0000	0.98	A	A
RB	1	529.8000	51.5000	0.85		W
RC	1	644.0000	33.0000	1.04	A	A
RM	1	626.0000	38.0000	1.01	A	A
RS	1	694.0000	25.7900	1.12		A
RU	1	515.0000	61.8000	0.83	A	W
SA	1	702.0000	109.0000	1.13	A	A
SB	1	612.4000	73.8900	0.99	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** K40

**EML Value:** 621.6700**EML Error:** 33.8600

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SD	1	598.1000	27.3900	0.96	A	A
SE	1	571.0000	19.2000	0.92	A	A
SI	1	563.0000	15.0000	0.91	W	A
SK	1	602.0000	30.0000	0.97	A	A
SN	1	693.0000	86.0000	1.12	A	A
SR	1	605.0000	68.0000	0.97	A	A
SX	2	515.0400	33.1900	0.83	A	W
SX	1	499.1300	30.3200	0.80	A	W
SY	1	632.0000	40.0000	1.02	A	A
TE	1	613.1000	28.1000	0.99	A	A
TI	1	608.0000	25.8000	0.98	A	A
TM	1	562.0000	75.2000	0.90	A	A
TN	1	498.1000	38.0000	0.80	W	W
TO	1	504.9120	67.6410	0.81	A	W
TP	1	620.3500	9.4700	1.00	A	A
TQ	1	625.0000	17.0000	1.00	A	A
TW	1	618.0000	15.1400	0.99	A	A
TX	1	577.0000	14.0000	0.93	A	A
TY	1	470.0000	47.0000	0.76		N
UC	1	669.0000	77.6000	1.08	A	A
UY	1	529.0000	64.0000	0.85	A	W
WA	1	687.0000	17.0000	1.11	A	A
WC	1	660.0000	85.2000	1.06	A	A
WE	1	598.5000	14.4000	0.96	A	A
WE	2	551.3000	16.5000	0.89	A	W
WE	3	594.4000	16.3000	0.96	A	A
WI	3	628.0000	83.6000	1.01	A	A
WI	1	631.0000	84.1000	1.01	A	A
WI	2	628.0000	83.6000	1.01	A	A
WN	1	620.0000	38.0000	1.00	A	A
WN	3	585.0000	30.0000	0.94	A	A
WN	2	652.0000	28.0000	1.05	A	A
WO	1	618.8000	101.0000	1.00	A	A
WO	2	629.8000	73.6700	1.01	A	A
WT	1	606.0000	64.5000	0.98	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** K40

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**EML Value:** 621.6700

**EML Error:** 33.8600

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WW	1	565.0000	37.0000	0.91	A	A
YA	1	586.5000	18.0000	0.94	A	A
YU	1	630.0000	60.0000	1.01		A

**Total Number Reported:** 142

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB212

**EML Value:** 51.1000  
**EML Error:** 2.7530

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	63.0000	12.7000	1.23	A	W
AG	1	50.6000	8.9400	0.99	A	A
AI	1	53.5000	8.0000	1.05	A	A
AM	1	52.3900	0.7600	1.02	W	A
AS	1	48.7000	1.8000	0.95	W	A
AU	1	52.3000	4.1000	1.02	A	A
BE	1	62.0000	18.0000	1.21	A	W
BN	1	49.5000	1.5000	0.97	A	A
BQ	1	58.0000	4.0000	1.13	A	A
BU	1	52.0000	10.0000	1.02	A	A
BX	1	57.4000	6.2000	1.12	A	A
CD	1	50.0000	2.0000	0.98	A	A
CH	1	55.5000	2.0890	1.09	A	A
CL	1	60.3000	1.6000	1.18	A	A
CM	1	46.0000	1.6000	0.90	W	A
CM	2	45.5000	1.5000	0.89	W	A
CN	1	44.2400	4.2900	0.87	A	W
CP	1	72.0000	7.0000	1.41		N
CR	1	57.0000	1.0000	1.12		A
CS	1	42.8700	6.7900	0.84	A	W
CU	1	49.5000	4.0000	0.97	A	A
CW	1	48.0000	1.2000	0.94	A	A
EC	2	47.5500	3.6600	0.93	A	A
EC	1	47.4000	3.8600	0.93	A	A
EC	3	48.9800	3.9700	0.96	A	A
EC	4	48.0800	3.9200	0.94	A	A
EC	5	46.5000	4.0800	0.91	A	A
EG	1	62.0000	6.0000	1.21	A	W
FE	1	52.9720	3.8550	1.04	A	A
FG	1	59.9000	6.7600	1.17	A	A
FL	1	48.1100	0.9900	0.94	A	A
FN	1	44.8000	4.0000	0.88	W	W
FR	1	58.0000	9.0000	1.13	A	A
FU	2	45.8400	1.8100	0.90	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB212

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**EML Value:** 51.1000  
**EML Error:** 2.7530

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FU	3	45.9900	1.6300	0.90	A	A
FU	4	45.6600	1.7900	0.89	A	A
FU	5	45.3000	1.6100	0.89	A	W
FU	1	49.8700	1.8700	0.98	A	A
GA	1	53.7000	5.1000	1.05	A	A
GE	1	48.0000	10.6000	0.94		A
HU	1	49.3000	1.5000	0.96	W	A
IO	1	49.1000	16.0000	0.96	A	A
IS	1	48.9500	6.7900	0.96	N	A
IT	1	60.0000	3.8800	1.17	W	A
KE	1	35.1300	1.4700	0.69		N
KO	1	50.0700	1.0200	0.98		A
LA	2	47.6000	5.5000	0.93		A
LA	1	47.0000	5.4000	0.92		A
LA	3	48.3000	5.6000	0.94		A
LL	1	59.0000	4.0800	1.15	A	A
LM	1	53.0800	1.0600	1.04	A	A
LV	1	42.2000	2.6000	0.83	A	W
ME	1	41.4000	1.9000	0.81	W	W
ME	2	41.4000	2.4000	0.81	W	W
ME	3	41.8000	2.5000	0.82	W	W
MH	1	47.4500	4.7100	0.93		A
MS	1	53.8000	5.4000	1.05	A	A
MY	1	61.9500	4.1000	1.21	A	W
NA	1	48.2000	2.0000	0.94	A	A
NJ	3	51.4000	4.8000	1.01		A
NJ	2	51.4000	4.8000	1.01		A
NJ	1	51.4000	4.8000	1.01		A
NL	1	52.5000	1.9000	1.03	A	A
NQ	1	56.3000	6.3000	1.10	A	A
NZ	1	61.8000	4.6000	1.21	A	W
OB	1	46.4000	10.4000	0.91	A	A
OH	1	49.9000	2.0000	0.98	W	A
OT	1	47.0000	21.0000	0.92	N	A
OU	1	51.7000	8.8300	1.01	N	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB212

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**EML Value:** 51.1000  
**EML Error:** 2.7530

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
PK	1	46.7000	2.5000	0.91	A	A
PK	2	46.7000	2.5000	0.91	A	A
PS	1	59.6300	5.2200	1.17	A	A
RA	1	57.3000	3.7000	1.12	A	A
RB	1	52.6000	7.4000	1.03		A
RI	1	45.7000	7.4000	0.89	W	A
RM	1	49.5000	4.5000	0.97	A	A
RS	1	63.2000	3.7800	1.24		W
RU	1	52.1000	6.3000	1.02	N	A
SE	1	43.8000	1.3000	0.86	A	W
SI	1	53.0000	1.4000	1.04	A	A
SK	1	51.2000	2.3000	1.00	A	A
SN	1	55.0000	7.2500	1.08	A	A
SR	1	31.5000	7.9000	0.62	A	N
SY	1	54.1000	3.8000	1.06	A	A
TE	1	51.6000	2.6000	1.01	A	A
TI	1	49.4000	3.3800	0.97		A
TM	1	63.9000	5.5000	1.25	A	W
TN	1	43.9700	5.0000	0.86	A	W
TO	1	46.3800	6.3330	0.91	A	A
TP	1	58.7600	2.9300	1.15	A	A
TQ	1	60.0000	1.7000	1.17	A	A
TW	1	53.6000	2.3400	1.05	A	A
TX	1	46.3000	1.2000	0.91	A	A
WA	1	51.0000	2.0000	1.00	A	A
WE	2	51.3400	2.6300	1.00	A	A
WE	3	51.9000	2.9300	1.02	A	A
WE	1	50.7300	3.1000	0.99	A	A
WI	3	59.2000	8.4400	1.16	W	A
WI	2	56.0000	8.0000	1.10	W	A
WI	1	56.9000	8.1300	1.11	W	A
WN	1	47.4000	2.7000	0.93	A	A
WN	3	50.7000	2.5000	0.99	A	A
WN	2	51.1000	2.3000	1.00	A	A
WO	2	49.8700	4.3200	0.98	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB212

**EML Value:** 51.1000  
**EML Error:** 2.7530

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WO	1	49.0000	4.6200	0.96	A	A
WT	1	60.4000	6.9700	1.18	W	A
WW	1	36.8000	2.0000	0.72	W	N
YU	1	58.2000	1.2000	1.14		A

**Total Number Reported:** 108

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB214

**EML Value:** 54.3667  
**EML Error:** 2.2490

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	78.7000	9.8000	1.45	A	W
AG	1	48.1000	8.8000	0.88	A	A
AI	1	44.0000	6.6000	0.81	W	W
AM	1	55.1500	1.4900	1.01	A	A
AS	1	48.5000	2.8000	0.89	A	A
AT	1	51.3830	4.3150	0.94	W	A
AU	1	53.7000	5.7000	0.99	A	A
BN	1	52.5000	3.2000	0.97	A	A
BQ	1	65.0000	10.0000	1.20	N	A
BX	1	50.0000	8.6000	0.92	A	A
CD	1	47.0000	3.0000	0.86	A	W
CF	1	45.0000	1.8000	0.83	A	W
CH	1	56.7000	3.7700	1.04	A	A
CL	1	48.3000	2.3000	0.89	A	A
CM	2	54.9000	1.4000	1.01	A	A
CM	1	52.5000	1.1000	0.97	A	A
CN	1	52.6000	3.7900	0.97	A	A
CP	1	67.0000	8.0000	1.23		A
CR	1	59.0000	1.0000	1.09		A
CS	1	48.0700	7.5400	0.88	A	A
CU	1	50.8000	3.0000	0.93	W	A
CW	1	49.3000	1.5000	0.91	A	A
EC	5	68.7000	3.2500	1.26	A	A
EC	1	69.9000	3.2900	1.29	A	W
EC	2	70.1000	3.3100	1.29	A	W
EC	3	71.3000	3.3700	1.31	A	W
EC	4	71.5000	3.3400	1.32	A	W
EG	1	65.0000	8.0000	1.20	W	A
FE	1	43.5980	8.2180	0.80	A	W
FG	1	52.6000	5.5000	0.97	W	A
FL	1	53.8400	1.1700	0.99	A	A
FN	1	56.3000	3.7000	1.04	A	A
FR	1	67.0000	10.0000	1.23	A	A
FU	3	46.8800	1.7000	0.86	A	W

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB214

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**EML Value:** 54.3667  
**EML Error:** 2.2490

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FU	4	49.2500	1.9800	0.91	A	A
FU	2	45.0400	3.5300	0.83	A	W
FU	1	45.8100	1.8500	0.84	A	W
FU	5	48.2300	2.7600	0.89	A	A
GA	1	49.0000	10.4000	0.90	N	A
GE	1	52.7000	7.5600	0.97		A
HU	1	53.6000	1.3000	0.99	A	A
IO	1	47.8000	20.6000	0.88	A	W
IS	1	45.0300	6.4790	0.83	A	W
IT	1	68.6000	5.0000	1.26	A	A
KE	1	35.0500	2.8100	0.64		N
KO	1	59.7100	1.6200	1.10		A
LA	2	43.8000	5.3000	0.81		W
LA	1	42.1000	5.0000	0.77		W
LA	3	40.9000	4.9000	0.75		N
LM	1	49.6000	1.8300	0.91	A	A
LV	1	45.9000	1.6000	0.84	A	W
ME	3	52.5000	2.5000	0.97	A	A
ME	2	51.0000	2.3000	0.94	A	A
ME	1	57.0000	2.3000	1.05	A	A
MH	1	49.5100	2.9400	0.91		A
MS	1	60.3000	6.0000	1.11	A	A
MY	1	73.4500	7.5100	1.35	A	W
NA	1	49.1000	2.1000	0.90	A	A
NJ	2	58.1000	3.7000	1.07		A
NJ	1	57.7000	4.1000	1.06		A
NJ	3	59.6000	4.1000	1.10		A
NL	1	61.4000	1.8000	1.13	A	A
NQ	1	53.7000	5.9000	0.99	A	A
NZ	1	66.8000	4.5000	1.23	A	A
OB	1	54.3000	14.2000	1.00	A	A
OH	1	45.1000	3.0000	0.83	W	W
OT	1	47.0000	10.0000	0.86	N	W
OU	1	54.4000	13.2000	1.00	W	A
PK	1	52.0000	4.6000	0.96	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB214

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**EML Value:** 54.3667  
**EML Error:** 2.2490

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
PK	2	52.0000	4.6000	0.96	A	A
PO	1	49.0000	3.0000	0.90		A
PS	1	53.7000	11.9300	0.99	A	A
RA	1	49.2000	3.1000	0.90	A	A
RB	1	56.3000	6.9000	1.04		A
RI	1	63.5000	10.7000	1.17	A	A
RM	1	52.3000	4.1000	0.96	A	A
RS	1	52.0200	4.6100	0.96		A
RU	1	40.7000	4.9000	0.75	A	N
SD	1	55.5900	4.2000	1.02	A	A
SE	1	51.7000	1.8000	0.95	A	A
SI	2	65.6000	1.8000	1.21	A	A
SI	1	50.0000	1.0000	0.92	A	A
SK	1	53.7000	2.5000	0.99	A	A
SN	1	50.8000	9.8000	0.93	A	A
SR	1	44.7000	5.6000	0.82	A	W
SY	1	54.1000	4.5000	1.00	A	A
TE	1	52.0000	3.6000	0.96	W	A
TI	1	49.1000	2.1500	0.90		A
TM	1	58.4000	8.2900	1.07	A	A
TN	1	48.2500	6.9600	0.89	A	A
TO	1	43.8270	7.9140	0.81	A	W
TP	1	57.6500	1.5600	1.06	A	A
TQ	1	60.4000	1.7000	1.11	A	A
TW	1	54.0000	2.3300	0.99	A	A
TX	1	48.1000	1.4000	0.88	A	A
WA	1	52.0000	3.0000	0.96	N	A
WE	2	49.1300	1.7500	0.90	W	A
WE	3	51.8000	1.7000	0.95	W	A
WE	1	50.4000	2.0000	0.93	W	A
WI	3	59.5000	8.5200	1.09	A	A
WI	2	53.8000	7.6900	0.99	A	A
WI	1	53.9000	7.8300	0.99	A	A
WN	3	55.6000	2.3000	1.02	A	A
WN	2	55.9000	1.9000	1.03	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PB214

**EML Value:** 54.3667  
**EML Error:** 2.2490

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WN	1	55.5000	3.3000	1.02	A	A
WO	2	73.5400	8.0900	1.35	A	W
WO	1	70.7500	8.4700	1.30	A	W
WT	1	65.3000	11.2000	1.20	A	A
WW	1	49.9000	1.5000	0.92	A	A
YU	1	53.9000	2.3000	0.99		A

**Total Number Reported:** 110

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PU238

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**EML Value:** 0.6909  
**EML Error:** 0.1046

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AG	1	0.9230	0.4030	1.34		A
AT	1	0.7490	0.4370	1.08	A	A
BU	1	0.5200	0.0300	0.75	A	W
CW	1	0.7130	0.0470	1.03	A	A
OB	1	1.7100	0.7360	2.47	W	W
PS	1	0.6300	0.4800	0.91	A	A
RA	1	1.0000	0.2000	1.45	A	A
SE	1	0.7400	0.1100	1.07		A
SE	2	0.7500	0.0900	1.09		A
SK	1	0.6770	0.0950	0.98		A
SK	2	0.9400	0.1400	1.36		A

**Total Number Reported:** 11

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**Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027**  
**Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PU239

**EML Value:** 19.0980  
**EML Error:** 0.7057

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	16.7000	5.6000	0.87	W	A
AF	1	18.3200	0.5100	0.96		A
AG	1	20.4000	3.0000	1.07	A	A
AI	1	19.7000	2.0000	1.03	A	A
AM	1	19.2570	3.6990	1.01	W	A
AN	1	20.5000	1.3000	1.07	A	A
AT	1	20.5000	3.0360	1.07	A	A
AU	1	19.2000	2.4000	1.00	A	A
BE	1	20.5300	1.4800	1.08	A	A
BM	1	20.3300	3.1200	1.07	A	A
BU	1	20.0000	1.0000	1.05	A	A
BX	1	15.7000	1.4000	0.82	A	W
CH	1	20.3300	1.9900	1.07	A	A
CL	1	11.0000	8.7000	0.58		N
CW	1	19.2900	0.3000	1.01	A	A
EG	1	22.4000	1.9000	1.17		W
EI	1	20.7800	1.6500	1.09		A
GA	1	19.3000	2.0900	1.01	W	A
GE	1	19.7000	2.4600	1.03	A	A
GT	1	21.8000	5.4000	1.14	A	W
IN	1	22.5800	4.8900	1.18	A	W
IS	1	21.1200	4.0950	1.11	A	A
IT	1	22.8000	2.2500	1.19	A	W
KA	1	21.5800	0.3000	1.13	A	A
KO	1	20.8880	0.8784	1.09		A
LA	3	20.3700	1.7600	1.07	A	A
LA	2	22.3400	1.9200	1.17	A	W
LA	1	21.1500	1.8200	1.11	A	A
LL	1	134.0000	9.3400	7.02	A	N
LW	1	19.5000	6.5700	1.02	N	A
ML	1	19.2040	4.0380	1.01	A	A
NA	1	19.7000	2.8000	1.03		A
NL	1	20.2000	2.4000	1.06	A	A
NQ	1	20.4000	1.7000	1.07	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** PU239

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**EML Value:** 19.0980  
**EML Error:** 0.7057

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OB	1	29.4000	8.7400	1.54	N	N
OK	1	23.5000	4.0000	1.23	A	W
OT	1	19.0000	1.0000	1.00	A	A
PS	1	21.6800	3.4000	1.13	A	W
RA	1	20.3000	4.0000	1.06	A	A
RI	1	20.3000	1.4800	1.06	A	A
SD	1	17.6000	1.9000	0.92	W	A
SE	2	17.3100	0.8300	0.91	A	A
SE	1	20.0500	1.3500	1.05	A	A
SE	4	19.0300	1.6600	1.00	A	A
SE	3	19.1000	0.7900	1.00	A	A
SK	2	19.7000	1.2000	1.03		A
SK	1	19.8000	1.2000	1.04		A
SN	1	20.5000	5.1500	1.07	A	A
SR	1	16.4000	1.3000	0.86	A	W
TE	1	14.7000	3.5000	0.77	A	W
TI	1	25.9000	6.7000	1.36	W	N
TM	1	18.9000	2.6200	0.99	A	A
TN	1	19.0900	1.8900	1.00	A	A
TO	1	18.0140	3.6390	0.94	A	A
TX	1	20.7000	0.5000	1.08	A	A
UC	1	20.2000	1.4800	1.06		A
UY	1	20.9000	2.8000	1.09	A	A
WA	1	17.1000	1.2000	0.89	A	A
WC	1	22.0000	4.6000	1.15	A	W
WE	2	20.0900	2.2300	1.05	A	A
WE	1	23.4800	2.5300	1.23	A	W
WI	3	23.0000	3.8000	1.20	W	W
WI	2	20.8000	3.2300	1.09	W	A
WI	1	21.7000	3.6800	1.14	W	W
YA	1	20.8600	0.4100	1.09	A	A

**Total Number Reported:** 65

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** SR90

**EML Value:** 53.7558  
**EML Error:** 1.4460

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	13.0000	1.5000	0.24	A	N
AG	1	46.2000	8.8100	0.86	A	A
AI	1	101.6600	15.2500	1.89	A	W
AM	1	26.6700	8.1800	0.50	W	N
AN	1	46.9000	2.0000	0.87	A	A
AT	1	56.1110	3.8340	1.04	A	A
AU	1	48.8000	4.1000	0.91	A	A
BE	1	50.0000	4.2000	0.93	A	A
BM	1	47.9600	4.0800	0.89	A	A
BX	1	47.7000	5.5000	0.89	W	A
CH	1	51.1700	10.8800	0.95	A	A
CL	1	18.2000	31.0000	0.34		N
CW	1	48.3000	1.0000	0.90		A
EG	1	51.8000	2.8000	0.96		A
GE	1	67.1000	3.0900	1.25	W	A
GT	1	46.0000	19.0000	0.86	A	A
IN	1	71.8000	18.6000	1.34	A	A
IO	1	52.3000	6.5000	0.97		A
IS	2	55.9000	7.6000	1.04	A	A
IS	1	45.2000	8.1000	0.84	A	A
IT	1	54.6000	6.2400	1.02		A
KA	1	51.0000	4.8000	0.95	A	A
KE	1	49.4900	0.7200	0.92	A	A
KO	1	46.1000	1.1800	0.86		A
KR	1	45.5000	1.4600	0.85		A
MZ	3	34.6000	0.4500	0.64		N
MZ	2	31.9900	0.4300	0.60		N
MZ	1	36.5600	0.6200	0.68		W
OB	1	52.2000	15.7000	0.97		A
OT	1	47.0000	5.0000	0.87	W	A
PS	1	57.3200	13.7400	1.07	A	A
RA	1	53.0000	11.0000	0.99	A	A
RI	1	59.5000	2.5600	1.11	A	A
RU	1	44.4000	3.3000	0.83	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** SR90

**EML Value:** 53.7558  
**EML Error:** 1.4460

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SE	1	46.1000	1.4000	0.86	A	A
SE	2	45.2000	1.4000	0.84	A	A
SN	1	40.8000	8.6300	0.76	A	W
SR	1	45.0000	19.0000	0.84	A	A
TE	1	52.1000	6.3000	0.97	A	A
TI	1	46.6000	7.9000	0.87	A	A
TM	1	59.5000	9.0600	1.11	W	A
TN	1	48.6600	6.2200	0.90	A	A
TO	1	40.1910	1.3440	0.75	A	W
TQ	1	58.5000	2.8000	1.09	A	A
TX	1	46.0000	7.0000	0.86	A	A
UY	1	36.7000	5.2000	0.68	A	W
WA	1	53.0000	3.0000	0.99	A	A
WC	1	74.1000	14.6000	1.38	W	W
WE	3	52.9100	5.5900	0.98	A	A
WE	2	55.1300	6.1100	1.03	A	A
WE	1	59.5700	6.1100	1.11	A	A
WI	1	42.5000	7.9000	0.79	A	W
WI	3	43.8000	7.9700	0.81	A	W
WI	2	40.7000	7.9200	0.76	A	W
YA	1	50.7000	2.1000	0.94	A	A

**Total Number Reported:** 55

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** TH234

**EML Value:** 89.3000  
**EML Error:** 6.8370

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AF	1	91.7600	14.9300	1.03		A
AG	1	123.0000	30.7000	1.38	A	A
AI	1	110.0000	16.5000	1.23	N	A
AM	1	94.2000	6.2300	1.05	A	A
AS	1	77.7000	23.4000	0.87	A	A
AU	1	111.0000	20.0000	1.24	A	A
BQ	1	100.0000	20.0000	1.12		A
BX	1	121.0000	20.0000	1.36	N	A
CH	1	101.9000	37.2600	1.14	A	A
CL	1	130.0000	17.3000	1.46	A	A
CN	1	96.6100	6.7200	1.08	A	A
CR	1	1700.0000	90.0000	19.04		N
CS	1	74.4300	13.2200	0.83		A
EC	1	125.3000	60.7000	1.40	A	A
EC	2	117.2000	56.9000	1.31	A	A
EC	3	121.8000	59.0000	1.36	A	A
EC	5	123.7000	59.9000	1.38	A	A
EC	4	119.9000	58.1000	1.34	A	A
EG	1	124.0000	26.0000	1.39	A	A
FE	1	107.7300	8.1280	1.21	A	A
FL	1	17.7900	1.8900	0.20	A	N
FR	1	93.0000	50.0000	1.04	A	A
FS	1	75.6000	14.9000	0.85	A	A
FU	2	91.4800	11.2900	1.02	A	A
FU	1	102.7000	18.8700	1.15	A	A
FU	4	89.9800	9.9200	1.01	A	A
FU	3	98.5800	34.8100	1.10	A	A
GA	1	76.2000	29.7000	0.85		A
GE	1	108.8000	36.0300	1.22		A
HU	1	116.5000	8.0000	1.30	A	A
IN	1	1274.0000	409.0000	14.27		N
IS	1	96.3100	14.0600	1.08	A	A
IT	1	216.0000	45.2000	2.42	A	N
KO	1	109.6700	7.7800	1.23		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** TH234

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**EML Value:** 89.3000  
**EML Error:** 6.8370

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LA	2	63.2000	10.3000	0.71		W
LA	3	46.8000	8.9000	0.52		N
LA	1	52.5000	9.2000	0.59		N
LM	1	102.5600	6.9400	1.15		A
LV	1	123.0000	22.0000	1.38	W	A
ME	3	124.3000	12.8000	1.39	A	A
ME	2	91.7000	7.2000	1.03	A	A
ME	1	106.5000	7.7000	1.19	A	A
MH	1	36.6600	9.4000	0.41		N
MY	1	264.7900	52.0900	2.96	A	N
NJ	3	92.0000	8.0000	1.03		A
NJ	2	81.0000	14.0000	0.91		A
NJ	1	87.0000	13.0000	0.97		A
NL	1	109.0000	13.0000	1.22	A	A
NQ	1	85.2000	15.2000	0.95	A	A
NZ	1	103.0000	16.0000	1.15	A	A
OB	1	44.8000	70.7000	0.50	A	N
OU	1	118.0000	45.0000	1.32	A	A
PO	1	78.0000	13.0000	0.87		A
RA	1	100.0000	8.0000	1.12		A
SR	1	109.0000	37.0000	1.22	A	A
SY	1	96.3000	12.0000	1.08	A	A
TE	1	122.4000	6.3000	1.37		A
TI	1	90.1000	9.9700	1.01		A
TO	1	87.9260	37.5160	0.99	A	A
TX	1	70.3000	6.6000	0.79	W	W
UY	1	91.0000	25.0000	1.02	A	A
WA	1	84.0000	12.0000	0.94	A	A
WE	3	102.0000	17.9500	1.14	W	A
WE	2	103.4000	17.9500	1.16	W	A
WE	1	98.5000	14.6500	1.10	W	A
WT	1	168.0000	62.6000	1.88	A	W
WW	1	82.4000	7.5000	0.92	A	A

**Total Number Reported:** 67

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**Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027**  
**Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** U234

**EML Value:** 93.8850  
**EML Error:** 7.7670

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	65.4000	2.4000	0.70	W	N
AF	1	72.5200	9.4300	0.77		W
AI	1	96.6000	3.0000	1.03	A	A
AM	1	102.6800	9.9900	1.09	A	A
AN	1	140.0000	10.0000	1.49	A	N
AT	1	84.3500	9.8970	0.90	A	A
AU	1	91.9000	11.7000	0.98	A	A
BE	1	90.7000	8.2000	0.97	A	A
BM	1	96.1500	15.5300	1.02	A	A
BQ	1	87.0000	5.0000	0.93		A
BU	1	76.0000	3.8000	0.81	A	W
BX	1	91.7000	8.0000	0.98	A	A
CF	2	97.3000	6.0000	1.04	A	A
CF	1	87.9000	5.2000	0.94	A	A
CF	3	83.3000	5.5000	0.89	A	A
CH	1	79.3600	5.7200	0.85	A	A
CL	1	74.4000	13.5000	0.79	W	W
CW	1	87.4000	1.4000	0.93	A	A
EG	1	84.2000	5.3000	0.90		A
EI	1	80.7100	4.3800	0.86		A
FU	1	85.1300	7.6100	0.91	A	A
FU	3	80.5200	11.2200	0.86	A	A
FU	2	115.7000	11.9400	1.23	A	N
FU	4	101.9000	11.4900	1.09	A	A
GA	1	83.4000	4.7700	0.89		A
GE	1	82.9000	9.5700	0.88	W	A
HT	1	85.5000	0.8000	0.91	N	A
IN	1	86.1000	16.6000	0.92		A
IS	1	81.1730	15.4130	0.87	A	A
KO	1	87.4091	2.2102	0.93		A
LW	1	86.2000	7.5200	0.92	A	A
ML	1	93.6850	15.5920	1.00	A	A
NA	1	86.0000	10.0000	0.92	W	A
NQ	1	85.7000	5.2000	0.91	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** U234

**EML Value:** 93.8850  
**EML Error:** 7.7670

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OB	1	92.9000	27.8000	0.99	N	A
OK	1	79.0000	14.0000	0.84	A	A
PS	1	84.6700	6.6900	0.90	A	A
SD	1	86.4000	2.9000	0.92	A	A
SN	1	81.7000	10.4000	0.87	A	A
SR	1	18.4000	1.5000	0.20	A	N
TI	1	90.5000	13.6000	0.96		A
TM	1	86.4000	5.0400	0.92	A	A
TN	1	73.4800	3.5100	0.78	A	W
TO	1	53.5020	10.8210	0.57	A	N
TX	1	83.4000	2.0000	0.89	A	A
WA	1	85.1000	3.7000	0.91	A	A
WC	1	69.7000	13.5000	0.74	W	W
WE	1	72.9300	7.5200	0.78	A	W
WE	2	68.3800	7.0800	0.73	A	N
YA	1	87.2000	1.8700	0.93	A	A

**Total Number Reported:** 50

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** U238

**EML Value:** 96.7783  
**EML Error:** 8.4100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	70.4000	2.5000	0.73	W	W
AF	1	76.7100	3.5900	0.79		W
AI	1	94.6000	2.5000	0.98		A
AM	1	106.4800	9.6200	1.10	A	A
AN	1	137.0000	7.0000	1.42	A	N
AT	1	87.7100	10.2800	0.91	A	A
AU	1	94.3000	12.0000	0.97	A	A
BE	1	91.3000	8.2000	0.94	A	A
BM	1	99.9100	16.0400	1.03	A	A
BQ	1	85.0000	5.0000	0.88		A
BU	1	79.0000	4.0000	0.82	A	W
BX	1	98.7000	8.6000	1.02	A	A
CF	2	100.3000	6.2000	1.04	A	A
CF	3	93.8000	6.1000	0.97	A	A
CF	1	95.5000	5.6000	0.99	A	A
CH	1	84.8200	6.0300	0.88	A	A
CL	1	85.5000	14.5000	0.88	A	A
CW	1	93.5000	1.5000	0.97	A	A
EG	1	86.9000	5.6000	0.90		A
EI	1	80.7200	4.3700	0.83		A
FL	1	4.3600	0.0700	0.05	W	N
FU	1	79.2600	7.1500	0.82	A	W
FU	2	104.1000	10.8800	1.08	A	A
FU	3	94.2500	12.7800	0.97	A	A
FU	4	96.4800	10.9600	1.00	A	A
GA	1	85.0000	6.7200	0.88		A
GE	1	85.7000	9.8700	0.89	A	A
GT	1	91.0000	23.0000	0.94	A	A
HT	1	90.0000	0.8000	0.93	W	A
IN	1	95.9000	19.2800	0.99		A
IS	1	87.5000	16.5830	0.90	A	A
KO	1	93.1047	2.3289	0.96		A
LW	1	89.7000	9.3300	0.93	A	A
ML	1	100.3150	16.6660	1.04	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** U238

**EML Value:** 96.7783  
**EML Error:** 8.4100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
NA	1	87.0000	10.0000	0.90	A	A
NQ	1	91.3000	5.6000	0.94	A	A
OB	1	94.7000	28.3000	0.98	A	A
OK	1	89.4000	15.0000	0.92	A	A
PS	1	80.1900	6.4000	0.83	A	A
SD	1	90.2000	3.0000	0.93	A	A
SI	1	93.0000	7.0000	0.96	A	A
SN	1	91.5000	11.1000	0.94	A	A
SR	1	17.9000	1.5000	0.19	A	N
TI	1	102.0000	14.8000	1.05		A
TM	1	91.5000	5.1700	0.94	A	A
TN	1	79.4100	3.6700	0.82	A	A
TO	1	60.5570	12.1530	0.63	A	N
TX	1	89.3000	2.1000	0.92	A	A
WA	1	96.2000	7.4000	0.99	A	A
WC	1	72.0000	14.0000	0.74	W	W
WE	2	78.0700	7.9400	0.81	A	W
WE	1	67.8900	7.0500	0.70	A	W
YA	1	91.7000	1.9400	0.95	A	A

**Total Number Reported:** 53

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** SO Soil Bq / kg  
**Radionuclide:** Ug U

**EML Value:** 7.8288  
**EML Error:** 0.7552

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AI	1	7.6600	1.0000	0.98		A
AS	1	7.5900	0.0600	0.97		A
BE	1	7.8000		1.00	A	A
BQ	1	7.0000	0.5000	0.89	A	A
BU	1	6.7300	0.6500	0.86	A	A
CA	1	7.9000	0.8000	1.01	A	A
CH	1	5.9400	0.5940	0.76		A
CL	1	0.0050	0.0005	0.00		N
GA	1	6.8900	0.5400	0.88	A	A
GE	1	7.7000	0.1730	0.98	A	A
HT	1	7.1700	0.7000	0.92	W	A
IT	1	7.0800	0.5700	0.90	A	A
KO	1	7.5289	0.1872	0.96		A
LA	3	7.3000	0.3650	0.93	A	A
LA	2	7.2400	0.3620	0.93	A	A
LA	1	6.8600	0.3430	0.88	A	A
NL	1	5.8200	0.0900	0.74	A	A
OU	1	6.2000	0.0010	0.79	A	A
RA	1	5.9000	0.4000	0.75	A	A
RI	2	5.8200		0.74	A	A
RI	1	5.5400		0.71	A	A
RI	3	5.9200		0.76	A	A
SD	1	7.2600	0.2400	0.93	A	A
SY	1	6.8400	0.2200	0.87	W	A
TM	1	7.9400	0.0920	1.01	A	A
TN	1	6.4400	0.7400	0.82	A	A
TO	1	4.4240	0.2370	0.56	A	W
UC	1	3.3300		0.43		N
UP	1	7.0400		0.90	A	A
YP	1	7.9800	1.0040	1.02	N	A

**Total Number Reported:** 30

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** AM241

**EML Value:** 2.2283  
**EML Error:** 0.2161

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	2.6000	0.7000	1.17	A	A
AG	1	2.7400	0.9000	1.23	A	A
AI	1	2.9800	0.3300	1.34	A	A
AM	1	2.7200	0.6600	1.22	A	A
AT	1	2.6000	0.9500	1.17	A	A
AU	1	2.5500	0.4700	1.14	A	A
BE	1	2.3000	0.1400	1.03	A	A
BU	1	2.3000	0.1000	1.03	A	A
BX	1	2.1600	0.6500	0.97	A	A
CH	1	2.9800	0.3000	1.34	A	A
CL	1	2.8000	4.5000	1.26	A	A
CW	1	2.4410	0.0670	1.10	A	A
EG	1	2.4000	0.1800	1.08		A
FL	1	0.2830	0.0380	0.13	A	N
FR	1	2.4000	0.7000	1.08	A	A
GA	1	2.8000	0.6990	1.26	A	A
GE	1	2.4300	0.3400	1.09	A	A
GT	1	2.1000	0.5000	0.94	W	A
HU	1	3.4800	1.1000	1.56	W	W
IS	1	2.3180	0.4760	1.04	A	A
IT	1	2.0200	0.2100	0.91	A	A
KO	1	2.3430	0.1375	1.05		A
LA	1	2.1720	0.2710	0.98	W	A
LA	2	2.3620	0.2991	1.06	W	A
LA	3	2.3570	0.2989	1.06	W	A
LM	1	2.1300	0.8000	0.96	W	A
LV	1	2.4800	0.5600	1.11	A	A
ME	1	4.1000	0.7000	1.84	W	W
MH	1	8.3200	0.8200	3.73		N
NJ	3	2.6000	0.6800	1.17	A	A
NJ	2	2.4700	0.5600	1.11	A	A
NJ	1	2.0900	0.6900	0.94	A	A
OB	1	17.5000	3.4600	7.85	N	N
OT	1	2.6000	0.4000	1.17	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** AM241

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**EML Value:** 2.2283  
**EML Error:** 0.2161

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
PO	1	5.0000	2.0000	2.24		N
RI	1	2.1800	0.3030	0.98	W	A
RS	1	7.6100	3.0700	3.41		N
SD	1	2.3500	0.3000	1.05	A	A
SE	2	10.3400	0.7400	4.64	A	N
SE	1	9.9800	0.0520	4.48	A	N
SI	1	2.2000	0.2000	0.99	A	A
SK	1	1.7600	0.4100	0.79		W
SN	1	1.8900	0.9250	0.85	A	W
SR	1	1.5600	0.2400	0.70	W	N
TE	1	3.1000	2.2000	1.39	A	A
TI	1	2.7300	0.7000	1.23		A
TM	1	2.2600	0.7250	1.01	A	A
TN	1	2.2780	0.9000	1.02	A	A
TO	1	1.6170	0.7540	0.73	A	N
TX	1	1.1000	0.1100	0.49	A	N
TY	1	3.9000	0.7000	1.75		W
UY	1	2.4800	0.3700	1.11	A	A
WA	1	2.3200	0.3100	1.04	A	A
WC	1	2.3700	1.3400	1.06	A	A
WE	3	2.4700	0.6000	1.11	A	A
WE	1	5.4400	1.1000	2.44	A	N
WE	2	2.4800	0.9000	1.11	A	A
WI	3	2.1900	0.4800	0.98	A	A
WI	1	2.4900	0.5250	1.12	A	A
WI	2	2.3500	0.5000	1.05	A	A
YA	1	2.2300	0.0415	1.00	A	A

**Total Number Reported:** 61

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**Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027**  
**Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CM244

**EML Value:** 1.3200  
**EML Error:** 0.1639

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	2.3000	0.7000	1.74	A	N
AG	1	1.3800	0.5900	1.04	A	A
AI	1	2.7000	0.4500	2.05	A	N
AU	1	1.4100	0.3500	1.07	A	A
BE	1	1.2400	0.0920	0.94	A	A
BU	1	1.0900	0.0600	0.83	A	A
BX	1	1.2400	0.9000	0.94	A	A
CH	1	1.3800	0.1600	1.04	A	A
CL	1	1.4000	2.5000	1.06	N	A
CW	1	1.1080	0.0440	0.84	A	A
EG	1	1.3000	0.1100	0.99		A
GA	1	1.6400	0.5790	1.24	A	A
GE	1	1.3900	0.2310	1.05	A	A
IS	1	1.5390	0.3394	1.17	A	A
IT	1	1.4200	0.1600	1.08	W	A
KO	1	1.2920	0.0882	0.98		A
OT	1	1.4000	0.2000	1.06	A	A
RI	1	1.5600	0.2290	1.18	W	A
SD	1	1.5000	0.2400	1.14	W	A
SN	1	1.3200	0.7500	1.00	W	A
SR	1	0.8400	0.1700	0.64	W	W
TE	1	0.9000	0.8000	0.68	A	W
TI	1	2.4300	0.6800	1.84		N
TM	1	1.4600	0.5530	1.11	W	A
TN	1	1.3470	0.5970	1.02	A	A
TO	1	1.3900	0.6980	1.05	W	A
UY	1	0.9820	0.2100	0.74	A	W
WA	1	1.0800	0.2000	0.82	A	A
WC	1	1.4100	0.9700	1.07	A	A
WE	2	1.0800	0.4000	0.82	W	A
WE	1	1.3300	0.5000	1.01	W	A
WI	1	1.4700	0.3730	1.11		A
WI	3	1.3900	0.3540	1.05		A
WI	2	1.2700	0.3300	0.96		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CM244

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**EML Value:** 1.3200  
**EML Error:** 0.1639

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
YA	1	1.1900	0.0294	0.90	A	A

**Total Number Reported:** 35

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CO60

**EML Value:** 11.2300  
**EML Error:** 0.6770

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	13.5000	1.6000	1.20	A	A
AG	1	11.7000	2.5000	1.04	A	A
AI	1	10.4400	1.5000	0.93	A	A
AM	1	12.6800	0.5300	1.13	A	A
AT	1	11.8370	1.2110	1.05	A	A
AU	1	12.8000	2.2000	1.14	A	A
BE	1	13.0000	2.0000	1.16	A	A
BM	1	12.3000	1.7200	1.10	A	A
BN	1	9.8000	0.7000	0.87	A	W
BQ	1	49.0000	22.0000	4.36	N	N
BU	1	11.8000	0.6000	1.05	A	A
BX	1	13.7000	1.9000	1.22	A	A
CD	1	11.3000	0.9000	1.01	A	A
CE	1	14.0000	2.0000	1.25	A	W
CF	3	11.0000	1.7000	0.98	A	A
CF	1	10.9000	1.4000	0.97	A	A
CF	2	10.8000	1.2000	0.96	A	A
CG	1	15.0000	10.0000	1.34	W	W
CH	1	12.1000	1.5000	1.08	A	A
CL	1	15.1000	1.3000	1.35	A	W
CN	1	11.9400	1.1300	1.06	A	A
CR	1	11.9000	0.7000	1.06		A
CU	1	11.5000	2.0000	1.02	N	A
CW	1	11.9000	0.7000	1.06	A	A
EG	1	9.1000	1.9000	0.81	W	W
FL	1	1.0920	0.0270	0.10	A	N
FN	1	12.8000	1.0000	1.14	A	A
FR	1	12.0000	2.0000	1.07	A	A
FU	1	11.6100	0.9400	1.03	A	A
FU	5	13.2800	0.7500	1.18	A	A
FU	4	12.4900	1.0400	1.11	A	A
FU	3	12.6400	0.8500	1.13	A	A
FU	2	13.0200	0.8800	1.16	A	A
GA	1	13.4000	3.1000	1.19	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CO60

**EML Value:** 11.2300  
**EML Error:** 0.6770

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
GC	2	13.2400	2.8400	1.18	A	A
GC	1	10.5000	2.4000	0.94	A	A
GC	3	10.3200	1.4200	0.92	A	A
GE	1	12.7000	2.0700	1.13	A	A
GT	1	14.0000	4.0000	1.25	A	W
HU	1	11.6400	0.3400	1.04	A	A
IN	1	11.3000	0.8100	1.01		A
IO	1	13.5000	3.1000	1.20	A	A
IS	1	10.5000	2.2600	0.94	W	A
IT	1	14.8000	1.3000	1.32	A	W
KE	1	9.6900	0.6200	0.86	A	W
KO	1	11.7800	0.5300	1.05		A
KR	3	13.2000	2.7000	1.17	A	A
KR	4	14.0000	4.0000	1.25	A	W
KR	5	12.7000	1.8000	1.13	A	A
KR	2	14.7000	3.5000	1.31	A	W
KR	1	13.2000	4.5000	1.17	A	A
KS	1	11.0000	0.8000	0.98	A	A
LA	2	12.7100	1.6200	1.13		A
LA	3	10.0000	1.3000	0.89		W
LA	1	9.8300	1.2700	0.88		W
LM	1	13.0900	0.9300	1.17	W	A
LV	1	14.0000	1.5000	1.25	A	W
ME	3	14.9000	0.9000	1.33	A	W
ME	2	15.5000	0.9000	1.38	A	W
ME	1	13.7000	1.8000	1.22	A	A
MH	1	11.3400	0.5000	1.01		A
NA	1	11.7000	0.6000	1.04	A	A
NJ	3	11.0000	0.7000	0.98	A	A
NJ	1	11.4000	0.6000	1.01	A	A
NJ	2	11.2000	0.6000	1.00	A	A
NZ	1	10.3000	1.1000	0.92	A	A
OB	1	14.0000	3.4600	1.25	A	W
OH	1	10.6000	1.6000	0.94	A	A
OT	1	13.0000	3.0000	1.16	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CO60

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**EML Value:** 11.2300  
**EML Error:** 0.6770

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
PO	1	13.0000	3.0000	1.16		A
PS	1	16.3300	2.0400	1.45	N	N
RA	1	11.6000	1.1000	1.03	A	A
RB	1	9.5000	1.0000	0.85		W
RS	1	20.0700	1.9800	1.79		N
RU	1	9.9000	1.3000	0.88	A	W
SB	1	9.0800	1.9570	0.81	A	W
SD	1	13.7700	1.1330	1.23	W	W
SE	1	11.2000	1.3000	1.00	A	A
SI	1	12.0000	0.3000	1.07	A	A
SK	1	10.8000	0.5000	0.96		A
SN	1	13.9000	3.7500	1.24	A	W
SR	1	9.9600	3.7500	0.89	A	W
SX	1	8.5200	0.9200	0.76	W	N
SX	2	9.7400	0.8000	0.87	W	W
SY	1	11.6300	1.4200	1.04	A	A
TE	1	13.5000	2.1000	1.20	A	A
TI	1	11.7000	0.7300	1.04	A	A
TM	1	14.1000	2.2400	1.26	A	W
TN	1	11.6900	3.1600	1.04	W	A
TO	1	10.4810	2.9580	0.93	A	A
TP	1	11.3600	0.1400	1.01	A	A
TQ	1	12.5000	0.7000	1.11	A	A
TW	1	12.0000	0.0500	1.07	A	A
TX	1	15.2000	0.9000	1.35	A	W
TY	1	11.0000	2.2000	0.98		A
UC	1	15.5000	5.6800	1.38	A	W
UY	1	10.4000	2.3000	0.93	A	A
WA	1	12.4000	0.9000	1.10	A	A
WC	1	12.8000	2.4000	1.14	A	A
WE	1	11.9500	0.5000	1.06	A	A
WE	3	11.4000	0.7000	1.01	A	A
WE	2	7.5700	0.6000	0.67	A	N
WI	1	9.2400	1.4400	0.82	A	W
WI	3	10.1000	1.6400	0.90	A	W

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CO60

**EML Value:** 11.2300  
**EML Error:** 0.6770

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WI	2	9.4200	1.4800	0.84	A	W
WN	3	14.1000	0.8000	1.26	W	W
WN	1	13.1000	1.4000	1.17	W	A
WN	2	13.0000	0.8000	1.16	W	A
WO	1	13.4500	3.6000	1.20	A	A
WO	2	10.7400	2.3700	0.96	A	A
WT	1	15.0000	3.6400	1.34	A	W
YA	1	10.6500	0.3900	0.95	A	A
YU	1	11.4000	0.8000	1.01		A

**Total Number Reported:** 113

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CS137

**EML Value:** 313.6670  
**EML Error:** 15.9100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	356.0000	4.0000	1.13	A	A
AG	1	343.0000	56.9000	1.09	A	A
AI	1	320.0000	48.0000	1.02	A	A
AM	1	318.2000	1.7900	1.01	A	A
AT	1	334.3860	35.9430	1.07	A	A
AU	1	331.0000	15.0000	1.05	A	A
BA	1	368.5200	66.8200	1.17	N	A
BE	1	319.0000	44.0000	1.02	A	A
BM	1	356.0000	45.0000	1.13	A	A
BN	1	319.1000	47.1000	1.02	A	A
BQ	1	350.0000	24.0000	1.12	A	A
BU	1	315.0000	16.0000	1.00	A	A
BX	1	360.0000	41.0000	1.15	A	A
CD	1	340.0000	10.0000	1.08	A	A
CE	1	361.0000	23.0000	1.15	A	A
CF	1	1077.0000	8.6000	3.43	A	N
CF	2	1077.0000	7.5000	3.43	A	N
CF	3	1026.0000	6.2000	3.27	A	N
CG	1	308.0000	36.0000	0.98	A	A
CH	1	321.8000	3.9000	1.03	A	A
CL	1	395.0000	3.4000	1.26	A	W
CN	1	331.8000	21.5000	1.06	A	A
CR	1	358.0000	5.0000	1.14		A
CS	1	318.5000	97.8600	1.01	A	A
CU	1	326.0000	25.0000	1.04	N	A
CW	1	323.0000	10.0000	1.03	A	A
EG	1	317.0000	25.0000	1.01	A	A
FL	1	30.7700	0.2200	0.10	A	N
FN	1	314.0000	28.0000	1.00	A	A
FR	1	320.0000	45.0000	1.02	A	A
FU	3	327.0000	10.5200	1.04	A	A
FU	5	328.5000	10.4600	1.05	A	A
FU	4	324.8000	10.6100	1.03	A	A
FU	1	331.3000	10.8000	1.06	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CS137

**EML Value:** 313.6670  
**EML Error:** 15.9100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FU	2	324.0000	10.4300	1.03	A	A
GA	1	325.0000	25.0000	1.04	A	A
GC	2	274.3000	13.5000	0.87	W	W
GC	1	271.1000	13.3000	0.86	W	W
GC	3	267.8000	12.4300	0.85	W	W
GE	1	335.0000	38.6000	1.07	A	A
GT	1	330.0000	30.0000	1.05	W	A
HU	1	318.8000	8.4000	1.02	A	A
IN	1	328.5000	13.6000	1.05		A
IO	1	346.3000	43.2000	1.10	A	A
IS	1	365.6000	47.6000	1.17	A	A
IT	1	351.9000	20.9000	1.12	A	A
KE	1	290.1800	3.4700	0.93	A	A
KO	1	330.3200	5.6400	1.05		A
KR	5	341.7000	6.8000	1.09	A	A
KR	1	340.7000	15.6000	1.09	A	A
KR	2	342.8000	14.8000	1.09	A	A
KR	3	341.3000	15.0000	1.09	A	A
KR	4	341.0000	15.0000	1.09	A	A
KS	1	291.8000	14.2000	0.93	A	A
LA	3	304.0000	34.0000	0.97		A
LA	1	280.0000	31.0000	0.89		W
LA	2	305.0000	34.0000	0.97		A
LM	1	308.5200	2.6200	0.98	A	A
LV	1	390.0000	41.0000	1.24	A	W
ME	3	395.9000	11.7000	1.26	W	W
ME	1	399.6000	11.0000	1.27	W	W
ME	2	399.6000	13.6000	1.27	W	W
MH	1	324.8000	16.4000	1.03		A
NA	1	361.0000	12.0000	1.15	A	A
NJ	3	311.0000	15.0000	0.99	A	A
NJ	2	312.0000	15.0000	1.00	A	A
NJ	1	310.0000	15.0000	0.99	A	A
NR	1	319.3000	63.9000	1.02	A	A
NZ	1	313.8000	9.3000	1.00	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CS137

**EML Value:** 313.6670  
**EML Error:** 15.9100

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OB	1	346.0000	65.7000	1.10	A	A
OH	1	221.7000	4.0000	0.71	A	N
OT	1	353.0000	7.0000	1.13	A	A
OU	1	337.0000	33.0000	1.07	A	A
PO	1	370.0000	20.0000	1.18		A
PS	1	459.2600	7.0400	1.46	N	N
RA	1	311.0000	20.0000	0.99	A	A
RB	1	311.4000	23.7000	0.99		A
RI	1	359.0000	54.7000	1.14	A	A
RS	1	541.6400	16.1000	1.73		N
RU	1	339.0000	40.7000	1.08	A	A
SB	1	306.5000	33.2300	0.98	A	A
SD	1	406.3000	21.4000	1.29	W	W
SE	1	330.0000	6.3000	1.05	A	A
SI	1	324.0000	7.0000	1.03	A	A
SK	1	341.0000	18.0000	1.09		A
SN	1	315.0000	31.8000	1.00	A	A
SR	1	307.0000	32.0000	0.98	A	A
SX	1	283.6600	15.2900	0.90	W	A
SX	2	284.4300	15.1000	0.91	W	A
SY	1	345.0000	17.0000	1.10	A	A
TE	1	350.4000	6.3000	1.12	A	A
TI	1	346.0000	8.6000	1.10	A	A
TM	1	488.0000	13.7000	1.56	A	N
TN	1	316.0000	10.0000	1.01	A	A
TO	1	276.4970	31.0750	0.88	A	W
TP	1	324.3600	2.1400	1.03	A	A
TQ	1	336.0000	9.0000	1.07	A	A
TW	1	336.0000	4.9700	1.07	A	A
TX	1	354.0000	6.0000	1.13	A	A
TY	1	278.0000	28.0000	0.89		W
UC	1	368.0000	16.5000	1.17		A
UY	1	286.0000	30.0000	0.91	A	A
WA	1	333.0000	21.0000	1.06	A	A
WC	1	336.0000	50.3000	1.07	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** CS137

**EML Value:** 313.6670**EML Error:** 15.9100

Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	QAP 55 Evaluation	Evaluation
WE	3	330.3000	12.6000	1.05	A	A
WE	2	338.9000	14.6000	1.08	A	A
WE	1	334.8000	13.5000	1.07	A	A
WI	1	258.0000	32.7000	0.82	W	W
WI	2	257.0000	32.4000	0.82	W	W
WI	3	257.0000	32.5000	0.82	W	W
WN	2	344.0000	13.0000	1.10	W	A
WN	1	348.0000	14.0000	1.11	W	A
WN	3	346.0000	13.0000	1.10	W	A
WO	2	364.1000	29.1000	1.16	A	A
WO	1	351.0000	40.5000	1.12	A	A
WT	1	352.0000	21.9000	1.12	A	A
YA	1	317.1000	9.2000	1.01	A	A
YU	1	319.0000	17.0000	1.02		A

**Total Number Reported:** 118

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** K40

**EML Value:** 864.3300**EML Error:** 47.2200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	1140.0000	33.0000	1.32	A	W
AG	1	894.0000	158.0000	1.03	A	A
AI	1	867.1000	130.0000	1.00	W	A
AM	1	941.5800	13.8000	1.09	A	A
AT	1	929.5860	91.5000	1.08	A	A
AU	1	823.0000	45.0000	0.95	A	A
BE	1	800.0000	116.0000	0.93	W	A
BN	1	756.0000	157.0000	0.88	A	W
BQ	1	900.0000	120.0000	1.04	A	A
BU	1	860.0000	45.0000	1.00	A	A
BX	1	947.0000	96.0000	1.10	A	A
CD	1	930.0000	30.0000	1.08	A	A
CE	1	964.0000	87.0000	1.12	A	A
CG	1	795.0000	51.0000	0.92	A	A
CH	1	965.4000	31.4000	1.12	A	A
CL	1	1130.0000	34.7000	1.31	A	W
CN	1	862.2000	59.8000	1.00	A	A
CR	1	1029.0000	24.0000	1.19		A
CS	1	803.4000	247.5000	0.93	A	A
CU	1	884.0000	50.0000	1.02	N	A
CW	1	865.0000	34.0000	1.00	A	A
EG	1	740.0000	100.0000	0.86	A	W
FL	1	82.9400	1.4800	0.10	A	N
FN	1	884.0000	80.0000	1.02	A	A
FR	1	920.0000	110.0000	1.06	A	A
FU	2	963.0000	34.8200	1.11	A	A
FU	3	966.5000	34.7900	1.12	A	A
FU	4	965.0000	38.9500	1.12	A	A
FU	5	974.4000	34.0500	1.13	A	A
FU	1	940.6000	36.1500	1.09	A	A
GA	1	925.0000	100.0000	1.07	A	A
GC	3	900.0000	54.5000	1.04	A	A
GC	1	943.7300	70.6000	1.09	A	A
GC	2	938.5000	69.6000	1.09	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** K40

**EML Value:** 864.3300  
**EML Error:** 47.2200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
GE	1	1000.0000	112.0000	1.16	A	A
GT	1	1100.0000	100.0000	1.27	A	W
HU	1	920.0000	65.0000	1.06	A	A
IN	1	1092.0000	97.6000	1.26		W
IO	1	913.4000	236.1000	1.06	A	A
IS	1	964.0000	107.0000	1.12	A	A
IT	1	940.2000	58.5000	1.09	A	A
KE	1	749.9300	19.1200	0.87	A	W
KO	1	925.2200	23.7000	1.07		A
KR	3	953.1000	98.8000	1.10	A	A
KR	4	962.4000	89.1000	1.11	A	A
KR	2	955.9000	91.8000	1.11	A	A
KR	1	955.1000	97.4000	1.11	A	A
KR	5	931.4000	64.1000	1.08	A	A
KS	1	869.3000	12.7000	1.01	A	A
LA	3	871.0000	98.0000	1.01		A
LA	1	781.0000	87.7000	0.90		A
LA	2	874.0000	97.9000	1.01		A
LM	1	961.3700	19.5600	1.11	W	A
LV	1	811.0000	87.0000	0.94	A	A
ME	1	984.1000	47.4000	1.14	A	A
ME	2	1050.7000	40.3000	1.22	A	A
ME	3	1069.2000	78.4000	1.24	A	W
MH	1	969.9000	47.3000	1.12		A
NA	1	927.0000	34.0000	1.07	A	A
NJ	2	821.0000	30.0000	0.95	A	A
NJ	3	829.0000	33.0000	0.96	A	A
NJ	1	810.0000	33.0000	0.94	A	A
NZ	1	775.0000	84.0000	0.90	A	W
OB	1	967.0000	197.0000	1.12	A	A
OH	1	614.0000	31.0000	0.71	A	N
OT	1	953.0000	53.0000	1.10	A	A
OU	1	1090.0000	150.0000	1.26	A	W
PO	1	961.0000	46.0000	1.11		A
PS	1	1207.4100	44.8100	1.40	N	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** K40

**EML Value:** 864.3300**EML Error:** 47.2200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
RA	1	860.0000	100.0000	1.00	W	A
RB	1	896.7000	83.1000	1.04		A
RS	1	1522.3000	68.9300	1.76		N
RU	1	814.0000	97.7000	0.94	W	A
SB	1	953.5000	114.8000	1.10	A	A
SD	1	1033.0000	51.2100	1.20	W	A
SE	1	916.0000	42.3000	1.06	A	A
SI	1	856.0000	23.0000	0.99	A	A
SK	1	859.0000	43.0000	0.99		A
SN	1	1029.0000	121.4000	1.19	A	A
SR	1	890.0000	120.0000	1.03	A	A
SX	2	799.5700	49.2500	0.93	W	A
SX	1	745.5500	55.4000	0.86	W	W
SY	1	900.0000	57.0000	1.04	A	A
TE	1	940.8000	45.6000	1.09	A	A
TI	1	952.0000	38.4000	1.10	A	A
TM	1	1100.0000	101.0000	1.27	A	W
TN	1	767.0000	61.4000	0.89	A	W
TO	1	753.3210	102.6840	0.87	W	W
TP	1	908.6800	21.7900	1.05	A	A
TQ	1	1009.0000	35.0000	1.17	A	A
TW	1	924.0000	25.5000	1.07	A	A
TX	1	988.0000	30.0000	1.14	A	A
TY	1	79.0000	7.9000	0.09		N
UC	1	1010.0000	146.0000	1.17	W	A
UY	1	824.0000	103.0000	0.95	A	A
WA	1	992.0000	41.0000	1.15	A	A
WC	1	1060.0000	13.4000	1.23	A	W
WE	2	955.9000	22.5000	1.11	A	A
WE	3	915.2000	24.8000	1.06	A	A
WE	1	879.8000	20.5000	1.02	A	A
WI	3	869.0000	115.0000	1.00	A	A
WI	2	860.0000	114.0000	1.00	A	A
WI	1	868.0000	115.0000	1.00	A	A
WN	3	933.0000	44.0000	1.08	W	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** K40

**EML Value:** 864.3300

**EML Error:** 47.2200

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WN	2	933.0000	44.0000	1.08	W	A
WN	1	943.0000	61.0000	1.09	W	A
WO	1	1042.0000	172.0000	1.21	A	A
WO	2	959.8000	114.1000	1.11	A	A
WT	1	950.0000	111.0000	1.10	A	A
YA	1	855.0000	26.0000	0.99	A	A
YU	1	830.0000	56.0000	0.96		A

**Total Number Reported:** 111

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** PU238

**EML Value:** 0.2566  
**EML Error:** 0.0457

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AG	1	0.2430	1.1000	0.95		A
BU	1	0.2000	0.0300	0.78	A	A
CW	1	0.2750	0.0240	1.07	A	A
EG	1	0.2500	0.0400	0.97		A
RA	1	0.2800	0.0800	1.09	A	A
SE	1	0.2500	0.0290	0.97		A
SE	2	0.2100	0.0380	0.82		A

**Total Number Reported:** 7

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** PU239

**EML Value:** 3.5433  
**EML Error:** 0.3770

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	3.2000	0.5000	0.90	W	A
AG	1	3.2400	1.5600	0.91	W	A
AI	1	2.9000	0.3000	0.82	A	W
AM	1	13.4840	2.5500	3.81	N	N
AT	1	3.0130	0.7320	0.85	A	A
AU	1	4.0900	0.6300	1.15	A	W
BE	1	3.5200	0.2700	0.99	A	A
BM	1	3.1200	0.6800	0.88	A	A
BU	1	3.3000	0.3700	0.93	A	A
BX	1	2.3600	0.4300	0.67	A	N
CH	1	7.0200	0.5700	1.98	A	N
CW	1	3.5110	0.0980	0.99	A	A
EG	1	3.5400	0.2500	1.00		A
GA	1	3.6700	0.8260	1.04		A
GE	1	3.4600	0.5000	0.98	A	A
GT	1	3.8000	0.9000	1.07	A	A
IS	1	3.2770	0.6538	0.93	A	A
IT	1	3.2400	0.2700	0.91	A	A
KO	1	3.5990	0.2028	1.02		A
LA	1	3.1470	0.4922	0.89	A	A
LA	2	2.9880	0.4679	0.84	A	A
LA	3	3.4060	0.5303	0.96	A	A
ML	1	3.0000	0.4380	0.85	A	A
NA	1	3.0900	0.5000	0.87	A	A
OB	1	191.0000	54.9000	53.90	W	N
OT	1	3.3000	0.5000	0.93	A	A
PS	1	3.7100	1.3700	1.05	A	A
RA	1	3.5000	0.7000	0.99	W	A
RI	1	3.1500	0.3810	0.89	A	A
SD	1	3.7700	0.8500	1.06	A	A
SE	1	3.0800	0.1500	0.87	A	A
SE	2	3.9000	0.2400	1.10	A	A
SN	1	2.8200	1.0600	0.80	A	W
SR	1	2.3800	0.3400	0.67	A	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** PU239

**EML Value:** 3.5433  
**EML Error:** 0.3770

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TE	1	16.9000	0.7000	4.77	W	N
TI	1	3.6200	0.9800	1.02	A	A
TM	1	2.1800	0.4790	0.62	A	N
TN	1	2.9900	0.6600	0.84	A	A
TO	1	2.5940	0.9070	0.73	A	W
TX	1	3.3600	0.1800	0.95	A	A
UY	1	3.2300	0.4300	0.91	A	A
WA	1	2.2200	0.3500	0.63	A	N
WC	1	3.4500	0.9700	0.97	A	A
WE	1	3.0000	0.8000	0.85	A	A
WE	2	2.7000	0.7000	0.76	A	W
WI	3	3.5300	0.7010	1.00	A	A
WI	2	3.6000	0.6990	1.02	A	A
WI	1	3.5100	0.7190	0.99	A	A
YA	1	3.3100	0.0600	0.93	A	A

**Total Number Reported:** 49

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** SR90

**EML Value:** 586.2800  
**EML Error:** 11.1400

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	555.0000	37.0000	0.95	A	A
AG	1	516.0000	93.3000	0.88	A	A
AI	1	677.5000	101.6000	1.16	A	W
AM	1	655.8400	205.1600	1.12	W	W
AT	1	553.1770	31.3340	0.94	A	A
AU	1	579.0000	20.0000	0.99	A	A
BE	1	580.0000	30.0000	0.99	A	A
BM	1	561.0000	16.0000	0.96	A	A
BQ	1	490.0000	34.0000	0.84		A
BU	1	551.1000	19.8000	0.94	A	A
BX	1	556.0000	18.0000	0.95	A	A
CH	1	508.8000	16.8000	0.87	A	A
CL	1	483.0000	54.0000	0.82	A	A
CW	1	560.0000	17.0000	0.95		A
EG	1	520.0000	17.0000	0.89		A
GE	1	611.0000	7.7600	1.04	A	A
GT	1	470.0000	50.0000	0.80	W	A
IO	1	430.0000	10.0000	0.73	W	W
IS	1	568.6000	78.4400	0.97	A	A
KE	1	524.5600	1.7400	0.89	A	A
LA	1	589.1270	100.2220	1.00		A
LA	3	526.6270	70.6360	0.90		A
LA	2	553.9940	79.5120	0.94		A
NA	1	559.0000	16.0000	0.95	A	A
OB	1	592.0000	152.0000	1.01		A
OT	1	567.0000	20.0000	0.97	A	A
PS	1	573.3300	15.2200	0.98	A	A
RA	1	480.0000	100.0000	0.82	A	A
RB	1	577.6000	144.1000	0.99		A
RI	1	555.0000	10.5000	0.95	W	A
RU	1	456.1000	9.5000	0.78	A	A
SE	2	458.0000	9.0000	0.78	A	A
SE	1	458.0000	9.0000	0.78	A	A
SN	1	544.0000	17.1000	0.93	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** VE Vegetation Bq / kg  
**Radionuclide:** SR90

**EML Value:** 586.2800**EML Error:** 11.1400

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SR	1	451.0000	38.0000	0.77	A	A
TE	1	543.4000	24.9000	0.93	A	A
TI	1	477.0000	22.0000	0.81	A	A
TM	1	1640.0000	45.2000	2.80	A	N
TN	1	534.4000	15.7400	0.91	A	A
TO	1	501.0000	8.7100	0.86	A	A
TQ	1	579.4000	6.6000	0.99	A	A
TX	1	504.0000	19.0000	0.86	A	A
UY	1	437.0000	7.0000	0.75	W	A
WA	1	477.0000	19.0000	0.81	A	A
WC	1	496.0000	62.8000	0.85	A	A
WE	2	636.4000	27.8000	1.09	W	A
WE	1	614.2000	25.9000	1.05	W	A
WE	3	706.7000	31.5000	1.21	W	W
WI	1	452.0000	41.0000	0.77	A	A
WI	3	503.0000	75.1000	0.86	A	A
WI	2	446.0000	45.5000	0.76	A	A
YA	1	517.0000	22.0000	0.88	A	A

**Total Number Reported:** 52

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** AM241

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**EML Value:** 1.4737  
**EML Error:** 0.0212

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	1.6000	0.3000	1.09	N	A
AG	1	1.5000	0.2210	1.02	A	A
AI	1	1.2600	0.0300	0.86	A	W
AM	1	1.5300	0.1500	1.04	A	A
AN	1	1.5000	0.0800	1.02	A	A
AT	1	1.1070	0.3460	0.75	W	N
AU	1	1.6300	0.2000	1.11	A	A
BE	1	1.4730	0.0700	1.00	A	A
BM	1	1.5100	0.2800	1.02	W	A
BP	1	1.3400	0.0300	0.91		A
BU	1	1.0100	0.0500	0.69	A	N
BX	1	1.4500	0.1800	0.98	A	A
CB	1	1.5570	0.3070	1.06	A	A
CH	1	1.5560	0.1270	1.06	A	A
CL	1	2.8000	4.5000	1.90	A	N
CR	1	1.8000	0.1000	1.22		W
CS	1	1.0300	0.1900	0.70		N
CW	1	1.5800	0.0330	1.07	A	A
EC	2	1.6100	0.4600	1.09	A	A
EC	5	1.5500	0.4500	1.05	A	A
EC	4	1.5600	0.4500	1.06	A	A
EC	1	1.6000	0.4500	1.09	A	A
EC	3	1.4500	0.4100	0.98	A	A
EG	1	1.5700	0.1000	1.07	A	A
FL	1	1.9200	0.2500	1.30		W
FM	2	1.4000	0.4000	0.95	W	A
FM	1	1.8000	0.6000	1.22	W	W
FM	3	1.8000	0.5000	1.22	W	W
FR	1	1.4000	0.5000	0.95		A
GE	1	1.5400	0.1690	1.04	A	A
GT	1	1.4000	0.3000	0.95	A	A
IN	1	1.4100	0.2430	0.96	A	A
IO	1	1.6200	0.3800	1.10		A
IS	1	1.4290	0.0011	0.97	W	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** AM241

**EML Value:** 1.4737  
**EML Error:** 0.0212

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
IT	1	1.3000	0.1200	0.88	A	W
KO	1	1.5520	0.0690	1.05		A
KS	1	1.5000	0.1000	1.02		A
LA	1	1.5360	0.1863	1.04	A	A
LA	2	1.5400	0.1787	1.04	A	A
LA	3	1.6010	0.1873	1.09	A	A
LM	1	2.0900	0.2300	1.42	W	N
LV	1	1.1400	0.2600	0.77	N	N
LW	1	1.5200	0.1210	1.03	W	A
ME	1	1.4000	0.1000	0.95	A	A
ME	2	1.4000	0.5000	0.95	A	A
ME	3	1.7000	0.3000	1.15	A	A
MH	1	1.1600	0.2800	0.79		N
MI	1	1.4000	0.2000	0.95		A
MI	2	1.8000	0.2000	1.22		W
NJ	1	1.3900	0.4500	0.94	W	A
NJ	2	1.5300	0.6200	1.04	W	A
NJ	3	1.5400	0.4000	1.04	W	A
NM	1	1.3000	0.0400	0.88	A	W
NQ	1	1.5600	0.1100	1.06	A	A
NZ	1	1.5200	0.8700	1.03		A
OD	1	1.6800	0.1700	1.14	A	A
OK	1	1.4800	0.2000	1.00	A	A
OT	1	1.5000	0.1000	1.02	A	A
RI	1	1.7900	0.1350	1.22	A	W
RS	1	0.2700	0.0150	0.18		N
SD	1	1.4200	0.0500	0.96	A	A
SE	1	1.4400	0.0740	0.98	A	A
SE	2	1.4800	0.0590	1.00	A	A
SI	1	1.7800	0.1300	1.21	A	W
SK	1	1.4700	0.1300	1.00	A	A
SK	2	1.5100	0.1000	1.02	A	A
SK	3	1.4700	0.0900	1.00	A	A
SN	1	1.5000	0.2340	1.02	A	A
SR	1	1.3900	0.2500	0.94	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** AM241

**EML Value:** 1.4737  
**EML Error:** 0.0212

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TE	1	1.6800	0.1400	1.14	A	A
TI	1	1.4400	0.1700	0.98	A	A
TM	1	1.6600	0.0890	1.13	A	A
TN	1	1.4950	0.0700	1.01	A	A
TO	1	1.9190	0.3160	1.30	A	W
TX	1	1.2400	0.0200	0.84	A	W
UY	1	1.4900	0.1300	1.01	W	A
WA	1	1.6000	0.1100	1.09	A	A
WC	1	1.3900	0.2500	0.94	A	A
WE	1	1.5500	0.1100	1.05	A	A
WE	2	1.5800	0.1100	1.07	A	A
WE	3	1.5300	0.1000	1.04	A	A
WI	2	1.4300	0.2100	0.97	A	A
WI	1	1.6900	0.2320	1.15	A	A
WI	3	1.6100	0.2260	1.09	A	A
YA	1	1.5070	0.0150	1.02	A	A

**Total Number Reported:** 85

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** Bq U

**EML Value:** 2.8355  
**EML Error:** 0.1212

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AF	1	3.9200	1.0400	1.38		N
AG	1	2.7800	0.2750	0.98		A
AI	1	2.5400	0.3000	0.90	W	A
AM	1	2.5000	22.0000	0.88	A	A
AT	1	2.6630	0.2560	0.94	A	A
BP	1	2.5900	0.1000	0.91		A
BU	1	2.8000	0.1400	0.99	A	A
FG	1	1.2100	0.3000	0.43		N
HT	1	2.8700	0.2000	1.01	A	A
IO	1	2.6600	0.2000	0.94	A	A
KO	1	2.7510	0.1008	0.97		A
NJ	3	2.7800	0.2000	0.98	A	A
NJ	2	2.9100	0.2100	1.03	A	A
NJ	1	2.8000	0.2000	0.99	A	A
OH	1	2.6400	0.4100	0.93	N	A
OT	1	383.0000	33.0000	**.**	A	N
SD	1	2.6600	0.0800	0.94		A
SN	1	2.5900	0.3450	0.91		A
TE	1	3.2700	0.4300	1.15	A	A
UY	1	2.5600	0.2700	0.90	A	A
WA	1	2.5800	0.1800	0.91	W	A
WI	1	2.5300	0.2400	0.89	A	A
WI	3	2.5500	0.2540	0.90	A	A
WI	2	2.5600	0.2560	0.90	A	A
WO	2	2.7500	0.2600	0.97	A	A
WO	1	2.2800	0.2500	0.80	A	W
WT	1	2.6430	0.4290	0.93	A	A

**Total Number Reported:** 27

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CO60

**EML Value:** 347.3300**EML Error:** 12.3998

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	348.0000	5.0000	1.00	A	A
AF	1	339.1700	3.2700	0.98		A
AG	1	347.0000	57.2000	1.00	A	A
AI	1	309.4000	50.0000	0.89	W	W
AM	1	363.4000	0.8200	1.05	A	A
AN	1	345.0000	13.0000	0.99	A	A
AT	1	331.5290	22.1140	0.95	A	A
AU	1	358.0000	13.0000	1.03	A	A
AW	1	351.0000	28.0000	1.01	A	A
BA	1	343.7600	27.4200	0.99	A	A
BE	1	322.0000	28.0000	0.93	A	A
BM	1	344.0000	29.0000	0.99	A	A
BN	1	355.7000	5.4200	1.02	A	A
BP	1	345.0000	10.0000	0.99		A
BQ	1	330.0000	23.0000	0.95	A	A
BU	1	350.0000	18.0000	1.01	A	A
BX	1	368.0000	15.0000	1.06	A	A
CA	1	332.0000	33.0000	0.96	A	A
CB	1	329.8000	12.7000	0.95	A	A
CD	1	338.0000	9.0000	0.97	A	A
CE	1	319.0000	15.0000	0.92	A	A
CF	3	345.7000	1.7000	1.00	A	A
CF	2	342.6000	1.0000	0.99	A	A
CF	1	343.3000	1.7000	0.99	A	A
CG	1	358.0000	3.1000	1.03	A	A
CH	1	345.7000	3.3100	1.00	A	A
CL	1	342.0000	0.7000	0.99	A	A
CM	2	343.0000	5.0000	0.99	A	A
CM	1	345.0000	5.0000	0.99	A	A
CP	1	374.0000	15.0000	1.08		A
CR	1	360.0000	2.0000	1.04		A
CS	1	342.9000	25.4600	0.99	W	A
CU	1	355.0000	3.0000	1.02	A	A
CW	1	352.0000	6.0000	1.01	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CO60

**EML Value:** 347.3300**EML Error:** 12.3998

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
EC	3	362.0000	9.9200	1.04	A	A
EC	4	362.9000	9.9400	1.04	A	A
EC	5	363.0000	9.9400	1.04	A	A
EC	1	361.7000	9.9100	1.04	A	A
EC	2	363.3000	9.9500	1.05	A	A
EG	1	360.0000	30.0000	1.04	A	A
EP	1	360.3300	17.6400	1.04	A	A
FE	1	356.2660	6.9899	1.03	A	A
FG	1	346.6000	69.9000	1.00	A	A
FL	1	345.1000	0.4200	0.99	A	A
FM	1	354.0000	5.0000	1.02	A	A
FM	2	349.0000	5.0000	1.00	A	A
FM	3	357.0000	5.0000	1.03	A	A
FN	1	362.0000	23.0000	1.04	A	A
FR	1	341.0000	34.0000	0.98		A
GC	2	340.5000	14.1500	0.98	A	A
GC	1	342.1000	42.0000	0.99	A	A
GC	3	339.9000	14.4300	0.98	A	A
GE	1	356.0000	38.7000	1.02	A	A
GT	1	360.0000	50.0000	1.04	A	A
HU	2	349.5000	9.1000	1.01	W	A
HU	1	350.2000	9.1000	1.01	W	A
IL	1	359.7000	3.7000	1.04	A	A
IN	1	357.0000	11.6000	1.03	A	A
IO	1	353.5000	17.8000	1.02	A	A
IS	1	347.7000	36.1700	1.00	A	A
IT	1	346.6000	20.5000	1.00	N	A
KA	1	340.6700	25.2600	0.98	A	A
KO	1	351.9000	7.5800	1.01		A
KS	1	360.2000	12.7000	1.04	A	A
LA	3	382.0000	43.0000	1.10		A
LA	1	383.0000	43.0000	1.10		W
LA	2	382.0000	43.0000	1.10		A
LL	1	375.0000	32.2000	1.08	A	A
LM	1	374.3400	1.1200	1.08	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CO60

**EML Value:** 347.3300**EML Error:** 12.3998

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LN	1	350.0000	14.0000	1.01	A	A
LV	1	344.0000	8.0000	0.99	A	A
LW	1	350.0000	15.0000	1.01	W	A
ME	3	377.4000	6.3000	1.09	A	A
ME	2	373.6000	5.8000	1.08	A	A
ME	1	377.4000	6.1000	1.09	A	A
MH	1	343.9000	11.0000	0.99	A	A
MI	1	361.0000	7.8000	1.04		A
MI	2	367.0000	7.9000	1.06		A
MS	1	354.0000	35.0000	1.02	A	A
NA	1	338.0000	11.0000	0.97	A	A
NJ	3	348.0000	5.0000	1.00	A	A
NJ	2	344.0000	4.0000	0.99	A	A
NJ	1	348.0000	5.0000	1.00	A	A
NL	1	372.0000	6.0000	1.07	A	A
NP	1	353.8000	1.5000	1.02	A	A
NQ	1	402.0000	44.0000	1.16	A	W
NR	1	355.0000	71.0000	1.02	A	A
NS	3	872.9630	3.7030	2.51		N
NS	2	866.6670	3.7040	2.49		N
NS	1	864.4440	3.3330	2.49		N
OB	1	385.0000	50.3000	1.11	A	W
OD	1	366.1100	7.4300	1.05	A	A
OH	1	353.3000	2.9000	1.02	A	A
OK	1	363.3000	4.4000	1.05	W	A
OT	1	352.0000	3.0000	1.01	A	A
OU	1	394.0000	8.7300	1.13	A	W
PR	1	383.3300	0.9500	1.10	N	W
PS	1	316.6700	2.5600	0.91	A	A
RC	1	359.0000	15.0000	1.03	A	A
RI	1	353.0000	3.6700	1.02	A	A
RM	1	330.3000	7.9000	0.95	A	A
RS	1	126.6900	5.3600	0.37		N
RU	1	312.0000	34.3000	0.90	A	W
SA	1	352.0000	22.0000	1.01	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CO60

**EML Value:** 347.3300**EML Error:** 12.3998

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SB	1	354.5000	36.2000	1.02	A	A
SD	1	393.1000	15.0700	1.13	W	W
SE	1	325.0000	5.7000	0.94	A	A
SI	1	354.0000	7.0000	1.02	A	A
SK	1	343.0000	18.0000	0.99	A	A
SL	1	315.4300	4.2900	0.91	A	A
SN	1	338.0000	34.9000	0.97	A	A
SR	1	352.0000	25.0000	1.01	A	A
SX	1	390.0400	15.0800	1.12	W	W
SX	2	337.8800	13.0900	0.97	W	A
SY	1	352.0000	15.0000	1.01	A	A
TE	1	349.2000	2.6000	1.00	A	A
TI	1	367.0000	5.8000	1.06	A	A
TM	1	338.0000	7.2300	0.97	A	A
TN	1	372.7000	4.0000	1.07	A	A
TO	1	380.3970	26.6940	1.10	A	A
TP	1	340.6700	3.9900	0.98	A	A
TQ	1	338.8000	9.8000	0.98	A	A
TW	1	327.0000	2.2600	0.94	A	A
TX	1	361.0000	3.0000	1.04	A	A
UC	1	362.0000	3.7300	1.04	A	A
US	1	353.0000	50.8000	1.02		A
UY	1	350.0000	25.0000	1.01	A	A
WA	1	349.0000	6.0000	1.00	A	A
WC	1	365.0000	28.3000	1.05	A	A
WE	1	357.6000	4.8000	1.03	A	A
WE	3	348.7000	7.5000	1.00	A	A
WE	2	352.6000	4.8000	1.01	A	A
WI	1	348.0000	46.4000	1.00	A	A
WI	2	353.0000	47.0000	1.02	A	A
WI	3	365.0000	48.3000	1.05	A	A
WN	3	356.0000	9.0000	1.02	A	A
WN	1	356.0000	9.0000	1.02	A	A
WN	2	353.0000	8.0000	1.02	A	A
WO	2	360.8000	56.2000	1.04	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CO60

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**EML Value:** 347.3300

**EML Error:** 12.3998

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WO	1	359.9000	71.3300	1.04	A	A
WT	1	343.0000	14.8000	0.99	A	A
WV	1	366.4000	2.9200	1.05	A	A
YA	1	350.3000	10.0000	1.01	A	A
YU	1	308.8000	9.6000	0.89	A	W

**Total Number Reported:** 144

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS134

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**EML Value:** 3.3572  
**EML Error:** 0.2004

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	3.8000	0.9000	1.13		A
AF	1	2.9800	0.5300	0.89		W
AG	1	2.8300	0.6110	0.84		W
AI	1	2.7800	0.5200	0.83		W
AN	1	2.3500	0.7500	0.70		N
AT	1	3.1220	0.4630	0.93		A
AU	1	3.1000	1.4000	0.92		A
AW	1	3.1000	0.6000	0.92		A
BE	1	2.0000	1.0000	0.60		N
BN	1	3.5000	0.1800	1.04		A
BP	1	3.6200	0.4700	1.08		A
BQ	1	2.0000	2.0000	0.60		N
BU	1	3.5000	0.7000	1.04		A
BX	1	3.1600	1.2100	0.94		A
CB	1	2.9200	0.3400	0.87		W
CD	1	3.4000	1.0000	1.01		A
CF	1	2.3100	0.1400	0.69		N
CF	2	2.8400	0.1000	0.85		W
CF	3	3.1800	0.1600	0.95		A
CG	1	2.5300	0.7500	0.75		N
CH	1	3.3700	0.7000	1.00		A
CL	1	3.0000	0.2000	0.89		W
CM	1	3.0000	0.1000	0.89		W
CM	2	3.1000	0.1000	0.92		A
CP	1	3.8000	0.6000	1.13		A
CR	1	2.8000	0.1000	0.83		W
CU	1	3.6000	0.2000	1.07		A
EC	5	3.1200	0.4900	0.93		A
EC	2	3.0500	0.4700	0.91		A
EC	3	2.9600	0.5200	0.88		W
EC	4	3.3400	0.5000	1.00		A
EC	1	3.2400	0.5600	0.96		A
EG	1	3.0000	0.4000	0.89		W
EP	1	3.2000	0.5300	0.95		A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS134

**EML Value:** 3.3572  
**EML Error:** 0.2004

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
FG	1	3.0200	0.7500	0.90		A
FL	1	3.4400	0.1600	1.02		A
FM	3	3.3000	0.2000	0.98		A
FM	1	3.3000	0.2000	0.98		A
FM	2	3.7000	0.2000	1.10		A
FN	1	3.7000	0.4500	1.10		A
FR	1	2.7000	1.4000	0.80		W
GE	1	2.7300	0.6590	0.81		W
GT	1	3.0000	1.0000	0.89		W
HU	1	3.1300	0.2200	0.93		A
HU	2	2.7000	0.2600	0.80		W
IL	1	3.1000	0.1000	0.92		A
IN	1	3.5800	0.2900	1.07		A
IO	1	3.1100	1.5500	0.93		A
IS	1	2.8800	0.0647	0.86		W
IT	1	4.4300	0.7400	1.32		N
KA	1	3.2900	1.7600	0.98		A
KO	1	3.0600	0.3200	0.91		A
KS	1	3.3000	0.2000	0.98		A
LA	2	3.6200	0.5400	1.08		A
LA	1	3.5600	0.5300	1.06		A
LA	3	3.6200	0.5400	1.08		A
LV	1	3.1200	0.2300	0.93		A
ME	1	3.6000	0.2000	1.07		A
ME	3	3.1000	0.2000	0.92		A
ME	2	3.4000	0.4000	1.01		A
MH	1	2.6700	0.2200	0.80		N
MI	1	3.3000	0.2000	0.98		A
MI	2	3.5000	0.2000	1.04		A
MS	1	3.1500	0.3200	0.94		A
NA	1	3.3700	0.3500	1.00		A
NJ	2	3.2900	0.9000	0.98		A
NJ	1	3.3000	0.7000	0.98		A
NJ	3	3.3000	0.5300	0.98		A
NL	1	3.6100	0.1500	1.08		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS134

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**EML Value:** 3.3572  
**EML Error:** 0.2004

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
NP	1	2.6000	0.5000	0.77		N
NQ	1	6.0000	2.0000	1.79		N
NS	3	8.8000	0.6520	2.62		N
NS	1	8.2700	0.8040	2.46		N
NS	2	7.8850	0.7190	2.35		N
NZ	1	4.8000	1.9000	1.43		N
OH	1	2.8000	0.6500	0.83		W
OT	1	3.1000	0.7000	0.92		A
PR	1	3.3200	0.1460	0.99		A
PS	1	3.2400	0.5600	0.96		A
RC	1	3.5000	0.7000	1.04		A
RM	1	3.6000	1.0000	1.07		A
RS	1	1.4800	0.0200	0.44		N
RU	1	4.3000	0.9000	1.28		W
SA	1	3.0000	0.7000	0.89		W
SB	1	2.6080	0.7888	0.78		N
SE	1	3.6000	0.6000	1.07		A
SI	1	3.6000	0.2000	1.07		A
SK	1	3.2500	0.3400	0.97		A
SN	1	3.0400	0.8690	0.91		A
SR	1	3.0000	0.8000	0.89		W
SX	1	3.4500	0.4000	1.03		A
SX	2	2.5400	0.5500	0.76		N
SY	1	3.4100	0.3000	1.02		A
TE	1	3.4000	0.6000	1.01		A
TI	1	2.9300	0.3210	0.87		W
TM	1	2.6200	0.1820	0.78		N
TN	1	3.7700	0.9400	1.12		A
TO	1	3.6390	0.9290	1.08		A
TW	1	3.0100	0.2900	0.90		W
TX	1	2.9900	0.2400	0.89		W
US	1	3.9970	1.7210	1.19		W
UY	1	3.3100	0.4900	0.99		A
WA	1	3.0600	0.7000	0.91		A
WC	1	3.3800	0.3900	1.01		A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS134

**EML Value:** 3.3572  
**EML Error:** 0.2004

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WE	3	3.3200	0.2500	0.99		A
WE	1	2.6900	0.1600	0.80		W
WE	2	3.4300	0.2500	1.02		A
WI	2	2.6400	0.6780	0.79		N
WI	1	3.0700	0.8350	0.91		A
WI	3	3.3100	0.7890	0.99		A
WN	3	3.1000	0.2000	0.92		A
WN	2	3.0000	0.3000	0.89		W
WN	1	2.8000	0.4000	0.83		W
WO	1	3.2300	1.5000	0.96		A
WO	2	2.0900	1.0400	0.62		N
WV	1	3.0000	0.6400	0.89		W
YU	1	3.2000	0.2000	0.95		A

**Total Number Reported:** 117

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS137

**EML Value:** 56.0670  
**EML Error:** 2.9286

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	49.3000	1.3000	0.88	A	W
AF	1	53.5300	3.0200	0.95	A	A
AG	1	56.6000	9.4100	1.01	A	A
AI	1	50.5000	8.0000	0.90	A	A
AM	1	56.9300	0.5200	1.01	A	A
AN	1	54.8000	3.6000	0.98	A	A
AT	1	54.0730	5.6910	0.96	A	A
AU	1	57.4000	3.1000	1.02	A	A
AW	1	57.0000	5.1000	1.02	A	A
BA	1	56.0300	9.8800	1.00	A	A
BE	1	45.0000	10.0000	0.80	A	W
BM	1	56.9000	7.0000	1.01	A	A
BN	1	60.7000	1.6000	1.08	A	A
BP	1	56.2000	1.7000	1.00	A	A
BQ	1	49.0000	3.0000	0.87	A	W
BU	1	56.0000	2.8000	1.00	A	A
BX	1	55.9000	2.3000	1.00	A	A
CA	1	56.0000	5.0000	1.00	A	A
CB	1	56.2000	3.4000	1.00	A	A
CD	1	55.0000	2.0000	0.98	A	A
CE	1	52.0000	4.0000	0.93	A	A
CF	2	54.8000	0.4000	0.98	A	A
CF	3	55.6000	0.6000	0.99	A	A
CF	1	54.8000	0.5000	0.98	A	A
CG	1	57.5000	1.0000	1.03	A	A
CH	1	54.8800	1.4700	0.98	A	A
CL	1	56.5000	0.5000	1.01	A	A
CM	1	54.8000	1.2000	0.98	A	A
CM	2	55.3000	1.2000	0.99	A	A
CP	1	65.3000	3.7000	1.16		W
CR	1	59.3000	0.7000	1.06		A
CS	1	60.0800	4.5800	1.07	W	A
CU	1	52.0000	2.0000	0.93	A	A
CW	1	55.2000	1.3000	0.99	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS137

**EML Value:** 56.0670  
**EML Error:** 2.9286

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
EC	4	57.2000	2.4300	1.02	A	A
EC	5	57.2000	2.4400	1.02	A	A
EC	3	56.7000	2.4100	1.01	A	A
EC	2	56.9000	2.4200	1.01	A	A
EC	1	56.6000	2.4100	1.01	A	A
EG	1	57.0000	4.0000	1.02	A	A
EP	1	58.6400	3.4100	1.05	A	A
FE	1	62.1156	2.0189	1.11	A	A
FG	1	56.5600	8.8000	1.01	A	A
FL	1	57.3000	0.2300	1.02	A	A
FM	1	61.0000	1.0000	1.09	A	A
FM	2	58.0000	1.0000	1.03	A	A
FM	3	60.0000	1.0000	1.07	A	A
FN	1	56.1000	5.1000	1.00	A	A
FR	1	56.0000	6.0000	1.00		A
GC	3	57.8000	2.9500	1.03	A	A
GC	2	57.5000	3.2200	1.03	A	A
GC	1	56.0800	7.3400	1.00	A	A
GE	1	57.2000	6.1800	1.02	A	A
GT	1	53.0000	12.0000	0.94	A	A
HU	2	54.5000	3.1000	0.97	W	A
HU	1	54.8000	3.2000	0.98	W	A
IL	1	57.9000	0.7000	1.03	A	A
IN	1	58.0000	2.2000	1.03	A	A
IO	1	57.9000	6.5000	1.03	A	A
IS	1	57.1500	7.0440	1.02	A	A
IT	1	54.2000	3.3300	0.97	N	A
KA	1	56.9000	6.6400	1.01	A	A
KO	1	57.3700	1.1600	1.02		A
KS	1	54.8000	2.6000	0.98	A	A
LA	3	65.3000	7.3000	1.16		W
LA	2	65.3000	7.3000	1.16		W
LA	1	64.3000	7.2000	1.15		W
LL	1	59.6000	8.1400	1.06	A	A
LM	1	59.4900	0.6400	1.06	W	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS137

**EML Value:** 56.0670  
**EML Error:** 2.9286

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LN	1	60.8000	6.0800	1.08	A	A
LV	1	65.4000	2.3000	1.17	A	W
LW	1	66.0000	5.0000	1.18	W	W
ME	2	61.8000	1.5000	1.10	A	A
ME	3	62.2000	1.8000	1.11	A	A
ME	1	62.2000	1.9000	1.11	A	A
MH	1	55.4000	2.9000	0.99	A	A
MI	2	61.1000	2.6000	1.09		A
MI	1	60.3000	2.6000	1.08		A
MS	1	57.4000	5.7000	1.02	A	A
NA	1	57.4000	2.0000	1.02	A	A
NJ	2	56.2000	3.0000	1.00	A	A
NJ	1	55.9000	3.0000	1.00	A	A
NJ	3	57.0000	3.0000	1.02	A	A
NL	1	62.8000	2.5000	1.12	A	A
NM	1	46.7000	2.6000	0.83		W
NP	1	55.7000	0.8000	0.99	A	A
NQ	1	54.7000	6.7000	0.98	A	A
NR	1	59.6000	11.9000	1.06	A	A
NS	3	151.0370	1.7410	2.69		N
NS	2	178.5930	1.7040	3.18		N
NS	1	149.3700	1.4440	2.66		N
NZ	1	63.0000	21.0000	1.12	A	W
OB	1	62.9000	11.9000	1.12	A	W
OD	1	61.8000	3.5800	1.10	A	A
OH	1	59.0000	1.0000	1.05	A	A
OK	1	57.7000	1.9000	1.03	W	A
OT	1	58.0000	2.0000	1.03	A	A
OU	1	64.4000	3.1700	1.15	A	W
PR	1	51.6800	0.7060	0.92	A	A
PS	1	51.1100	1.0900	0.91	A	A
RC	1	57.7000	1.1000	1.03	A	A
RI	1	59.8000	2.6800	1.07	A	A
RM	1	56.9000	2.2000	1.01	A	A
RS	1	20.1400	0.9200	0.36		N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS137

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**EML Value:** 56.0670  
**EML Error:** 2.9286

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
RU	1	61.0000	7.3000	1.09	A	A
SA	1	57.0000	4.0000	1.02	A	A
SB	1	56.4300	6.5680	1.01	A	A
SD	1	63.8500	3.4710	1.14	W	W
SE	1	57.1000	1.4000	1.02	A	A
SI	1	57.0000	1.3000	1.02	A	A
SK	1	57.4000	3.4000	1.02	A	A
SL	1	53.5100	2.0700	0.95	N	A
SN	1	51.2000	5.2800	0.91	A	A
SR	1	56.2000	6.0000	1.00	A	A
SX	1	61.7200	3.4100	1.10	A	A
SX	2	56.0300	3.1000	1.00	A	A
SY	1	58.2000	2.6000	1.04	A	A
TE	1	57.2000	1.7000	1.02	A	A
TI	1	59.6000	1.7700	1.06	A	A
TM	1	52.0000	1.7900	0.93	A	A
TN	1	62.2800	4.2400	1.11	W	A
TO	1	64.3340	6.9830	1.15	A	W
TP	1	54.2500	0.6300	0.97	A	A
TQ	1	59.4000	1.7000	1.06	A	A
TW	1	53.3000	0.8500	0.95	A	A
TX	1	59.1000	1.0000	1.05	A	A
UC	1	59.4000	3.0600	1.06	A	A
US	1	61.4600	6.9650	1.10		A
UY	1	58.6000	6.2000	1.04	A	A
WA	1	57.7000	4.0000	1.03	A	A
WC	1	61.2000	8.2200	1.09	A	A
WE	1	59.3000	1.2000	1.06	A	A
WE	2	58.1000	1.3000	1.04	A	A
WE	3	59.4600	2.0000	1.06	A	A
WI	1	55.3000	7.7000	0.99	A	A
WI	2	55.5000	7.6600	0.99	A	A
WI	3	57.4000	7.8500	1.02	A	A
WN	1	56.7000	2.7000	1.01	A	A
WN	2	57.8000	2.5000	1.03	A	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** CS137

**EML Value:** 56.0670  
**EML Error:** 2.9286

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WN	3	57.4000	2.5000	1.02	A	A
WO	2	56.8800	7.4800	1.01	A	A
WO	1	58.3100	9.5300	1.04	A	A
WT	1	59.1000	4.4400	1.05	N	A
WV	1	59.7000	1.3400	1.07	A	A
YA	1	55.3000	1.7000	0.99	A	A
YU	1	48.8000	2.2000	0.87	A	W

**Total Number Reported:** 146

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** GROSS ALPHA

**EML Value:** 375.0000**EML Error:** 37.5000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	357.0000	35.0000	0.95		A
AG	1	321.0000	45.5000	0.86	A	A
AI	1	330.0000	15.0000	0.88	A	A
AM	1	307.4400	7.5500	0.82	A	A
AP	1	556.0000	0.0400	1.48		N
AS	1	429.0000	24.0000	1.14	A	W
AT	1	331.5000	17.5000	0.88	A	A
AU	1	407.0000	128.0000	1.09	A	A
BE	1	361.0000	40.0000	0.96	A	A
BN	1	288.0000	89.1000	0.77	N	W
BP	1	318.0000	16.0000	0.85		A
BQ	1	380.0000	20.0000	1.01	N	A
BU	1	372.0000	30.0000	0.99		A
BX	1	468.0000	27.0000	1.25	A	W
CE	1	303.0000	24.0000	0.81	W	A
CG	1	194.0000	20.0000	0.52		N
CH	1	344.7000	42.2000	0.92	A	A
CL	1	356.0000	24.1000	0.95		A
CM	1	512.0000	15.5000	1.37	W	N
CM	2	482.0000	15.0000	1.28	W	W
CP	1	388.0000	21.0000	1.03		A
CR	1	352.0000	4.0000	0.94		A
CW	1	365.0000	11.0000	0.97	A	A
CZ	3	420.0000	34.0000	1.12		A
CZ	1	425.0000	22.0000	1.13		W
CZ	2	420.0000	34.0000	1.12		A
EG	1	360.0000	29.0000	0.96	A	A
FG	1	356.5000	35.0000	0.95	A	A
FL	1	655.0900	16.6400	1.75	A	N
FN	1	366.0000	12.0000	0.98	A	A
GE	1	483.0000	20.5000	1.29	W	W
GS	3	520.0000	40.0000	1.39	W	N
GS	1	540.0000	40.0000	1.44	W	N
GS	2	550.0000	40.0000	1.47	W	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** GROSS ALPHA

**EML Value:** 375.0000**EML Error:** 37.5000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
GT	1	360.0000	50.0000	0.96	A	A
HC	1	407.0000	41.0000	1.09	N	A
IL	1	394.4000	15.9000	1.05	W	A
IO	1	440.0000	144.0000	1.17	A	W
IS	1	350.4000	37.5200	0.93	A	A
IT	1	381.4000	42.6000	1.02	A	A
KA	1	345.6700	64.6700	0.92	A	A
KG	1	527.8000	20.7000	1.41		N
KO	1	374.1600	38.5000	1.00		A
KS	1	312.7000	24.3000	0.83	A	A
LI	1	366.3000	44.1000	0.98		A
LI	2	377.2000	32.5000	1.01		A
LI	3	344.4000	30.3000	0.92		A
LI	4	348.3000	31.3000	0.93		A
LM	1	387.2400	111.2800	1.03	A	A
LV	1	397.0000	50.0000	1.06	W	A
LW	1	340.0000	25.3000	0.91	A	A
MI	1	260.0000	22.0000	0.69		W
MI	2	234.0000	42.0000	0.62		W
NJ	1	339.0000	34.0000	0.90	W	A
NJ	2	349.0000	28.0000	0.93	W	A
NJ	3	347.0000	28.0000	0.93	W	A
NL	1	312.0000	36.0000	0.83	A	A
NQ	1	485.0000	32.0000	1.29	W	N
NZ	1	223.0000	13.0000	0.60	N	W
OB	1	318.0000	34.5000	0.85	N	A
OH	1	422.0000	28.0000	1.13	W	A
OT	1	960.0000	43.0000	2.56	A	N
OU	1	407.0000	55.8000	1.09	W	A
PC	1	454.0000	64.0000	1.21		W
PS	1	401.6300	10.4100	1.07	W	A
RB	1	677.5000	106.7000	1.81		N
RG	1	315.4000	16.8000	0.84	A	A
RI	1	746.0000	42.5000	1.99	A	N
RS	1	439.1000	24.5800	1.17		W

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** GROSS ALPHA

**EML Value:** 375.0000**EML Error:** 37.5000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
SA	1	410.0000	46.0000	1.09	W	A
SB	2	362.0000	21.5000	0.96	A	A
SB	1	373.0000	21.9000	1.00	A	A
SD	1	369.0000	4.0000	0.98	A	A
SN	1	573.0000	46.0000	1.53	W	N
SR	1	351.0000	81.0000	0.94	A	A
TE	1	265.4000	7.7000	0.71	A	W
TI	1	427.0000	38.0000	1.14	W	W
TM	1	425.0000	18.3000	1.13	A	W
TN	1	379.8000	18.1000	1.01	A	A
TO	1	401.2560	30.2280	1.07	A	A
TQ	1	383.0000	18.0000	1.02	A	A
TW	1	360.4500	28.0700	0.96	A	A
TX	1	418.0000	19.0000	1.12	A	A
UC	1	407.8000	7.5000	1.09		A
UY	1	369.0000	18.0000	0.98	A	A
WC	1	482.0000	54.9000	1.28	A	W
WE	3	316.0000	38.9000	0.84	W	A
WE	1	291.0000	35.2000	0.78	W	W
WE	2	309.0000	37.0000	0.82	W	A
WO	1	365.5000	40.8000	0.98	A	A
WO	2	404.4100	46.9900	1.08	A	A
WT	1	318.0000	28.0000	0.85	A	A
WV	1	429.0000	48.7000	1.14	A	W
YA	1	281.0000	6.5800	0.75	A	W
YU	1	358.0000	9.0000	0.95		A

**Total Number Reported:** 95

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** GROSS BETA

**EML Value:** 1030.0000**EML Error:** 103.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	988.0000	40.0000	0.96		A
AG	1	875.0000	120.0000	0.85	A	A
AI	1	1063.0000	50.0000	1.03	A	A
AM	1	1024.3101	11.3600	0.99	A	A
AP	1	663.0000	0.0600	0.64		W
AS	1	869.0000	27.0000	0.84	A	A
AT	1	901.0000	48.6500	0.88	A	A
AU	1	971.0000	308.0000	0.94	A	A
BE	1	930.0000	55.0000	0.90	A	A
BN	1	887.4000	120.2000	0.86	A	A
BP	1	857.0000	43.0000	0.83		A
BQ	1	750.0000	52.0000	0.73	A	W
BX	1	899.0000	30.0000	0.87	A	A
CA	1	1400.0000	100.0000	1.36	A	W
CD	1	900.0000	90.0000	0.87	A	A
CE	1	930.0000	52.0000	0.90	A	A
CG	1	805.0000	27.0000	0.78		W
CH	1	982.5000	46.1000	0.95	A	A
CL	1	1210.0000	65.7000	1.17		A
CM	2	1180.0000	15.0000	1.15	A	A
CM	1	1182.0000	15.0000	1.15	A	A
CP	1	1150.0000	55.0000	1.12		A
CR	1	960.0000	30.0000	0.93		A
CW	1	859.0000	16.0000	0.83	A	A
CZ	1	1147.0000	29.0000	1.11		A
CZ	2	919.0000	34.0000	0.89		A
CZ	3	914.0000	34.0000	0.89		A
EG	1	1080.0000	58.0000	1.05	A	A
FG	1	940.0000	51.0000	0.91	A	A
FL	1	1177.9700	14.8300	1.14	A	A
FN	1	1087.0000	28.0000	1.05	A	A
GE	1	1101.0000	25.6000	1.07	A	A
GS	1	1140.0000	40.0000	1.11	A	A
GS	3	1180.0000	40.0000	1.15	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** GROSS BETA

**EML Value:** 1030.0000**EML Error:** 103.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
GS	2	1230.0000	50.0000	1.19	A	A
GT	1	910.0000	100.0000	0.88	A	A
HC	1	1005.0000	111.0000	0.98	N	A
HU	1	1100.0000	100.0000	1.07	W	A
HU	2	1250.0000	110.0000	1.21	W	A
IL	1	1078.8000	25.1000	1.05	A	A
IO	1	907.0000	157.0000	0.88	A	A
IS	1	954.6000	96.7600	0.93	A	A
IT	1	1041.0000	72.4000	1.01	A	A
KA	1	898.0000	97.6000	0.87	A	A
KO	1	934.0600	52.9000	0.91		A
KS	1	905.6000	31.5000	0.88	A	A
LI	4	929.4000	29.8000	0.90		A
LI	3	966.8000	30.8000	0.94		A
LI	2	983.0000	40.5000	0.95		A
LI	1	1042.8000	59.0000	1.01		A
LM	1	754.4300	120.3800	0.73	A	W
LV	1	855.0000	110.0000	0.83	A	A
LW	1	1000.0000	36.2000	0.97	A	A
MI	1	1114.0000	40.0000	1.08		A
MI	2	1013.0000	66.0000	0.98		A
NJ	2	984.0000	15.0000	0.95	A	A
NJ	1	977.0000	15.0000	0.95	A	A
NJ	3	966.0000	15.0000	0.94	A	A
NL	1	1013.0000	106.0000	0.98	A	A
NP	1	1111.0000	10.0000	1.08	A	A
NQ	1	1109.0000	78.0000	1.08	A	A
NZ	1	879.0000	42.0000	0.85	W	A
OB	1	859.0000	87.5000	0.83	A	A
OH	1	914.0000	27.0000	0.89	A	A
OT	1	2.9000	0.2000	0.00	A	N
OU	1	946.0000	73.8000	0.92	A	A
PC	1	1041.0000	44.0000	1.01		A
PS	1	1024.1801	12.5300	0.99	A	A
RB	1	1256.1000	314.3000	1.22		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** GROSS BETA

**EML Value:** 1030.0000**EML Error:** 103.0000

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
RG	1	861.6000	22.5000	0.84	A	A
RI	1	932.0000	28.9000	0.90	A	A
RS	1	1059.0000	63.4200	1.03		A
SA	1	986.0000	84.0000	0.96	A	A
SB	1	886.0000	24.5000	0.86	A	A
SB	2	855.0000	24.1000	0.83	A	A
SD	1	960.0000	6.0000	0.93	A	A
SN	1	1782.0000	59.3000	1.73	A	N
SR	1	826.0000	125.0000	0.80	A	W
TE	1	930.6000	12.0000	0.90	A	A
TI	1	895.0000	38.0000	0.87	A	A
TM	1	969.0000	19.2000	0.94	A	A
TN	1	917.1000	21.3000	0.89	A	A
TO	1	1123.0480	40.2040	1.09	A	A
TQ	1	1051.0000	23.0000	1.02	A	A
TW	1	1021.2400	47.7600	0.99	A	A
TX	1	917.0000	29.0000	0.89	A	A
UC	1	916.8000	32.2000	0.89		A
UY	1	878.0000	22.0000	0.85	A	A
WC	1	982.0000	102.0000	0.95	A	A
WE	3	969.0000	130.0000	0.94	A	A
WE	2	984.0000	131.0000	0.95	A	A
WE	1	951.0000	128.0000	0.92	A	A
WO	1	910.0000	48.9000	0.88	A	A
WO	2	951.9000	53.7000	0.92	A	A
WT	1	1140.0000	42.9000	1.11	A	A
WV	1	998.0000	54.8000	0.97	A	A
YA	1	951.0000	15.2000	0.92	A	A
YU	1	916.0000	7.0000	0.89		A

**Total Number Reported:** 98

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** H3

**EML Value:** 283.7000  
**EML Error:** 3.3800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	577.0000	12.0000	2.03	N	W
AF	1	320.0500	53.4200	1.13		A
AG	1	316.0000	43.0000	1.11	A	A
AI	1	130.0000	13.0000	0.46	W	N
AM	1	246.7700	3.2660	0.87	A	W
AN	1	289.0000	3.0000	1.02	A	A
AT	1	277.1480	7.2370	0.98	A	A
AU	1	278.0000	24.0000	0.98	A	A
BE	1	300.0000	11.0000	1.06	A	A
BN	1	307.4000	21.6000	1.08	A	A
BP	1	256.0000	24.0000	0.90		A
BQ	1	280.0000	19.0000	0.99	W	A
BU	1	283.6000	8.6000	1.00		A
BX	1	335.0000	21.0000	1.18	A	A
CA	1	265.0000	27.0000	0.93	A	A
CB	1	289.0000	14.0000	1.02	A	A
CB	2	316.0000	14.0000	1.11	A	A
CD	1	295.0000	20.0000	1.04	A	A
CE	1	262.0000	11.0000	0.92	A	A
CG	1	183.0000	8.0000	0.64	A	N
CH	1	293.3000	11.7500	1.03	A	A
CL	1	409.0000	15.1000	1.44	W	W
CM	1	261.0000	3.1000	0.92	A	A
CM	2	257.0000	3.0000	0.91	A	A
CR	1	528.0000	51.0000	1.86		W
CU	1	273.0000	5.0000	0.96	A	A
EP	1	276.2000	8.9600	0.97	A	A
FG	1	260.6000	10.1000	0.92	W	A
FL	1	301.5600	5.1400	1.06	A	A
FN	1	263.0000	5.0000	0.93	A	A
GC	1	288.0000		1.01	A	A
GE	1	244.0000	6.3200	0.86	A	W
GT	1	275.0000	30.0000	0.97	A	A
HC	1	281.0000	14.0000	0.99	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** H3

**EML Value:** 283.7000  
**EML Error:** 3.3800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
IO	1	290.0000	15.0000	1.02	W	A
IS	1	280.0000	34.0000	0.99	A	A
IT	1	264.3000	4.3000	0.93	A	A
KA	1	278.3000	29.4000	0.98	A	A
KO	1	288.5000	2.1000	1.02		A
KS	1	267.9000	30.1000	0.94	A	A
LA	1	254.5600	32.9300	0.90	N	W
LA	2	261.2200	33.3000	0.92	N	A
LA	3	264.5500	33.6700	0.93	N	A
LI	2	308.8000	30.9000	1.09		A
LI	1	309.3000	30.9000	1.09		A
LL	1	185.0000	2.6400	0.65	W	N
LM	1	261.5700	3.1600	0.92	A	A
LN	1	278.0000	22.2400	0.98	N	A
LV	1	294.0000	23.0000	1.04	N	A
LW	1	290.0000	29.0000	1.02	A	A
ME	1	430.4000	9.0000	1.52	W	W
ME	2	420.1000	9.1000	1.48	W	W
ME	3	427.2000	9.0000	1.51	W	W
MI	1	107.9000	6.4000	0.38		N
MI	2	113.4000	6.4000	0.40		N
ML	1	296.2100	11.3300	1.04	A	A
NA	1	257.5000	4.9000	0.91	A	A
NJ	3	315.0000	10.0000	1.11	W	A
NJ	2	323.0000	10.0000	1.14	W	A
NJ	1	323.0000	10.0000	1.14	W	A
NP	1	316.0000	3.4000	1.11	A	A
NS	2	293.0100	14.3690	1.03	A	A
NS	3	292.8760	14.3660	1.03	A	A
NS	1	295.6400	14.4180	1.04	A	A
OD	1	282.6700	82.3300	1.00	W	A
OH	1	271.0000	14.0000	0.95	A	A
OK	1	200.0000	14.0000	0.70	A	N
OT	1	256.0000	15.0000	0.90	A	A
OU	1	437.0000	30.5000	1.54		W

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

June 2002

**Matrix:** WA Water Bq / L  
**Radionuclide:** H3

**EML Value:** 283.7000**EML Error:** 3.3800

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
PR	1	275.6000	0.6900	0.97	A	A
RC	1	300.0000	20.0000	1.06	A	A
RI	1	192.0000	12.1000	0.68	A	N
RS	1	313.1000	16.7800	1.10		A
SA	2	278.0000	24.0000	0.98	A	A
SA	1	281.0000	72.0000	0.99	A	A
SB	1	286.0000	10.2000	1.01	A	A
SB	3	305.0000	11.0000	1.08	A	A
SB	2	287.0000	10.6000	1.01	A	A
SD	1	242.0000	5.0000	0.85	A	W
SI	1	320.0000	23.0000	1.13		A
SK	1	282.0000	14.0000	0.99	A	A
SL	1	15690.4902	313.8100	55.31		N
SN	1	296.0000	14.5000	1.04	A	A
SR	1	291.0000	17.0000	1.03	A	A
ST	1	278.2000	9.3000	0.98	A	A
SX	1	307.3600	13.1000	1.08	A	A
SX	2	321.8600	13.5200	1.13	A	A
SY	1	421.0000	3.0000	1.48	A	W
TE	1	226.3000	32.7000	0.80	A	W
TI	1	285.0000	20.0000	1.00	A	A
TM	1	278.0000	36.8000	0.98	A	A
TN	1	294.9000	10.6600	1.04	A	A
TO	1	311.8350	30.3980	1.10	A	A
TQ	1	296.3300	12.0000	1.04	A	A
TX	1	294.0000	21.0000	1.04	A	A
UY	1	277.0000	18.0000	0.98	A	A
WA	1	277.0000	6.0000	0.98	A	A
WC	1	266.0000	54.3000	0.94	A	A
WE	2	225.7000	13.0000	0.80	W	W
WE	1	214.2000	12.4000	0.75	W	N
WO	1	280.4600	10.5800	0.99	A	A
WO	2	298.1800	10.7700	1.05	A	A
WV	1	285.1000	10.1700	1.00	A	A
YA	1	309.0000	11.0000	1.09	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** H3

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**EML Value:** 283.7000  
**EML Error:** 3.3800

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Labcode	Test Number	Reported Value	Reported Error	<u>Reported</u> EML	<b>QAP 55</b> Evaluation	<b>Evaluation</b>
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**Total Number Reported:** 104

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**Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027**  
**Evaluation: A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** PU238

**EML Value:** 0.4904  
**EML Error:** 0.0324

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	0.5000	0.1000	1.02	A	A
AG	1	0.4940	0.0840	1.01	A	A
AI	1	0.3450	0.0140	0.70	W	N
AM	1	0.4260	0.0486	0.87	N	W
AN	1	0.5000	0.0100	1.02	A	A
AT	1	0.5220	0.0730	1.06	A	A
AU	1	0.5300	0.1000	1.08	A	A
BE	1	0.5180	0.0390	1.06	A	A
BM	1	0.4800	0.0790	0.98	A	A
BP	1	0.5000	0.0200	1.02		A
BU	1	0.5000	0.0300	1.02	W	A
BX	1	0.5260	0.0550	1.07	A	A
CH	1	0.5131	0.0509	1.05	A	A
CL	1	0.4000	0.1000	0.82	W	W
CR	1	0.4700	0.0200	0.96		A
CW	1	0.5200	0.0160	1.06	A	A
EG	1	0.4800	0.0370	0.98	A	A
GE	1	0.4760	0.0670	0.97	A	A
GT	1	0.4800	0.1000	0.98	A	A
IN	1	0.5140	0.1120	1.05	W	A
IS	1	0.4932	0.0991	1.01	A	A
IT	1	0.4700	0.0460	0.96	A	A
KO	1	0.5440	0.0241	1.11		W
LA	3	0.5088	0.0800	1.04	A	A
LA	2	0.5087	0.0780	1.04	A	A
LA	1	0.4895	0.0773	1.00	A	A
ML	1	0.4980	0.0820	1.01	A	A
NA	1	0.4580	0.0400	0.93	A	A
NL	1	0.4720	0.0550	0.96	A	A
NM	1	0.4300	0.0200	0.88	W	W
NQ	1	0.4500	0.0320	0.92	A	A
OB	1	0.0124	0.0068	0.03	A	N
OD	1	0.5500	0.0600	1.12	A	W
OK	1	0.4590	0.0450	0.94	W	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** PU238

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**EML Value:** 0.4904  
**EML Error:** 0.0324

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OT	1	0.4300	0.1100	0.88	N	W
OU	1	0.3070	0.0430	0.63	N	N
PS	1	0.4500	0.0860	0.92	A	A
RI	1	0.7360	0.0839	1.50	N	N
SD	1	0.4970	0.0300	1.01	A	A
SE	2	0.5500	0.0580	1.12	W	W
SE	1	0.4900	0.0260	1.00	W	A
SK	2	0.5630	0.0600	1.15	A	W
SK	1	0.4780	0.0630	0.98	A	A
SN	1	0.4740	0.0930	0.97	A	A
SR	1	0.4700	0.1000	0.96	A	A
TE	1	0.4500	0.1100	0.92	A	A
TI	1	0.5400	0.1100	1.10	W	W
TM	1	0.5130	0.0510	1.05	W	A
TN	1	0.5050	0.0420	1.03	A	A
TO	1	0.5030	0.1380	1.03	A	A
TX	1	0.5540	0.0170	1.13	A	W
UC	1	0.4730	0.0716	0.96	A	A
UY	1	0.4760	0.0500	0.97	A	A
WA	1	0.4200	0.6000	0.86	A	W
WC	1	0.4900	0.1000	1.00	A	A
WE	3	0.5200	0.0600	1.06	A	A
WE	1	0.4400	0.0600	0.90	A	W
WE	2	0.5500	0.0700	1.12	A	W
WI	3	0.4830	0.0784	0.99	A	A
WI	1	0.5450	0.0862	1.11	A	W
WI	2	0.5280	0.0830	1.08	A	A
YA	1	0.6760	0.0170	1.38	W	N

**Total Number Reported:** 62

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** PU239

**EML Value:** 4.2190  
**EML Error:** 0.1720

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	3.5000	0.3000	0.83	A	W
AG	1	4.2400	0.5520	1.00	A	A
AI	1	2.7800	0.0900	0.66	W	N
AM	1	3.5400	0.1420	0.84	N	W
AN	1	4.1600	0.1100	0.99	A	A
AT	1	4.3690	0.5200	1.04	A	A
AU	1	4.4900	0.4400	1.06	W	A
BE	1	4.3900	0.3000	1.04	A	A
BM	1	4.2800	0.5900	1.01	A	A
BP	1	4.1600	0.1200	0.99		A
BU	1	4.3000	0.2000	1.02	W	A
BX	1	4.4000	0.3700	1.04	A	A
CH	1	4.4090	0.3040	1.04	A	A
CL	1	4.0000	0.5000	0.95	A	A
CR	1	3.9700	0.0500	0.94		A
CW	1	4.3850	0.0800	1.04	A	A
EG	1	4.4900	0.2700	1.06	A	A
GE	1	4.2600	0.4430	1.01	A	A
GT	1	4.2000	0.8000	1.00	A	A
IN	1	4.2900	0.6900	1.02	A	A
IS	1	4.1070	0.7994	0.97	A	A
IT	1	4.2500	0.3200	1.01	A	A
KA	1	4.4600	0.0300	1.06	W	A
KO	1	4.6460	0.1918	1.10		W
LA	1	4.2610	0.6464	1.01	A	A
LA	3	4.3420	0.6603	1.03	A	A
LA	2	4.3890	0.6570	1.04	A	A
LL	1	4.3600	0.5540	1.03	A	A
LW	1	4.1500	0.4090	0.98	A	A
ML	1	4.1250	0.6140	0.98	A	A
NA	1	4.2400	0.2100	1.00	A	A
NL	1	4.1600	0.4700	0.99	A	A
NM	1	3.6000	0.1500	0.85	W	W
NQ	1	3.8800	0.2400	0.92	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** PU239

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**EML Value:** 4.2190  
**EML Error:** 0.1720

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OB	1	0.0760	0.0243	0.02	A	N
OD	1	4.2500	0.4500	1.01	A	A
OK	1	4.2200	0.1300	1.00	W	A
OT	1	3.6000	0.3000	0.85	A	W
OU	1	2.8400	0.1300	0.67	N	N
PS	1	4.0900	0.6100	0.97	A	A
RI	1	4.3600	0.3620	1.03	W	A
SD	1	4.1800	0.0900	0.99	A	A
SE	1	4.1200	0.1700	0.98	A	A
SE	2	4.3200	0.3200	1.02	A	A
SK	2	4.6800	0.3400	1.11	A	W
SK	1	4.8900	0.3600	1.16	A	W
SN	1	4.4500	0.5960	1.05	A	A
SR	1	3.9700	0.6300	0.94	A	A
TE	1	4.4700	0.2800	1.06	A	A
TI	1	4.7300	0.6100	1.12	W	W
TM	1	4.3400	0.1400	1.03	W	A
TN	1	4.4380	0.1540	1.05	W	A
TO	1	4.5420	0.8470	1.08	A	A
TX	1	4.4000	0.0400	1.04	A	A
UC	1	4.2600	0.1810	1.01	A	A
UY	1	4.1600	0.3900	0.99	A	A
WA	1	3.8100	0.1500	0.90	A	A
WC	1	4.3200	0.8200	1.02	A	A
WE	3	4.0000	0.3900	0.95	W	A
WE	2	4.2700	0.4500	1.01	W	A
WE	1	3.8800	0.4000	0.92	W	A
WI	3	4.3800	0.5810	1.04	A	A
WI	1	4.7400	0.6280	1.12	A	W
WI	2	4.4000	0.5780	1.04	A	A
YA	1	4.4760	0.0550	1.06	A	A

**Total Number Reported:** 65

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** SR90

**EML Value:** 7.5786  
**EML Error:** 0.1756

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	6.2000	1.6000	0.82	A	W
AF	1	7.4600	1.4300	0.98		A
AG	1	6.7100	1.2200	0.88	A	A
AI	1	9.0400	1.3600	1.19	A	W
AM	1	5.3400	0.4500	0.70	A	W
AN	1	6.7800	0.2800	0.89	A	A
AT	1	7.2360	0.4510	0.95	W	A
AU	1	6.3200	0.5000	0.83	A	W
BE	1	6.9200	0.4800	0.91	A	A
BM	1	6.8700	0.8200	0.91	A	A
BN	1	5.8200	0.2200	0.77	A	W
BP	1	5.5100	0.1700	0.73		W
BQ	1	4.1000	0.3000	0.54		N
BX	1	6.6700	0.3600	0.88	A	A
CB	1	6.8400	0.2100	0.90	A	A
CB	2	6.9500	0.2100	0.92	A	A
CE	1	5.7000	0.4000	0.75	N	W
CH	1	7.3150	0.5860	0.96	A	A
CL	1	5.9000	0.8000	0.78	W	W
CR	1	5.8000	0.2000	0.76		W
CU	1	8.9000	0.3000	1.17		W
CW	1	6.9300	0.2500	0.91		A
EG	1	6.5200	0.2800	0.86		A
FL	1	6.4700	0.3100	0.85	W	A
GC	1	6.7500		0.89	A	A
GE	1	7.5100	0.1290	0.99	A	A
GT	1	7.1000	0.8000	0.94	A	A
IN	1	7.0700	0.4700	0.93	W	A
IO	1	7.6000	0.8000	1.00	A	A
IS	1	7.1060	1.3450	0.94	W	A
IT	1	7.4500	0.8000	0.98	A	A
KA	1	7.2800	0.8800	0.96	A	A
KO	1	6.6200	0.1400	0.87		A
LA	3	6.6920	0.5110	0.88		A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** SR90

**EML Value:** 7.5786  
**EML Error:** 0.1756

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
LA	2	7.5160	0.6010	0.99		A
LA	1	8.2310	0.6310	1.09		A
NA	1	6.7000	0.9000	0.88		A
NJ	2	6.3000	0.3000	0.83	A	W
NJ	1	7.3000	0.4000	0.96	A	A
NJ	3	8.4000	0.4000	1.11	A	A
NM	1	7.0900	1.1000	0.94		A
OD	1	6.9400	0.8200	0.92	A	A
OH	1	6.8000	0.6000	0.90	A	A
OT	1	7.2000	0.6000	0.95	A	A
OU	1	4.8800	0.6000	0.64	A	N
PS	1	6.8900	0.2300	0.91	A	A
RI	1	7.4100	0.5110	0.98	A	A
RU	1	9.8000	1.1000	1.29		W
SD	1	6.4300	0.1900	0.85		A
SE	2	6.3500	0.1400	0.84	A	W
SE	1	6.2200	0.1400	0.82	A	W
SI	1	6.0600	0.4200	0.80		W
SN	1	6.7200	0.4290	0.89	A	A
SR	1	6.2000	1.3000	0.82	W	W
TE	1	7.4000	1.3000	0.98	A	A
TI	1	5.7800	0.1900	0.76	W	W
TM	1	7.7100	0.4440	1.02	A	A
TN	1	8.2290	0.1970	1.09	A	A
TO	1	6.3600	0.3900	0.84	A	W
TQ	1	5.4700	0.1300	0.72	A	W
TX	1	6.5800	0.7000	0.87	W	A
UY	1	6.8600	0.1600	0.90	A	A
WA	1	7.8100	0.7400	1.03	A	A
WC	1	7.9300	1.1200	1.05	A	A
WE	1	8.0700	0.5600	1.07	A	A
WE	2	8.4700	0.5600	1.12	A	A
WE	3	7.2500	0.5400	0.96	A	A
WI	3	7.1400	0.4410	0.94	A	A
WI	2	7.1700	0.4560	0.95	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** SR90

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**EML Value:** 7.5786  
**EML Error:** 0.1756

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
WI	1	6.8400	0.4420	0.90	A	A
WO	1	7.5400	0.4900	1.00	W	A
WV	1	7.0600	0.3220	0.93	A	A
YA	1	6.2600	0.2700	0.83	A	W

**Total Number Reported:** 73

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** U234

**EML Value:** 1.4018  
**EML Error:** 0.0560

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	1.2000	0.1000	0.86	W	W
AF	1	1.8900	0.5100	1.35		N
AI	1	1.2400	0.0300	0.88	W	W
AM	1	1.2520	0.1180	0.89	A	W
AN	1	1.3600	0.0200	0.97	A	A
AT	1	1.3210	0.1840	0.94	A	A
AU	1	1.2700	0.1900	0.91	W	A
BE	1	1.2600	0.1200	0.90	A	W
BM	1	1.3300	0.1800	0.95	A	A
BQ	1	1.1600	0.0800	0.83		W
BU	1	1.3500	0.0700	0.96	A	A
BX	1	1.6700	0.1400	1.19	A	W
CF	1	1.0700	0.0700	0.76	W	N
CF	3	1.0200	0.0600	0.73	W	N
CF	2	1.1900	0.0900	0.85	W	W
CH	1	1.2660	0.1020	0.90	A	A
CL	1	1.3000	0.1000	0.93	A	A
CW	1	1.3250	0.0430	0.94	A	A
EG	1	1.2700	0.0700	0.91	W	A
FE	1	1.4103	0.0562	1.01	A	A
FG	1	0.6160	0.0500	0.44		N
GE	1	1.2200	0.1340	0.87	W	W
HT	1	1.4100	0.1000	1.01	A	A
IN	1	1.8200	0.3760	1.30		W
IS	1	1.2130	0.2290	0.87	W	W
KO	1	1.3520	0.0484	0.96		A
LW	1	1.4400	0.1420	1.03	A	A
ML	1	1.2670	0.1920	0.90	A	A
NA	1	1.2800	0.0800	0.91	A	A
NJ	1	1.3900	0.1100	0.99	A	A
NJ	3	1.3800	0.1100	0.98	A	A
NJ	2	1.4100	0.1100	1.01	A	A
NL	1	1.2900	0.1500	0.92	W	A
NQ	1	1.2960	0.0770	0.93	A	A

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** U234

**EML Value:** 1.4018  
**EML Error:** 0.0560

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
OB	1	1.1700	0.3480	0.83	A	W
OD	1	1.1900	0.1200	0.85	A	W
OK	1	1.5100	0.2000	1.08	N	A
PS	1	1.2300	0.0950	0.88	W	W
SD	1	1.3300	0.0400	0.95	A	A
SE	2	1.0900	0.0800	0.78	N	N
SE	1	0.9400	0.0840	0.67	N	N
SN	1	1.2200	0.1550	0.87	A	W
SR	1	1.3900	0.2800	0.99	W	A
TI	1	1.3000	0.1500	0.93		A
TM	1	1.3100	0.0750	0.94	A	A
TN	1	1.3000	0.0500	0.93	A	A
TO	1	1.2860	0.2570	0.92	A	A
TX	1	1.2500	0.0400	0.89	A	W
WA	1	1.2400	0.1100	0.88	W	W
WC	1	1.2400	0.2400	0.88	A	W
WE	1	1.2900	0.0700	0.92	A	A
WE	2	1.3200	0.0800	0.94	A	A
WE	3	1.2700	0.0700	0.91	A	A
YA	1	1.3100	0.0264	0.94	A	A

**Total Number Reported:** 54

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** U238

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**EML Value:** 1.3812  
**EML Error:** 0.0791

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AC	1	1.2000	0.1000	0.87	W	W
AF	1	1.8900	0.4900	1.37		N
AI	1	1.2400	0.0300	0.90	N	W
AM	1	1.2190	0.0920	0.88	A	W
AN	1	1.3200	0.0400	0.96	A	A
AT	1	1.2790	0.1780	0.93	A	A
AU	1	1.2900	0.2000	0.93	A	A
BE	1	1.2800	0.1200	0.93	A	A
BM	1	1.3100	0.1800	0.95	A	A
BQ	1	1.1000	0.0800	0.80		N
BU	1	1.3300	0.0700	0.96	A	A
BX	1	1.6200	0.1400	1.17	A	W
CF	1	1.0800	0.0700	0.78	A	N
CF	2	1.2500	0.0900	0.90	A	A
CF	3	1.0700	1.0700	0.77	A	N
CH	1	1.2610	0.1010	0.91	A	A
CL	1	1.3000	0.1000	0.94	A	A
CW	1	1.3210	0.0430	0.96	A	A
EG	1	1.3000	0.0700	0.94	A	A
FE	1	1.4146	0.0500	1.02	A	A
FG	1	0.5890	0.0500	0.43		N
GE	1	1.2100	0.1340	0.88	W	W
GT	1	1.3000	0.3000	0.94	A	A
HT	1	1.4300	0.1000	1.03	A	A
IN	1	1.4700	0.3200	1.06	W	A
IS	1	1.2370	0.2340	0.90	W	W
KO	1	1.3450	0.0483	0.97		A
LW	1	1.4200	0.1750	1.03	N	A
ML	1	1.3330	0.2020	0.96	A	A
NA	1	1.2900	0.0800	0.93	A	A
NJ	1	1.3200	0.1000	0.96	A	A
NJ	3	1.3000	0.1000	0.94	A	A
NJ	2	1.3800	0.1100	1.00	A	A
NL	1	1.3000	0.1500	0.94	W	A

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** U238

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**EML Value:** 1.3812  
**EML Error:** 0.0791

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
NQ	1	1.3270	0.0790	0.96	A	A
OB	1	1.1700	0.3490	0.85	A	W
OD	1	1.1700	0.1200	0.85	W	W
OK	1	1.4400	0.2000	1.04	W	A
PS	1	0.0058	1.2300	0.00	W	N
SD	1	1.3300	0.0400	0.96	A	A
SE	1	0.9300	0.0830	0.67	N	N
SE	2	0.9600	0.0730	0.69	N	N
SN	1	1.3100	0.1630	0.95	A	A
SR	1	1.3700	0.2800	0.99	W	A
TI	1	1.2900	0.1500	0.93		A
TM	1	1.3500	0.0760	0.98	A	A
TN	1	1.2800	0.0600	0.93	W	A
TO	1	1.2510	0.2500	0.91	A	A
TX	1	1.2300	0.0400	0.89	A	W
WA	1	1.2600	0.1100	0.91	W	A
WC	1	1.2500	0.2400	0.90	A	A
WE	3	1.3200	0.0800	0.96	A	A
WE	2	1.4600	0.0900	1.06	A	A
WE	1	1.3600	0.0800	0.99	A	A
YA	1	1.3100	0.0266	0.95	A	A

**Total Number Reported:** 55

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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**QAP 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** Ug U

**EML Value:** 0.1117  
**EML Error:** 0.0070

Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
AI	1	0.1010	0.0110	0.90		A
AS	1	0.1070	0.0007	0.96		A
BE	1	0.1040		0.93	A	A
BQ	1	0.1110	0.0080	0.99	A	A
CA	1	0.1260	0.0130	1.13	A	W
CB	3	0.1070	0.0080	0.96	A	A
CB	2	0.1060	0.0080	0.95	A	A
CB	1	0.1080	0.0080	0.97	A	A
CG	1	0.1190	0.0040	1.07	A	A
CH	1	0.1030	0.0100	0.92	A	A
CL	1	0.1000	0.0100	0.89		W
CW	1	0.1090	0.0050	0.98	A	A
FE	1	0.0971	0.0010	0.87	A	W
GE	1	0.1080	0.0035	0.97	W	A
HT	1	112.0000	10.0000	**.**	A	N
IS	1	0.0995	0.0115	0.89	A	W
IT	1	0.0950	0.0100	0.85	W	W
KA	1	0.1033	0.0030	0.93	A	A
KO	1	0.1088	0.0039	0.97		A
LA	3	0.0990	0.0020	0.89		W
LA	2	0.0990	0.0020	0.89		W
LA	1	0.0980	0.0020	0.88		W
NJ	1	0.1060	0.0080	0.95	A	A
NJ	2	0.1110	0.0090	0.99	A	A
NJ	3	0.1040	0.0080	0.93	A	A
NL	1	0.1060	0.0120	0.95	A	A
OU	1	0.1080	0.0020	0.97	W	A
RI	2	0.0982		0.88	W	W
RI	1	0.0989		0.88	W	W
RI	3	0.0981		0.88	W	W
RM	1	0.1100	0.0100	0.99	A	A
SD	1	0.1070	0.0030	0.96	A	A
SY	1	0.1100	0.0100	0.99	A	A
TM	1	101.0000	1.2100	**.**	A	N

Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027

Evaluation: A=Acceptable, 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 56 Results by Nuclide**

**Matrix:** WA Water Bq / L  
**Radionuclide:** Ug U

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**EML Value:** 0.1117  
**EML Error:** 0.0070

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Labcode	Test Number	Reported Value	Reported Error	Reported EML	QAP 55 Evaluation	Evaluation
TN	1	0.0935	0.0108	0.84	W	W
TO	1	0.1120	0.0040	1.00	A	A
UC	1	0.1200		1.07		A
UP	1	0.1060		0.95	A	A
YP	1	0.1002	0.0022	0.90	A	W

**Total Number Reported:** 39

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Values for elemental Uranium are reported in micrograms/filter, g or mL pCi/g or mL =Bq x 0.027  
**Evaluation:** A=Acceptable, 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.

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## Participating Laboratories in EML QAP 56

### Laboratories Reporting Data

<b>Code</b>	<b>Laboratory Name</b>
AC	Analytical Chemistry Laboratory, Argonne, IL
AF	Air Force Analytical Lab (AFIERA/SDRR), Brooks AFB
AG	Paragon Analytics, Inc, Fort Collins, CO
AI	Nuclear Technology Services, Inc., Roswell, GA
AM	American Radiation Services, Inc., Baton Rouge
AN	Argonne National Laboratory
AP	Aberdeen Proving Ground, Aberdeen, MD
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
BE	Grand Junction Office Analytical Laboratory
BM	Battelle Memorial Institute, Columbus, OH
BN	U.S. Department of Energy
BP	Battelle Pacific Northwest National Laboratory
BQ	Becquerel Laboratories Inc., Mississauga, Ontario, Canada
BU	Autoridad Regulatoria, Buenos Aires, Argentina
BX	BWX Technologies, Inc., Lynchburg, VA
CA	Canadian Nuclear Safety Commission, Ottawa, Canada
CB	Radiation Protection Bureau, Ontario, Canada
CD	Centrale nucleaire Gentilly-2
CE	Environmental Monitoring Laboratory, New Brunswick, Canada
CF	Freshwater Institute Radiochemistry Winnipeg, Manitoba, Canada
CG	AECL WL Environmental Monitoring Group, Canada
CH	California State Dept. Health Serv.,Sanitation & Radiation Laboratory
CL	Enviro-Test Laboratories, Casper, WY
CM	Metropolitan Water Reclamation District of Greater Chicago
CN	China Institute for Radiation Protection
CP	CoPhysics Corporation, Monroe, NY
CR	Atomic Energy of Canada, Chalk River Laboratories, Canada
CS	Rocketdyne Propulsion & Power, Canoga Park, CA
CU	Universite Laval, Quebec Canada
CW	Carlsbad Environmental Monitoring Research Center, NM
CZ	ACZ Laboratories, Inc. Steamboat Springs, CO
EC	Envirocare of Utah
EG	INEEL TRA Radioanalytical Laboratory, Scoville
EI	Eichrom Technologies, IL
EP	US EPA, Las Vegas
FE	Fernald WPRAP Field Office, Ohio
FG	FGL Environmental, Santa Paula, CA
FL	Florida Dept of Health & Rehab. Serv., Orlando
FM	Florida Mobile Emergency Radiological Laboratory, Orlando
FN	Fermi Lab, Batavia, IL
FR	CEA/SACLAY - SPR/SRSE, France
FS	Florida State University, Tallahassee
FU	FUSRAP Laboratory, Missouri
GA	Lockheed Martin, Pikton, OH
GC	Georgia Power Company Environmental Lab
GE	General Engineering Labs, Charleston, SC
GS	USGS/NWQL, Arvada, CO

## Participating Laboratories in EML QAP 56

### Laboratories Reporting Data

<b>Code</b>	<b>Laboratory Name</b>
<b>GT</b>	Georgia Institute of Technology
<b>HC</b>	Lawrence Livermore Laboratory, California
<b>HT</b>	Technical University, Budapest, Hungary
<b>HU</b>	Water Resources Research Centre (VITUKI), Hungary
<b>IL</b>	ISU Environmental Assessment Laboratory, Pocatello, ID
<b>IN</b>	INEEL INTECH Radioanalytical Laboratory
<b>IO</b>	Illinois Department of Nuclear Safety
<b>IS</b>	Severn Trent Laboratories - St. Louis
<b>IT</b>	Severn Trent Laboratories - Richland
<b>KA</b>	Knolls Atomic Power Lab, Schenectady
<b>KE</b>	Uljin NPP Environmental Radiation Laboratory, South Korea
<b>KG</b>	Korea Institute of Geoscience And Mineral Resources (KIGAM)
<b>KO</b>	Korea Institute of Nuclear Safety
<b>KR</b>	Korea Atomic Energy Research Institute
<b>KS</b>	Radiochemistry Laboratory, DHEL, KDHE, Kansas
<b>LA</b>	Los Alamos National Laboratory, NM
<b>LI</b>	Lionville Laboratory, Inc. PA
<b>LL</b>	LLNL Chemistry and Material Science/Environmental
<b>LM</b>	American Radiation Services of New Mexico, Los Alamos
<b>LN</b>	Los Alamos National Lab, ES&H
<b>LV</b>	UNLV, Dept of Health Physics
<b>LW</b>	Lawrence Livermore National Lab, Waste
<b>ME</b>	Radiation Control Program, Jamaica Plain, MA
<b>MH</b>	Maine Health & Environmental Testing Laboratory
<b>MI</b>	Massachusetts Institute of Technology
<b>ML</b>	BWXT of Ohio, Mound, Miamisburg, Ohio
<b>MS</b>	Manufacturing Sciences Corporation, Oak Ridge
<b>MX</b>	Laboratory of Radiochimica CREN-U of Zacatecas, Mexico
<b>MY</b>	FUSRAP Maywood Mobile Laboratory, NJ
<b>MZ</b>	Comisi_n Nacional de Seguridad Nuclear y Salvaguardias, Mexico
<b>NA</b>	US EPA NAREL, Montgomery, AL
<b>ND</b>	Dept. of Environmental Health and Safety, NC State University
<b>NJ</b>	NJ Department of Health and Senior Services
<b>NL</b>	Fluor Daniel Fernald, Inc., Ohio
<b>NM</b>	Environmental Evaluation Group, Carlsbad, NM
<b>NP</b>	JAF Environmental Laboratory, New York Power Authority
<b>NQ</b>	New Mexico Department of Health, Albuquerque
<b>NR</b>	Naval Reactors Facility Chemistry, Scoville, ID
<b>NS</b>	State Lab of Public Health, North Carolina
<b>NZ</b>	National Radiation Laboratory, New Zealand
<b>OB</b>	OBG Laboratories, East Syracuse, NY
<b>OD</b>	ORNL, Radiobioassay Lab
<b>OH</b>	Ohio Dept Of Health Laboratory, Columbus
<b>OK</b>	Southwest Laboratory of Oklahoma
<b>OT</b>	ORNL Radioactive Material Analysis Lab
<b>OU</b>	Outreach Laboratory, Broken Arrow, OK
<b>PA</b>	BWXT Pantex, Amarillo, TX
<b>PC</b>	pCi/Labs, Inc., Orangeburg, NY
<b>PK</b>	Pakistan Institute of Nuclear Science & Technology
<b>PO</b>	Institute of Oceanology PAN, Poland
<b>PR</b>	Princeton Plasma Physics Lab

## Participating Laboratories in EML QAP 56

### Laboratories Reporting Data

<b>Code</b>	<b>Laboratory Name</b>
<b>PS</b>	PA-DEP Bureau of Radiation Protection, Harrisburg
<b>RA</b>	V. G. Khlopin Radium Institute, St. Petersburg, Russia
<b>RB</b>	Research Department of a Radiative Metrology, Belarus
<b>RC</b>	US NRC Region I Laboratory, PA
<b>RG</b>	Thermo Nutech Rocky Flats Plant, Golden
<b>RI</b>	Fluor Hanford, Inc., 222S Lab.
<b>RK</b>	Rock Island Arsenal, Illinois
<b>RM</b>	RMI Environmental Services
<b>RS</b>	RSA Laboratories, Hebron, CT
<b>RU</b>	Research Institute of Radiology, Belarus
<b>SA</b>	Sandia Labs Radioactive Sample Diag. Prog., NM
<b>SB</b>	SC Dept. of Health and Environment Control Radiological Lab
<b>SD</b>	STL Denver
<b>SE</b>	Swedish Defence Research Agency (FOI)
<b>SI</b>	Jozef Stefan Institute, Slovenia
<b>SK</b>	Savannah River Plant
<b>SL</b>	Stanford Linear Accelerator Center
<b>SN</b>	Sanford Cohen Associates, Inc., Montgomery, AL
<b>SR</b>	Savannah River Environmental Laboratory
<b>ST</b>	SC DHEC, Aiken, South Carolina
<b>SX</b>	Saxton Nuclear Experimental Corp., Saxton, PA
<b>SY</b>	Syrian Arab Republic Atomic Energy Commission
<b>TE</b>	Environmental Inc., Northbrook, IL
<b>TI</b>	Teledyne Brown Engineering Environmental Services, Knoxville, TN
<b>TM</b>	Eberline Services Albuquerque Lab, NM
<b>TN</b>	Eberline Services, Richmond, CA
<b>TO</b>	Eberline Services Oak Ridge Laboratory
<b>TP</b>	Taiwan Power Company, Taipei, Taiwan
<b>TQ</b>	Institute of Nuclear Energy Research, Taiwan
<b>TW</b>	Taiwan Radiation Monitoring Center
<b>TX</b>	Texas Dept. of Health/Laboratories, Austin
<b>TY</b>	Scientific Production Association, Russia
<b>UC</b>	United States Enrichment Corporation, Paducah, KY
<b>UG</b>	USGS Menlo Park WRD sediment radioisotope laboratory
<b>UP</b>	BWXT Y-12, L.L.C. Analytical Chemistry Organization Oak Ridge
<b>US</b>	Unitech, Springfield, MA
<b>UY</b>	BWXT Y-12, L.L.C. Analytical Chemistry Organization Oak Ridge
<b>WA</b>	Environmental Radiation Lab, Off. of Public Health Labs. Seattle
<b>WC</b>	Fluor Hanford WSCF, Waste Sampling and Characterization Facility
<b>WE</b>	Antech Ltd.-Waltz Mill Site, PA
<b>WI</b>	WIPP Site, Westinghouse Electric Corp.
<b>WN</b>	State Health Radiation Protection Section, Madison, WI
<b>WO</b>	Wisconsin State Lab of Hygiene
<b>WT</b>	Waste Stream Technology, Buffalo, NY
<b>WV</b>	West Valley Nuclear Services, NY
<b>WW</b>	West Valley Radiation Protection, NY
<b>YA</b>	Duke Engineering & Services Environmental Lab.
<b>YP</b>	US Army Proving Ground, Yuma, AZ
<b>YU</b>	Institute of Occupational and Radiological Health, Serbia

**Total Reporting Labs: 151**

## Participating Laboratories in EML QAP 56

### Laboratories NOT Reporting Data

<b>Code</b>	<b>Laboratory Name</b>
<b>BC</b>	SBCCOM Rsdiation Laboratory
<b>BR</b>	US Army Research Laboratory, Aberdeen Proving Ground
<b>CO</b>	Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada
<b>CY</b>	Chem-Nuclear Systems, Barnwell, SC
<b>DH</b>	Duke Engineering Services Hanford
<b>EL</b>	Energy Laboratories, Inc., Casper, WY
<b>EM</b>	3M, Empore Disks, St. Paul, MN
<b>FJ</b>	The University of the South Pacific, Fiji Islands
<b>GD</b>	GTS Duratek, Oak Ridge, TN
<b>HO</b>	Rontgen Technische Dienst bv, The Netherlands
<b>IA</b>	Bhabha Atomic Research Centre, India
<b>ID</b>	Institute of Radiation Protection and Dosimetry, IRD/ CNEN, Brazil
<b>IV</b>	IT Corporation, Las Vegas, NV
<b>JE</b>	Jacobs Engineering, Oak Ridge, TN
<b>JL</b>	Jefferson Lab, Newport News, VA
<b>KN</b>	Kori Nuclear Station, Pusan, Korea
<b>LB</b>	Lawrence Berkeley Lab UCB
<b>MJ</b>	Mississippi State Department of Health, Jackson
<b>NF</b>	Nuclear Fuel Services, Erwin, TN
<b>NT</b>	New World Technology, Livermore, CA
<b>NW</b>	Naval Reasearch LAb, Washington,DC
<b>OC</b>	Radiation Protection Service Laboratory, Ontario, Canada
<b>OS</b>	Oregon Health Division Radiation Controls Section, Portland
<b>RF</b>	Rocky Flats Environmental Tech Site, Colorado
<b>SH</b>	Savannah River Ecology Lab
<b>SV</b>	Institute of Occupational Safety, Slovenia
<b>SW</b>	Southwest Research Institute, San Antonio, TX
<b>TK</b>	ATG, Kingston, TN
<b>TT</b>	Tracer Technologies International, Inc., Cleveland
<b>TU</b>	Texas A&M University, Dept of Nuclear Engineering
<b>WY</b>	Wayne Interim Storage Site, NJ
<b>XZ</b>	Pacific Northwest National Laboratory

**Total Non-Reporting Labs: 32**