Appendix B-2

Laboratory Control Limits

CAS AVS/SEM Control Limits

METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	UNITS	LCS (%Rec.)	MS (%Rec.)	(% RPD)
GEN-AVS	Sulfides, Acid Volatile	18496-25-8	Soil	0.09	0.5	mg/Kg	60-115	56-142	20
6010/AVS-SEM	Antimony	7440-36-0	Soil	0.002	0.004	umol/g	80-120	75-125	30
6010/AVS-SEM	Arsenic	7440-38-2	Soil	0.003	0.02	umol/g	80-120	75-125	30
6010/AVS-SEM	Cadmium	7440-43-9	Soil	0.0002	0.0004	umol/g	80-120	75-125	30
6010/AVS-SEM	Chromium	7440-47-3	Soil	0.0003	0.001	umol/g	80-120	75-125	30
6010/AVS-SEM	Copper	7440-50-8	Soil	0.0008	0.002	umol/g	80-120	75-125	30
6010/AVS-SEM	Lead	7439-92-1	Soil	0.0008	0.002	umol/g	80-120	75-125	30
7470/AVS-SEM	Mercury	7439-96-7	Soil	0.000005	0.00004	umol/g	75-125	75-125	30
6010/AVS-SEM	Nickel	7440-02-0	Soil	0.0004	0.003	umol/g	80-120	75-125	30
6010/AVS-SEM	Zinc	7440-66-6	Soil	0.0009	0.002	umol/g	80-120	75-125	30

CAS Butyltins Control Limits

Analyte Name	MDL	MRL	Surr/MS Limits	LCS Limits	Units	Analyte ID
n-Butyltin Cation	0.26	1	10-126	20-123	ug/Kg	78763-54-9
Tri-n-butyltin Cation	0.43	1	10-118	25-101	ug/Kg	36643-28-4
Tetra-n-butyltin	0.44	1	10-120	30-110	ug/Kg	1461-25-2
Di-n-butyltin Cation	0.19	1	10-145	35-108	ug/Kg	14488-53-0

CAS ICP-AES Metals Control Limits

METHOD	ANALYTE	CAS No.	MATRIX	MDL	MRL	UNITS	LCS (%Rec.)	MS (%Rec.)	(% RPD)
6010C	Aluminum	7429-90-5	Soil	6	10	mg/kg	41-158	75-125	20
6010C	Antimony	7440-36-0	Soil	3	10	mg/kg	50-150	75-125	20
6010C	Arsenic	7440-38-2	Soil	4	20	mg/kg	78-122	75-125	20
6010C	Barium	7440-39-3	Soil	0.08	2	mg/kg	81-119	75-125	20
6010C	Beryllium	7440-41-7	Soil	0.02	1	mg/kg	83-117	75-125	20
6010C	Boron	7440-42-8	Soil	0.4	10	mg/kg	67-133	75-125	20
6010C	Cadmium	7440-43-9	Soil	0.3	1	mg/kg	81-119	75-125	20
6010C	Calcium	7440-70-2	Soil	2	10	mg/kg	79-121	75-125	20
6010C	Chromium	7440-47-3	Soil	0.5	2	mg/kg	80-119	75-125	20
6010C	Cobalt	7440-48-4	Soil	0.4	2	mg/kg	82-118	75-125	20
6010C	Copper	7440-50-8	Soil	0.7	2	mg/kg	83-116	75-125	20
6010C	Iron	7439-89-6	Soil	0.7	4	mg/kg	50-149	75-125	20
6010C	Lead	7439-92-1	Soil	3	20	mg/kg	79-121	75-125	20
6010C	Lithium	7439-93-2	Soil	0.5	2	mg/kg	75-125	75-125	20
6010C	Magnesium	7439-95-4	Soil	0.08	4	mg/kg	73-127	75-125	20
6010C	Manganese	7439-96-5	Soil	0.04	2	mg/kg	81-119	75-125	20
6010C	Molybdenum	7439-98-7	Soil	0.7	2	mg/kg	75-125	75-125	20
6010C	Nickel	7440-02-0	Soil	0.6	4	mg/kg	81-118	75-125	20
6010C	Phosphorus	7723-14-0	Soil	4	40	mg/kg	75-125	75-125	20
6010C	Potassium	7440-09-7	Soil	20	80	mg/kg	73-126	75-125	20
6010C	Selenium	7782-49-2	Soil	5	20	mg/kg	80-120	75-125	20
6010C	Silver	7440-22-4	Soil	2	2	mg/kg	66-134	75-125	20
6010C	Sodium	7440-23-5	Soil	4	40	mg/kg	74-126	75-125	20
6010C	Strontium	7440-24-6	Soil	0.02	2	mg/kg	79-121	75-125	20
6010C	Thallium	7440-28-0	Soil	7	20	mg/kg	79-120	75-125	20
6010C	Tin	7440-31-5	Soil	4	10	mg/kg	75-124	75-125	20
6010C	Titanium	7440-32-6	Soil	0.8	2	mg/kg	75-125	75-125	20
6010C	Vanadium	7440-62-2	Soil	2	2	mg/kg	79-121	75-125	20
6010C	Zinc	7440-66-6	Soil	0.3	2	mg/kg	73-121	75-125	20

CAS ICP-MS Metals Control Limits

ANALYTE	CAS No.	MATRIX	MDL	MRL	UNITS	LCS (%Rec.)	MS (%Rec.)	(% RPD)
Aluminum	7429-90-5	Soil	0.4	2	mg/kg	41-158	75-125	20
Antimony	7440-36-0	Soil	0.02	0.05	mg/kg	50-150	10-120	20
Arsenic	7440-38-2	Soil	0.06	0.5	mg/kg	78-122	78-121	20
Barium	7440-39-3	Soil	0.005	0.05	mg/kg	81-119	54-173	20
Beryllium	7440-41-7	Soil	0.003	0.02	mg/kg	83-117	80-132	20
Cadmium	7440-43-9	Soil	0.004	0.02	mg/kg	81-119	68-137	20
Chromium	7440-47-3	Soil	0.03	0.2	mg/kg	80-119	48-146	20
Cobalt	7440-48-4	Soil	0.003	0.02	mg/kg	82-118	74-118	20
Copper	7440-50-8	Soil	0.08	0.1	mg/kg	83-116	55-144	20
Lead	7439-92-1	Soil	0.009	0.05	mg/kg	79-121	72-130	20
Manganese	7439-96-5	Soil	0.03	0.05	mg/kg	81-119	75-125	20
Nickel	7440-02-0	Soil	0.03	0.2	mg/kg	81-118	59-132	20
Selenium	7782-49-2	Soil	0.2	1	mg/kg	80-120	33-156	20
Silver	7440-22-4	Soil	0.008	0.02	mg/kg	66-134	75-121	20
Thallium	7440-28-0	Soil	0.003	0.02	mg/kg	79-120	84-116	20
Vanadium	7440-62-2	Soil	0.02	0.2	mg/kg	79-121	59-142	20
Zinc	7440-66-6	Soil	0.2	0.5	mg/kg	73-121	48-162	20
Calcium	7440-70-2	Soil	2	10	mg/kg	79-121	75-125	30
Iron	7439-89-6	Soil	0.3	4	mg/kg	50-149	75-125	30
Magnesium	7439-95-4	Soil	0.04	4	mg/kg	73-127	75-125	30
Potassium	7440-09-7	Soil	5	80	mg/kg	73-126	75-125	30
Sodium	7440-23-5	Soil	4	40	mg/kg	74-126	75-125	30
Titanium	7440-32-6	Soil	0.5	2	mg/kg	75-125	75-125	30

CAS General Chemistry Control Limits

ANALYTE	CAS No.	MATRIX	MDL	MRL	UNITS	LCS (%Rec.)	MS (%Rec.)	(% RPD)
Ammonia as N	7664-41-7	Soil	0.04	0.5	mg/Kg	90-110	55-135	20
Total Kjeldahl Nitrogen	7727-37-9	Soil	8	40	mg/Kg	75-130	23-174	20
Phosphorus, Total	7723-14-0	Soil	-	0.1	mg/Kg	85-115	75-125	20
Sulfide, Total	18496-25-8	Soil	0.2	0.5	mg/Kg	55-130	45-150	20
Cyanide, Total	57-12-5	Soil	0.06	0.2	mg/Kg	78-110	10-165	20
Total Organic Carbon	7440-44-0	Soil	0.02	0.05	%	74-118	69-123	20

TestAmerica-West Sacramento EPA Method 1699 QC Limits		
Analyte	**OPR QC Limits (%R)**	**Recovery in Samples (%)**
Native Analytes		
Aldrin	50-150	NA
alpha-BHC	50-150	NA
beta-BHC	50-150	NA
delta-BHC	50-150	NA
gamma-BHC	50-150	NA
cis-Chlordane	50-150	NA
trans-Chlordane	50-150	NA
oxy-chlordane	50-150	NA
Dieldrin	50-150	NA
2,4'-DDD	50-150	NA
4,4'-DDD	50-150	NA
2,4'-DDE	50-150	NA
4,4'-DDE	50-150	NA
2,4'-DDT	50-150	NA
4,4'-DDT	50-150	NA
Endosulfan I (primary)	50-150	NA
Endosulfan I (optional)	50-150	NA
Endosulfan II	50-150	NA
Endosulfan sulfate	50-150	NA
Endrin	50-150	NA
Endrin aldehyde	50-170	NA
Endrin ketone	50-170	NA
Heptachlor	50-150	NA
Heptachlor epoxide B	50-150	NA
Hexachlorobenzene	50-150	NA
Methoxychlor	50-150	NA
cis-Nonachlor	50-150	NA
trans-Nonachlor	50-150	NA
Internal Standards		
$^{13}C_{12}$-Aldrin	20-180	20-180
$^{13}C_{12}$-alpha-BHC	20-180	20-180
$^{13}C_{12}$-beta-BHC	20-180	20-180
$^{13}C_{12}$-delta-BHC	20-180	20-180
$^{13}C_{12}$-gamma-BHC	20-180	20-180
$^{13}C_{10}$-cis-Chlordane	20-180	20-180
$^{13}C_{10}$-trans-Chlordane	20-180	20-180
$^{13}C_{10}$-oxy-Chlordane	20-180	20-180
$^{13}C_{12}$-Dieldrin	20-180	20-180
$^{13}C_{12}$-2,4'-DDD	30-160	30-160
$^{13}C_{12}$-4,4'-DDD	30-160	30-160
$^{13}C_{12}$-2,4'-DDE	30-160	30-160
$^{13}C_{12}$-4,4'-DDE	30-160	30-160
$^{13}C_{12}$-2,4'-DDT	30-160	30-160
$^{13}C_{12}$-4,4'-DDT	30-160	30-160
$^{13}C_{9}$-Endosulfan I (primary)	20-180	20-180
$^{13}C_{9}$-Endosulfan I (optional)	20-180	20-180
$^{13}C_{9}$-Endosulfan II	20-180	20-180
$^{13}C_{9}$-Endosulfan sulfate	20-180	20-180
$^{13}C_{12}$-Endrin	20-180	20-180
$^{13}C_{12}$-Endrin Aldehyde	20-180	20-180
$^{13}C_{11}$Endrin ketone	20-180	20-180
$^{13}C_{10}$-Heptachlor	20-180	20-180
$^{13}C_{10}$-Heptachlor epoxide	20-180	20-180
$^{13}C_{6}$-Hexachlorobenzene	20-180	20-180
$^{13}C_{12}$-Methoxychlor	20-180	20-180
$^{13}C_{10}$-Mirex	20-180	20-180
$^{13}C_{10}$-cis-Nonachlor	20-180	20-180
$^{13}C_{10}$-trans-Nonachlor	20-180	20-180
$^{13}C_{10}$-oxy-Chlordane	20-180	20-180

Note OPR native recovery limits apply to MS/MSD samples, but internal standard recoveries in the sample column apply to the MS/MSD samples
OPR = Ongoing Precision and Recovery
%R = Percent Recovery
[a] See Worksheet#23

TestAmerica Knoxville PAHs RLs, MDLs, and QC Limits

					LCS QC Limits			MS/MSD QC Limits		
Compound	**RL**	**Units**	**MDL**	**Units**	**LCL**	**UCL**	**RPD**	**LCL**	**UCL**	**RPD**
1-Methylnaphthalene	5	ng/g	1.3	ng/g	60	140	30	60	140	30
1-Methylphenanthrene	1	ng/g	0.26	ng/g	60	140	30	60	140	30
2,3,5-Trimethylnaphthalene	2	ng/g	0.46	ng/g	60	140	30	60	140	30
2,6-Dimethylnaphthalene	2	ng/g	0.44	ng/g	60	140	30	60	140	30
2-Methylnaphthalene	10	ng/g	2.9	ng/g	60	140	30	60	140	30
Acenaphthene	1	ng/g	0.21	ng/g	60	140	30	60	140	30
Acenaphthylene	1	ng/g	0.063	ng/g	60	140	30	60	140	30
Anthracene	1	ng/g	0.19	ng/g	60	140	30	60	140	30
Benzo(a)anthracene	1	ng/g	0.29	ng/g	60	140	30	60	140	30
Benzo(a)pyrene	1	ng/g	0.19	ng/g	60	140	30	60	140	30
Benzo(b)fluoranthene	1	ng/g	0.25	ng/g	60	140	30	60	140	30
Benzo(e)pyrene	1	ng/g	0.17	ng/g	60	140	30	60	140	30
Benzo(ghi)perylene	1	ng/g	0.15	ng/g	60	140	30	60	140	30
Benzo(k)fluoranthene	1	ng/g	0.22	ng/g	60	140	30	60	140	30
Chrysene	1	ng/g	0.2	ng/g	60	140	30	60	140	30
Dibenz(a,h)anthracene	1	ng/g	0.07	ng/g	60	140	30	60	140	30
Dibenzothiophene	1	ng/g	0.14	ng/g	60	140	30	60	140	30
Fluoranthene	1	ng/g	0.36	ng/g	60	140	30	60	140	30
Fluorene	1	ng/g	0.47	ng/g	60	140	30	60	140	30
Indeno(1,2,3-cd)pyrene	1	ng/g	0.17	ng/g	60	140	30	60	140	30
Naphthalene	20	ng/g	5.3	ng/g	60	140	30	60	140	30
Perylene	1	ng/g	0.12	ng/g	60	140	30	60	140	30
Phenanthrene	2	ng/g	1.6	ng/g	60	140	30	60	140	30
Pyrene	2	ng/g	1.1	ng/g	60	140	30	60	140	30
C2-Naphthalenes	2	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C3-Naphthalenes	2	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C4-Naphthalenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C1-Fluorenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C2-Fluorenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C3-Fluorenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C1-Dibenzothiophenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C2-Dibenzothiophenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C3-Dibenzothiophenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C4-Dibenzothiophenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C1-Phenanthrenes/anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C2-Phenanthrenes/anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C3-Phenanthrenes/anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C4-Phenanthrenes/anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA

TestAmerica Knoxville PAHs RLs, MDLs, and QC Limits

					LCS QC Limits			MS/MSD QC Limits		
Compound	**RL**	**Units**	**MDL**	**Units**	**LCL**	**UCL**	**RPD**	**LCL**	**UCL**	**RPD**
C1-Fluoranthenes/pyrenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C1-Chrysenes/benz(a)anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C2-Chrysenes/benz(a)anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C3-Chrysenes/benz(a)anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
C4-Chrysenes/benz(a)anthracenes	1	ng/g	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene-d8	Internal Standard				60	140		30	120	
Phenanthrene-d10	Internal Standard				60	140		30	120	
Chrysene-d12	Internal Standard				60	140		30	120	
Perylene-d12	Internal Standard				60	140		30	120	
2-Methylnaphthalene-d10	Internal Standard				60	140		30	120	
Acenaphthylene-d8	Internal Standard				60	140		30	120	
Benzo(a)anthracene-d12	Internal Standard				60	140		30	120	
Benzo(a)pyrene-d12	Internal Standard				60	140		30	120	
Benzo(b)fluoranthene-d12	Internal Standard				60	140		30	120	
Benzo(ghi)perylene-d12	Internal Standard				60	140		30	120	
Benzo(k)fluoranthene-d12	Internal Standard				60	140		30	120	
Dibenz(ah)anthracene-d14	Internal Standard				60	140		30	120	
Fluoranthene-d10	Internal Standard				60	140		30	120	
Indeno(1,2,3-cd)pyrene-d12	Internal Standard				60	140		30	120	
Anthracene-d10	Internal Standard				60	140		30	120	
2,6-Dimethylnaphthalene-d12	Internal Standard				60	140		30	120	
1-Methylnaphthalene-d10	Internal Standard				60	140		30	120	
Dibenzothiophene-d8	Internal Standard				60	140		30	120	

TestAmerica Knoxville 8270C RLs, MDLs,and QC Limits

					LCS QC Limits			MS/MSD QC Limits	
Compound	**RL**	**Units**	**MDL**	**Units**	**LCL**	**UCL**	**RPD**	**LCL**	**UCL**
1,1'-Biphenyl	170	ug/kg	26	ug/kg	40	120	30	40	120
1,4-Dioxane	170	ug/kg	23	ug/kg	30	130	30	30	130
1,2,4,5-Tetrachlorobenzene	170	ug/kg	33	ug/kg	40	140	30	40	140
2,2'-Oxybis(1-Chloropropane)	170	ug/kg	35	ug/kg	31	115	31	31	124
2,3,4,6-Tetrachlorophenol	330	ug/kg	152	ug/kg	40	140	30	40	140
2,4,5-Trichlorophenol	170	ug/kg	28	ug/kg	66	122	20	30	142
2,4,6-Trichlorophenol	170	ug/kg	26	ug/kg	67	112	23	29	141
2,4-Dichlorophenol	170	ug/kg	32	ug/kg	65	110	23	52	121
2,4-Dimethylphenol	330	ug/kg	260	ug/kg	56	112	21	20	130
2,4-Dinitrophenol	830	ug/kg	330	ug/kg	55	103	40	10	163
2,4-Dinitrotoluene	170	ug/kg	34	ug/kg	67	111	24	63	112
2,6-Dinitrotoluene	170	ug/kg	40	ug/kg	72	114	23	71	114
2-Chloronaphthalene	170	ug/kg	41	ug/kg	58	106	20	54	106
2-Chlorophenol	170	ug/kg	34	ug/kg	48	111	29	28	124
2-Methylnaphthalene	170	ug/kg	33	ug/kg	56	107	24	37	131
2-Methylphenol	170	ug/kg	37	ug/kg	52	116	32	45	124
2-Nitroaniline	170	ug/kg	100	ug/kg	65	113	20	21	144
2-Nitrophenol	170	ug/kg	100	ug/kg	54	101	28	10	139
3,3'-Dichlorobenzidine	330	ug/kg	200	ug/kg	51	94	31	11	123
3-Nitroaniline	330	ug/kg	190	ug/kg	45	91	22	10	126
4,6-Dinitro-2-methylphenol	330	ug/kg	330	ug/kg	61	104	25	10	150
4-Bromophenyl phenyl ether	170	ug/kg	47	ug/kg	71	117	21	65	126
4-Chloro-3-methylphenol	170	ug/kg	35	ug/kg	64	119	28	41	138
4-Chloroaniline	170	ug/kg	170	ug/kg	34	83	46	10	94
4-Chlorophenyl phenyl ether	170	ug/kg	42	ug/kg	64	108	24	63	108
4-Methylphenol	170	ug/kg	72	ug/kg	51	116	29	47	123
4-Nitroaniline	330	ug/kg	160	ug/kg	62	108	23	10	139
4-Nitrophenol	330	ug/kg	160	ug/kg	61	113	28	27	135
Acenaphthene	170	ug/kg	37	ug/kg	62	104	22	60	104
Acenaphthylene	170	ug/kg	38	ug/kg	65	105	23	58	109
Acetophenone	170	ug/kg	41	ug/kg	40	140	30	40	140
Anthracene	170	ug/kg	38	ug/kg	65	111	22	44	119
Atrazine	170	ug/kg	30	ug/kg	30	150	30	30	150
Benzaldehyde	170	ug/kg	22	ug/kg	40	140	30	40	140
Benzo(a)anthracene	170	ug/kg	41	ug/kg	73	113	20	51	126
Benzo(a)pyrene	170	ug/kg	32	ug/kg	69	119	27	30	137
Benzo(b)fluoranthene	170	ug/kg	45	ug/kg	70	117	67	34	132
Benzo(ghi)perylene	170	ug/kg	39	ug/kg	69	116	28	69	116

TestAmerica Knoxville 8270C RLs, MDLs,and QC Limits

					LCS QC Limits			MS/MSD QC Limits	
Compound	**RL**	**Units**	**MDL**	**Units**	**LCL**	**UCL**	**RPD**	**LCL**	**UCL**
Benzo(k)fluoranthene	170	ug/kg	50	ug/kg	68	121	38	35	129
bis(2-Chloroethoxy)methane	170	ug/kg	32	ug/kg	52	105	26	52	110
bis(2-Chloroethyl) ether	170	ug/kg	42	ug/kg	49	98	36	42	116
bis(2-Ethylhexyl) phthalate	170	ug/kg	45	ug/kg	75	122	20	71	137
Butyl benzyl phthalate	170	ug/kg	46	ug/kg	75	122	20	49	148
Caprolactam	170	ug/kg	43	ug/kg	40	140	30	40	140
Carbazole	170	ug/kg	44	ug/kg	60	113	21	30	124
Chrysene	170	ug/kg	48	ug/kg	68	109	25	47	121
Dibenz(a,h)anthracene	170	ug/kg	43	ug/kg	70	113	29	65	113
Dibenzofuran	170	ug/kg	41	ug/kg	59	106	23	49	110
Diethyl phthalate	170	ug/kg	40	ug/kg	64	113	23	51	124
Dimethyl phthalate	170	ug/kg	39	ug/kg	69	109	20	45	129
Di-n-butyl phthalate	170	ug/kg	52	ug/kg	73	116	23	37	151
Di-n-octyl phthalate	170	ug/kg	30	ug/kg	74	124	36	40	162
Fluoranthene	170	ug/kg	50	ug/kg	63	116	20	37	126
Fluorene	170	ug/kg	42	ug/kg	65	110	20	58	110
Hexachlorobenzene	170	ug/kg	35	ug/kg	63	108	20	57	108
Hexachlorobutadiene	170	ug/kg	35	ug/kg	54	95	27	35	109
Hexachloroethane	170	ug/kg	40	ug/kg	48	101	36	20	118
Hexachlorocyclopentadiene	170	ug/kg	100	ug/kg	42	85	28	10	114
Indeno(1,2,3-cd)pyrene	170	ug/kg	40	ug/kg	74	114	24	69	114
Isophorone	170	ug/kg	30	ug/kg	51	107	26	47	113
Naphthalene	170	ug/kg	39	ug/kg	53	99	24	43	108
Nitrobenzene	170	ug/kg	34	ug/kg	51	104	25	40	114
N-Nitrosodi-n-propylamine	170	ug/kg	36	ug/kg	43	113	26	43	123
N-Nitrosodiphenylamine	170	ug/kg	36	ug/kg	68	123	20	39	139
Pentachlorophenol	330	ug/kg	120	ug/kg	51	107	28	18	146
Phenanthrene	170	ug/kg	43	ug/kg	61	108	24	35	120
Phenol	170	ug/kg	39	ug/kg	47	122	29	47	122
Pyrene	170	ug/kg	46	ug/kg	73	121	20	48	131
2-Fluorobiphenyl	Surrogate				49	107		49	107
2-Fluorophenol	Surrogate				35	112		35	112
2,4,6-Tribromophenol	Surrogate				29	138		29	138
Nitrobenzene-d5	Surrogate				31	112		31	112
Phenol-d5	Surrogate				37	122		37	122
Terphenyl-d14	Surrogate				58	109		58	109