

QAP 0403 Results by Laboratory

Lab: SR Savannah River Environmental Laboratory

Sample ID	Radio nuclide	Repetition	Reported Value	Reported Error	EML Value	EML Error	Reported /EML	Evaluation
<i>Air (Bq/filter)</i>								
0403AISR	60Co	1	38.2	2.3	35.4	0.85	1.079	A
0403AISR	90Sr	1	2.06	0.144	1.76 **	0.19	1.170	A
0403AISR	134Cs	1	19.7	0.98	18.2	0.402	1.082	A
0403AISR	137Cs	1	29.7	1.48	26.4	0.86	1.125	A
0403AISR	234U	1	0.0923	0.014	0.0858	0.0008	1.076	A
0403AISR	238Pu	1	0.0395	0.0064	0.0405	0.0027	0.975	A
0403AISR	238U	1	0.0961	0.014	0.085	0.0029	1.131	A
0403AISR	239Pu	1	0.157	0.024	0.1644	0.0112	0.955	A
0403AISR	241Am	1	0.099	0.014	0.1045	0.0025	0.947	A
0403AISR	Gross Alpha	1	0.99	0.09	1.2	0.12	0.825	W
0403AISR	Gross Beta	1	2.89	0.29	2.85	0.28	1.014	A
<i>Soil (Bq/Kg)</i>								
0403SOSR	40K	1	534.0	50.0	539.0	29.11	0.991	A
0403SOSR	90Sr	1	60.6	13.2	51.0 **	5.9	1.188	A
0403SOSR	137Cs	1	1320.0	128.0	1323.0	66.17	0.998	A
0403SOSR	212Bi	1	31.5	7.8	50.43	4.61	0.625	A
0403SOSR	212Pb	1	46.3	4.0	47.73	2.53	0.970	A
0403SOSR	214Bi	1	56.7	4.1	58.4	2.2	0.971	A
0403SOSR	214Pb	1	56.3	4.0	61.0	2.38	0.923	A
0403SOSR	228Ac	1	50.0	3.8	49.0	1.96	1.020	A
0403SOSR	234U	1	86.7	14.0	87.22	1.97	0.994	A
0403SOSR	238Pu	1	0.826	0.13	0.82	0.05	1.007	A
0403SOSR	238U	1	93.7	15.0	89.73	4.22	1.044	A

0403SOSR	239Pu	1	19.8	3.2	22.82	0.56	0.868	W
0403SOSR	241Am	1	13.2	2.1	13.0	0.43	1.015	A
Vegetation (Bq/Kg)								
0403VESR	40K	1	777.0	72.0	720.0	37.92	1.079	A
0403VESR	60Co	1	16.2	1.4	14.47	0.64	1.120	A
0403VESR	90Sr	1	723.0	43.0	734.0 **	82.0	0.985	A
0403VESR	137Cs	1	623.0	30.0	584.67	29.23	1.066	A
0403VESR	238Pu	1	0.51	0.3	0.455	0.0485	1.121	A
0403VESR	239Pu	1	6.71	1.0	6.81	0.28	0.985	A
0403VESR	241Am	1	4.96	0.79	4.93	0.29	1.006	A
Water (Bq/L)								
0403WASR	3H	1	225.0	11.0	186.6	3.3	1.206	A
0403WASR	60Co	1	156.0	9.0	163.2	5.9	0.956	A
0403WASR	90Sr	1	5.49	0.73	4.76 **	0.5	1.153	A
0403WASR	137Cs	1	50.5	5.0	51.95	2.7	0.972	A
0403WASR	234U	1	2.52	0.38	2.28	0.02	1.105	A
0403WASR	238Pu	1	1.06	0.16	1.1	0.03	0.964	A
0403WASR	238U	1	2.49	0.38	2.25	0.06	1.107	A
0403WASR	239Pu	1	2.82	0.45	3.08	0.1	0.916	A
0403WASR	241Am	1	1.074	0.16	1.31	0.04	0.820	W
0403WASR	Gross Alpha	1	355.0	73.0	326.0	32.0	1.089	A
0403WASR	Gross Beta	1	1325.0	160.0	1170.0	117.0	1.132	A

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

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

pCi/g or mL = Bq x 0.027

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

** = Grand mean average used in lieu of experimentally determined EML value

* = EML activity value not available at this time

***** = Value out of bounds

