MAPEP Mixed Analyte Performance Evaluation Program

Sample Statistical Summary

MAPEP-10-MaS23

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Inorganic							Units: (mg/kg)
Aluminum	5						
Antimony	22						
Arsenic	22	22	29.1	2.1	26.8	0.3	18.8 - 34.8
Barium	23	21	330	37	336	3	235 - 437
Beryllium	24	24	52.2	3.9	57.0	0.6	39.9 - 74.1
Cadmium	26	25	16.47	0.95	17.41	0.17	12.19 - 22.63
Calcium	4						
Chromium	24	24	59.3	6.8	65.4	0.9	45.8 - 85.0
Cobalt	26	25	96.4	8.5	107.4	1.1	75.2 - 139.6
Copper	26	24	78.6	7.4	82.9	0.8	58.0 - 107.8
Iron	4						
Lead	25	25	63.3	5.3	66.0	0.7	46.2 - 85.8
Magnesium	4						
Manganese	5						
Mercury	21	20	0.0981	0.0096	0.0965	.0012	0.0676 - 0.1255
Molybdenum	4						
Nickel	26	25	107.1	10.1	116.4	1.1	81.5 - 151.3
Potassium	4						
Selenium	20	19	17.31	1.65	18.26	0.18	12.78 - 23.74
Silver	22	19	60.0	4.6	62.0	0.6	43.4 - 80.6
Sodium	4						
Technetium-99	4	3			5.18E-4	1.00E-5	3.63E-4 - 6.73E-4
Thallium	21	21	85.0	9.9	90.6	0.9	63.4 - 117.8
Uranium-235	14	13	0.153	0.016	0.170	0.003	0.119 - 0.221
Uranium-238	14	13	20.7	2.0	23.2	0.6	16.2 - 30.2
Uranium-Total	21	18	21.2	1.9	23.4	0.6	16.4 - 30.4
Vanadium	24	23	92.0	10.6	91.1	1.5	63.8 - 118.4
Zinc	25	24	201	20	207	3	145 - 269

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological							Units: (Bq/kg)
Americium-241	59	54	84	9	87	1	61 - 113
Antimony-125	1						
Cesium-134	76	72	882	74	940	14	658 - 1222
Cesium-137	77	75	689	55	670	10	469 - 871
Cobalt-57	55	41					False Positive Test
Cobalt-58	2						
Cobalt-60	77	75	354	26	343	2	240 - 446
Iron-55	9	6	1188	99	1333	27	933 - 1733
Manganese-54	75	73	867	65	820	16	574 - 1066
Nickel-63	14	13	984	106	1058	21	741 - 1375
Plutonium-238	37	28	66	5	64	1	45 - 83
Plutonium-239/240	37	28	70	7	71	1	50 - 92
Potassium-40	68	66	722	68	699	6	489 - 909
Strontium-90	32	27					False Positive Test
Technetium-99	22	18	290	36	325	6	228 - 423
Uranium-234/233	42	36	268	20	278	7	195 - 361
Uranium-235	11						
Uranium-238	48	41	270	26	289	7	202 - 376
Zinc-65	75	71	285	26	265	5	186 - 345

Note: (1) T = Total number of laboratories reporting analyte.
(2) A = Number of laboratories with 'Acceptable' performance.
(3) Mean excludes values derived as total metals and values indicated as "Not Acceptable";
Additionally, mean for organics in soil is the biweight mean of all the data per NELAC FOPT Table.

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported