Mixed Analyte Performance Evaluation Program

Statistical Summary

Sample ID: MAPEP-05-MaS14

Mixed Analyte Soil Standard

Analyte	T(1)	A(2)	Grand Mean	Std. Dev.	Reference Value	Analyte Text	Acceptance Limits	Units
Antimony	26	18	50.79	4.74	51		35.70 - 66.30	(mg/kg)
Arsenic	29	28	41.09	3.54	38.7		27.09 - 50.31	(mg/kg)
Barium	29	29	430.39	34.53	400		280.00 - 520.00	(mg/kg)
Beryllium	29	28	31.53	2.62	29.1		20.37 - 37.83	(mg/kg)
Cadmium	29	26	7.36	0.58	6.8		4.76 - 8.84	(mg/kg)
Chromium	29	18	37.08	3.82	34.1		23.87 - 44.33	(mg/kg)
Copper	5	4			22			(mg/kg)
Lead	29	27	43.11	4.48	41		28.70 - 53.30	(mg/kg)
Mercury	27	24	1.41	0.12	1.53		1.07 - 1.99	(mg/kg)
Molybdenum	2							
Nickel	29	28	73.28	7.86	71		49.70 - 92.30	(mg/kg)
Potassium	2							
Selenium	29	25	15.95	1.44	15.01		10.51 - 19.51	(mg/kg)
Silver	24	22				False Positive Test		
Thallium	26	25				False Positive Test		
Uranium-Total	9	8	12.41	1.32	13.5		9.52 - 17.69	(mg/kg)
Uranium-235	3				0.0441			
Uranium-238	4	4			13.5			(mg/kg)
Vanadium	27	27	127.43	14.93	127.1		88.97 - 165.23	(mg/kg)
Zinc	28	28	164.94	14.23	158		110.60 - 205.40	(mg/kg)
Actinium-228	2	30						
Americium-241	55	51	77.52	9.32	81.1		56.77 - 105.43	(Bq/kg)
Cesium-134	71	71	534.14	47.95	568		397.60 - 738.40	(Bq/kg)
Cesium-137	73	72	455.43	37.97	439		307.30 - 570.70	(Bq/kg)
Cobalt-57	71	69	533.73	54.16	524		366.80 - 681.20	(Bq/kg)
Cobalt-60	73	71	294.56	19.76	287		200.90 - 373.10	(Bq/kg)
Iron-55	6	4			357		249.90 - 464.10	(Bq/kg)
Manganese-54	72	71	465.61	39.74	439		307.30 - 570.70	(Bq/kg)
Nickel-63	14	9	425.83	57.32	445		311.50 - 578.50	(Bq/kg)
Plutonium-238	42	36	59.70	4.81	60.8		42.56 - 79.04	(Bq/kg)
Plutonium-239/240	42	26			0.2035	Sensitivity Evaluation		(Bq/kg)
Potassium-40	68	63	633.02	50.24	604		422.80 - 785.20	(Bq/kg)
Strontium-90	39	32	685.36	78.43	757		529.90 - 984.10	(Bq/kg)
Technetium-99	23	19	283.78	30.44	315		220.50 - 409.50	(Bq/kg)

Note: Outliers are excluded from the statistical summary.
Outliers are defied as laboratory data with a bias greater than 30 percent.
(1) T = Total Number of Laboratories Reporting Analyte.
(2) A = Number of Laboratories with 'Acceptable' Performance.

Analyte	T(1)	A(2)	Grand Mean	Std. Dev.	Reference Value	Analyte Text	Acceptance Limits	Units
Uranium-234/233	41	38	50.03	5.43	52.5		36.75 - 68.25	(Bq/kg)
Uranium-238	46	45	160.89	18.08	168		117.60 - 218.40	(Bq/kg)
Zinc-65	72	70	880.77	70.68	823		576.10 - 1069.90	(Bq/kg)
Analine	5							
Phenol	7							
2-Chlorophenol	7							
1,3-Dichlorobenzene	13	13	223.08	134.57	190.2		QL - 626.67	(ug/kg)
1,4-Dichlorobenzene	7							
Benzyl Alcohol	7							
1,2-Dichlorobenzene	7							
Hexachloroethane	7							
Nitrobenzene	17	17	536.92	121.98	536.9		171.09 - 902.75	(ug/kg)
Isophorone	7							
2-Nitrophenol	7							
2,4-Dimethylphenol	7	7			105.3			
2,4-Dichlorophenol	7							
1,2,4-Trichlorobenzene	17	17	471.91	201.36	471.9		QL - 1075.77	(ug/kg)
Naphthalene	17	17	461.57	154.19	461.6		QL - 923.99	(ug/kg)
Hexachlorobutadiene	16	16	376.69	191.46	376.7		QL - 950.88	(ug/kg)
4-Chloro-3-methylphenol	7							
2-Methylnaphthalene	7							
2-Methylphenol	7							
Hexachlorocyclopentadiene	7							
3 Methyl & 4-Methylphenol	7							
2,4,6-Trichlorophenol	7							
2,6-Dichlorophenol	6	5			35.4			
o-Toluidine	3							
1,4-Phenylenediamine	3							
2-Chloronaphthalene	18	18	596.47	138.90	596.5		179.91 - 1013.03	(ug/kg)
2-Nitroanaline	7							
Dimethylphthalate	7							
Acenaphthylene	7							
2,6-Dinitrotoluene	18	18	800.97	103.41	801		490.86 - 1111.09	(ug/kg)
3-Nitroanaline	7							
Acenaphthene	7							
2,4-Dinitrotoluene	19	19	912.50	207.62	912.5		289.86 - 1535.15	(ug/kg)
2,4-Dinitrophenol	7							
4-Chloroanaline	7							

Note: Outliers are excluded from the statistical summary.
Outliers are defied as laboratory data with a bias greater than 30 percent.
(1) T = Total Number of Laboratories Reporting Analyte.
(2) A = Number of Laboratories with 'Acceptable' Performance.

Analyte	T(1)	A(2)	Grand Mean	Std. Dev.	Reference Value	Analyte Text	Acceptance Limits	Units
Dibenzofuran	7							
4-Nitrophenol	7							
2-Naphthylamine	3							
1,4-Naphthoquinone	3							
Fluorene	7							
Diethylphthalate	19	18	763.62	97.58	763.6		470.98 - 1056.26	(ug/kg)
4,6-Dinitro-2-methylpheno	7							
1,2,4,5-Tetrachlorobenzen	3							
2,4,5-Trichlorophenol	7							
Hexachlorobenzene	19	19	662.09	104.84	662.1		347.69 - 976.50	(ug/kg)
Pentachlorophenol	7							
4-Nitroanaline	7							
Phenanthrene	7							
Anthracene	17	17	426.73	70.31	426.7		215.85 - 637.60	(ug/kg)
1,4-Dinitrobenzene	2							
1,3-Dinitrobenzene	8	8	534.82	85.78	534.8		277.57 - 792.07	(ug/kg)
Pentachlorobenzene	3							
Pentachloronitrobenzene	3							
Di-n-butylphthalate	8							
2,3,4,6-Tetrachlorophenol	4							
Fluoranthene	19	19	785.04	109.55	785		456.51 - 1113.58	(ug/kg)
Pyrene	19	19	752.20	99.90	752.2		452.61 - 1051.79	(ug/kg)
Dinoseb	3							
Butylbenzylphthalate	7							
Benzo(a)anthracene	19	19	689.81	81.37	689.8		445.77 - 933.85	(ug/kg)
Chrysene	7							
Bis(2-ethylhexyl)phthalat	19	16	1274.62	116.01	1274		926.71 - 1622.53	(ug/kg)
Di-n-octylphthalate	7							
Benzo(b)fluoranthene	7							
Benzo(k)fluoranthene	7							
Benzo(a)pyrene	7							
Indeno(1,2,3-c,d)pyrene	7							
Dibenzo(a,h)anthracene	7							
Benzo(g,h,i)perylene	7							
alpha-BHC	4							
beta-BHC	4							
gamma-BHC (Lindane)	14	14	40.21	6.68	40.2		20.18 - 60.24	(ug/kg)
delta-BHC	4							

Note: Outliers are excluded from the statistical summary.
Outliers are defied as laboratory data with a bias greater than 30 percent.
(1) T = Total Number of Laboratories Reporting Analyte.
(2) A = Number of Laboratories with 'Acceptable' Performance.

Analyte	T(1)	A(2)	Grand Mean	Std. Dev.	Reference Value	Analyte Text	Acceptance Limits	Units
Heptachlor	14	14	44.19	9.15	44.2		16.75 - 71.62	(ug/kg)
Aldrin	4							
Heptachlor epoxide	4							
Endosulfan I	4							
4,4'-DDE	14	13	32.01	5.35	32		15.97 - 48.06	(ug/kg)
Dieldrin	4							
Endrin	4							
4,4'-DDD	4							
Endosulfan II	4							
4,4'-DDT	14	14	41.40	12.51	41.4		3.88 - 78.92	(ug/kg)
Endrin Aldehyde	4							
Endosulfan sulfate	4							
Endrin Ketone	4							
Methoxychlor	4							

Note: Outliers are excluded from the statistical summary.
Outliers are defied as laboratory data with a bias greater than 30 percent.
(1) T = Total Number of Laboratories Reporting Analyte.
(2) A = Number of Laboratories with 'Acceptable' Performance.