Mixed Analyte Performance Evaluation Program

Statistical Summary

Sample ID: MAPEP-99-S6

Analyte	T(1)	A(2)	Grand Mean	Standard Deviation	Reference Value	Acceptance Range	Units
Arsenic	38	33	26.0	3.4	26.7	18.7 - 34.7	(mg/kg)
Barium	36	35	368	29	400	280 - 520	(mg/kg)
Beryllium	36	34	46.4	3.0	48.0	33.6 - 62.4	(mg/kg)
Cadmium	39	35	13.5	1.2	14.4	10.1 - 18.7	(mg/kg)
Chromium	42	40	68.1	8.6	79.0	55.3 - 102	(mg/kg)
Lead	40	38	71.6	7.1	77.8	54.5 - 101.2	(mg/kg)
Nickel	41	37	45.1	4.4	49.6	34.7 - 64.5	(mg/kg)
Selenium	35	25	8.6	1.3	9.6	6.7 - 12.5	(mg/kg)
Thallium	34	32	86.4	9.7	96.1	67.2 - 124.9	(mg/kg)
Uranium-Total	4	4	2.82		3.27	2.29 - 4.25	(mg/kg)
Vanadium	37	36	178	23	194	136 - 253	(mg/kg)
Zinc	40	34	85	9	102	71 - 132	(mg/kg)
Americium-241	37	27	6.15	0.83	6.55	4.58 - 8.51	(Bq/kg)
Cesium-134	51	47	686	83	752	526 - 978	(Bq/kg)
Cesium-137	58	55	320	27	331	232 - 430	(Bq/kg)
Cobalt-57	56	52	352	39	360	252 - 468	(Bq/kg)
Cobalt-60	58	53	133	12	131	92 - 170	(Bq/kg)
Iron-55	6	5	954	152	960	672 - 1248	(Bq/kg)
Manganese-54	58	52	355	30	345	242 - 448	(Bq/kg)
Nickel-63	10	7	712	107	791	554 - 1028	(Bq/kg)
Plutonium-238	40	34	27.2	1.6	27.5	19.2 - 35.8	(Bq/kg)
Plutonium-239/240	40	34	46.1	2.6	48.1	33.7 - 62.5	(Bq/kg)
Potassium-40	53	49	657	59	652	456 - 848	(Bq/kg)
Strontium-90	28	17			***False Positive Test***		
Uranium-234/233	40	35	148	16	157	110 - 204	(Bq/kg)
Uranium-238	43	33	36.8	4.2	40.7	28.5 - 52.9	(Bq/kg)
Zinc-65	58	50	3004	261	2840	1988 - 3692	(Bq/kg)
Trichloroethene	14	14	378.8	215.1	378.8	0 - 1239.2	(ug/kg)
Toluene	17	17	1467.2	246.8	1467.2	480.0 - 2454.4	(ug/kg)
1,1,2-Trichloroethane	13	13	1695.0	260.3	1695.0	653.8 - 2736.2	(ug/kg)
Tetrachloroethene	16	16	1345.7	260.2	1345.7	304.9 - 2386.5	(ug/kg)
Ethylbenzene	17	17	4902.8	697.1	4902.8	2114.4 - 7691.2	(ug/kg)
m & p-Xylene	15	15	5099.0	1018.8	5099.0	1023.8 - 9174.2	(ug/kg)
1,1,2,2-Tetrachloroethane	10	10	8781.4	872.8	8781.4	5291.1 - 12272	(ug/kg)
Phenol	16	16	314.9	101.9	314.9	0 - 722.7	(ug/kg)
2,4-Dimethylphenol	1						
Naphthalene	27	27	2447.5	541.7	2447.5	280.7 - 4614.2	(ug/kg)
2-Methylphenol	2						
3 Methyl & 4-Methylphenol	7	7	89.8	50.2	89.8	0 - 290.4	(ug/kg)
2,6-Dinitrotoluene	26	26	3408.3	735.1	3408.3	467.7 - 6348.8	(ug/kg)
Acenaphthene	26	26	1086.7	381.2	1086.7	0 - 2611.6	(ug/kg)
2,4-Dinitrotoluene	26	25	1178.1	235.8	1178.1	234.9 - 2121.3	(ug/kg)
2,4-Dinitrophenol	23	23	3544.7	2080.0	3544.7	0 - 11864	(ug/kg)
Fluorene	27	27	2037.3	533.1	2037.3	0 - 4169.9	(ug/kg)
Diethylphthalate	26	26	1611.5	334.8	1611.5	272.2 - 2950.9	(ug/kg)
Phenanthrene	27	27	1193.0	208.9	1193.0	357.6 - 2028.4	(ug/kg)
Anthracene	27	27	594.3	269.7	594.3	0 - 1672.9	(ug/kg)
1,3-Dinitrobenzene	3						
2,3,4,6-Tetrachlorophenol	5						
Pyrene	27	27	1301.3	285.3	1301.3	160.2 - 2442.4	(ug/kg)
Benzo(a)anthracene	27	26	1076.4	161.7	1076.4	476 - 2072.0	(ug/kg)
Bis(2-ethylhexyl)phthalate	24	23	2342.8	776.7	2342.8	0 - 5449.6	(ug/kg)
Di-n-octylphthalate	24	24	3363.5	1160.8	3363.5	0 - 8006.6	(ug/kg)

Outliers are excluded from the statistical summary.

Outliers are defined as laboratory data with a bias greater than 30% (Z-Score > 4.0).

(1) T = Total Number of Laboratories Reporting Analyte

(2) A = Number of Laboratories with "Acceptable Performance".

1. For organic components in this study, absolute value of Z-score < 3.0.
2. Acceptance range minimum for organics is based on the Estimated Quantitation Limit per SW 846 Method 8270C, Dec. 1996 or 3 times Standard Deviation which ever is larger.
3. Excludes laboratory data catagorized as Total Inorganic Analyte.