Sample sites

All sites sampled as part of the Brooklyn and Queens Aquifer Study, Mosquito Insecticides in Surface Water Study, South Fork Evaluation Study, Manhasset Neck Peninsula Aquifer Study, Shelter Island Study, and Waste Water Coumpounds in Ground Water Study are reported in the water-quality tables. Ground-water sites include observation wells, industrial-supply wells, and public-supply wells. Most surface-water and ground-water samples were analyzed in the U.S. Geological Survey Laboratory in Denver, Colorado. Samples collected as part of the Mosquito Insecticides in Surface Water Study were analyzed at the USGS Kansas Organic Water Quality Research Laboratory. All samples were collected in accordance with the USGS field manual, available on line at http://water.usgs.gov/owq/FieldManual.

Analyses of pesticides and degradates in surface-water and ground-water samples (laboratory schedule 2002)

Selected surface-water and ground-water samples from Brooklyn and Queens Aquifer Study, New York State Pesticide Monitoring Program, and South Fork Evaluation Study sites were analyzed for pesticides and degradates on laboratory schedule 2002 during the 2004 water year. This table lists the pesticides on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only pesticides and degradates detected in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--Pesticides and degradates in filtered water extracted on C-18 Solid Phase Extraction (SPE) cartridge and analyzed by Gas Chromatography/Mass Spectrometry (GC/MS).

SAMPLE REQUIREMENTS.--1 liter of water filtered through 0.7-micron glass-fiber depth filter, processed by chilling at 4° C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Pesticide name.

OTHER NAME.--Common or trade name(s) for constituent

MRL.--Minimum reporting level.

PCode	Compound name (other names)	MRL (µg/L)
61611	1,4-Napthoquinone	0.0444
49295	1-Naphthol	0.0882
61614	2,5-Dichloroaniline	0.0074
61617	2-Amino-*N*-isopropylbenzamide	0.0049
61618	2-Chloro-2,6-diethylacetanilide	0.0050
61620	2-Ethyl-6-methylaniline	0.0045
61625	3,4-Dichloroaniline	0.0045
61627	3,5-Dichloroaniline	0.0043
61630	3-Trifluoromethylaniline	0.0108
61631	4,4´-Dichlorobenzophenone	0.0073
61633	4-Chloro-2-methylphenol	0.0056
61634	4-Chlorobenzylmethyl sulfone	0.0104
61635	Azinphos-methyl oxon	0.0700
61580	Bifenthrin	0.0053
38716	Sulprofos	0.0155
61636	Chlorpyrofos oxygen analog	0.0562
79842	*cis*-Methyl-3-(2,2-dichlorovinyl)-2,2-dimethyl-(1-cyclopropane)-carboxylate	0.0224
79846	*cis*-Propiconazole	0.008
04031	Cycloate	0.0048
61637	2-(4-*tert*-Butylphenoxy)-cyclohexanol	0.0051
61585	Cyfluthrin	0.008
61586	Cypermethrin	0.0086
38775	Dichlorvos	0.0118
38454	Dicrotophos	0.0843
82662	Dimethoate	0.0061
61640	Disulfoton sulfone	0.0059
61641	Disulfoton sulfoxide	0.0363
79844	E-Dimethomorph	0.0203
34362	alpha-Endosulfan	0.03
34357	beta-Endosulfan	0.0142
61590	Endosulfan sulfate	0.0138
61642	Endosulfan ether	0.0066
82346	Ethion	0.0040
61644	Ethion monoxon	0.0020
61591	Fenamiphos	0.0290
61645	Fenamiphos sulfone	0.0491
61646	Fenamiphos sulfoxide	0.0387
38801	Fenthion	0.0153
61592	Flumetralin	0.004
61647	Fenthion sulfoxide	0.0079
61649	Fonofos, oxygen analog	0.0029
04025	Hexazinone	0.0129
61593	Iprodione	0.387
61594	Isofenphos	0.0034
61595	lambda-Cyhalothrin	0.0089
61652	Malaoxon	0.0298
61596	Metalaxyl	0.0051
61598	Methidathion	0.0058
61599	Myclobutanil	0.008
61660	*O*-Ethyl-*O*-methyl-*S*-propylphosphorothioate	0.0053
61600	Oxyfluorfen	0.0073
61663	Paraoxon-ethyl	0.0158
61664	Paraoxon-methyl	0.0299
61666	Phorate oxon	0.1048
61601	Phosmet	0.0079
61668	Phosmet oxon	0.0511
61602	Tebupirimphos	0.0055
61669	Tebupirimphos oxygen analogue	0.0063
61603	Profenofos	0.0059
04036	Prometryn	0.0054
61604	Propetamphos	0.0038
61605	Sulfotepp	0.0025
61606	Tefluthrin	0.0077
61607	Temephos (Abate)	0.2669
61674	Terbufos-O-analogue sulfone	0.0676
04022	Terbuthylazine	0.0102
79843	*trans*-Methyl-3-(2,2-dichlorovinyl)-2,2-dimethyl-(1-cyclopropane)-carboxylate	0.0062
79847	*trans*-Propiconazole	0.0133
61610	Tribufos	0.0044
79845	Z-Dimethomorph	0.0457

Analyses of pesticides and degradates in surface-water and ground-water samples (laboratory schedule 2003)

Selected surface-water and ground-water samples from Brooklyn and Queens Aquifer Study and South Fork Evaluation Study sites were analyzed for pesticides and degradates on laboratory schedule 2003 during the 2004 water year. This table lists the pesticides on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only pesticides and degradates detected in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--Pesticides and degradates in filtered water extracted on C-18 Solid Phase Extraction (SPE) cartridge and analyzed by Gas Chromatography/Mass Spectrometry (GC/MS).

SAMPLE REQUIREMENTS.--1 liter of water filtered through 0.7-micron glass-fiber depth filter, processed by chilling at 4° C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Pesticide name.

OTHER NAME.--Common or trade name(s) for constituent

MRL.--Minimum reporting level.

PCode	Compound name (other names)	MRL (µg/L)
49295	1-Naphthol	0.088
61618	2-Chloro-2,6-diethylacetanilide	0.005
61620	2-Ethyl-6-methylaniline	0.004
61625	3,4-Dichloroaniline	0.004
61633	4-Chloro-2-methylphenol	0.006
49260	Acetochlor	0.006
46342	Alachlor	0.005
82660	2,6-Diethylaniline	0.006
39632	Atrazine	0.007
82686	Azinphos-methyl	0.050
61635	Azinphos-methyl oxon	0.07
82673	Benfluralin	0.010
82680	Carbaryl	0.041
38933	Chlorpyrifos	0.005
61636	Chlorpyrofos oxygen analog	0.06
82687	*cis*-Permethrin	0.006
61585	Cyfluthrin	0.008
61586	Cypermethrin	0.009
82682	DCPA	0.003
04040	2-Chloro-4-isopropylamino-6-amino-s-triazine (CIAT)	0.006
39572	Diazinon	0.005
61638	Diazinon oxygen analog	0.006
38775	Dichlorvos	0.012
38454	Dicrotophos	0.084
39381	Dieldrin	0.005
82662	Dimethoate	0.006
82346	Ethion	0.004
61644	Ethion monoxon	0.002
61591	Fenamiphos	0.03
61645	Fenamiphos sulfone	0.049
61646	Fenamiphos sulfoxide	0.039
62169	Desulfinylfipronil amide	0.029
62167	Fipronil sulfide	0.013
62168	Fipronil sulfone	0.024
62170	Desulfinylfipronil	0.012
62166	Fipronil	0.016
04095	Fonofos	0.003
61649	Fonofos oxygen analog	0.002
04025	Hexazinone	0.013
61593	Iprodione	0.387
61594	Isofenphos	0.003
61652	Malaoxon	0.298
39532	Malathion	0.027
61596	Metalaxyl	0.005
61598	Methidathion	0.006
82667	Parathion-methyl	0.006
39415	Metolachlor	0.006
82630	Metribuzin	0.006
61599	Myclobutanil	0.008
61664	Paraoxon-methyl	0.03
82683	Pendimethalin	0.022
82664	Phorate	0.011
61666	Phorate oxon	0.105
61601	Phosmet	0.008
61668	Phosmet oxon	0.051
04037	Prometon	0.01
04036	Prometryn	0.005
82676	Propyzamide	0.004
04035	Simazine	0.005
82670	Tebuthiuron	0.02
82675	Terbufos	0.02
61674	Terbufus-O-analogue sulfone	0.07
04022	Terbuthylazine	0.01
82661	Trifluralin	0.009

Analyses of pesticides in surface-water and ground-water samples (laboratory schedule 2060)

Surface-water and ground-water samples from both Brooklyn and Queens Aquifer Study, and South Fork Evaluation Study sites were analyzed for pesticides on laboratory schedule 2060 during the 2004 water year. This table lists the pesticides on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only pesticides detected in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--Pesticides in filtered water extracted using a 0.5-gram graphitized carbon-based solid phase cartridge, eluted from the cartridge into two analytical fractions, and analyzed using high-performance liquid chromatography with photo-array detection.

SAMPLE REQUIREMENTS.--1 liter of water filtered through a 0.7 micron glass-fiber depth filter, and chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Pesticide or metabolite name.

OTHER NAME.--Common or trade name(s) for constituent

MRL.--Minimum reporting level.

PCode	Compound name (other names)	MRL (µg/L)
49315	Acifluorfen (Blazer, Tackle 2S)	0.028
49312	Aldicarb (Temik, Ambush)	0.04
49313	Aldicarb sulfone (Standak, Aldoxycad)	0.02
49314	Aldicarb sulfoxide	0.022
39632	Atrazine	0.007
50299	Bendiocarb	0.20
50300	Benomyl	0.022
61693	Bensulfuron-methyl	0.02
38711	Bentazon (Basagran, Bentazone)	0.01
04029	Bromacil (Bromax, Urox B)	0.018
49311	Bromoxynil (Torch, Buctril)	0.028
50305	Caffeine	0.018
49310	Carbaryl (Sevin, Denapan)	0.018
49309	Carbofuran (Furandan, Curaterr)	0.016
61188	Chloramben methyl ester	0.02
50306	Chlorimuron-ethyl	0.032
49306	Chlorothalonil (Bravo, Daconil 2787)	0.04
49305	Clopyralid (Stringer)	0.024
04031	Cycloate	0.01
49304	Dacthal monoacid	0.028
04040	Deethylatrazine	0.028
04039	Deethyldeisopropylatrazine	0.04
04038	Deisopropylatrazine	0.04
38442	Dicamba (Banval, Dianat)	0.036
39732	2,4-Dichlorophenoxyacetic acid (2,4-D, AquaKleen)	0.038
50470	2,4-D methyl ester	0.038
38746	2,4-Dichlorophenoxybutyric acid (2,4-DB, Butyrac)	0.02
49302	Dichlorprop (2,4-DP, Seritux 50)	0.028
49301	Dinoseb (DNPB, Dinosebe)	0.038
04033	Diphenamid	0.010
49300	Diuron (DCMU, Crisuron)	0.014
49297	Fenuron (Beet-Klean, Fenulon)	0.03
61694	Flumetsulam	0.04
38811	Fluometuron (Flo-Met, Cotoron)	0.016
50355	2-Hydroxyatrazine	0.032
49308	3-Hydroxycarbofuran	0.008
50356	Imazaquin	0.036
50407	Imazethapyr	0.02
61695	Imidacloprid	0.020
50295	3-Ketocarbofuran	0.02
38478	Linuron (Linurex, Lorex)	0.01
50359	Metalaxyl	0.012
38501	Methiocarb (Mesurol, Slug-Geta)	0.008
49296	Methomyl (Lannate, Lanox)	0.020
38482	4-(4-Chloro-2-methylphenoxy) acetic acid (MCPA)	0.030
38487	4-(4-Chloro-2-methylphenoxy) butyric acid (MCPB, Tropotox)	0.01
61697	Metsulfuron methyl	0.03
61692	*N*-(4-Chlorophenyl)- *N*´-methylurea	0.036
49294	Neburon (Neburea, Neburyl)	0.04
50364	Nicosulfuron	0.01
49293	Norflurazon (Euitol, Predict)	0.02
49292	Oryzalin (Surflan, Dirimal)	0.012
38866	Oxyamyl (Vydate, Pratt)	0.030
49291	Picloram (Grazon, Tordon)	0.032
49236	Propham (Tuberite)	0.030
50471	Propiconazole	0.010
38538	Propoxur (Baygon, Blattanex)	0.008
38548	Siduron	0.02
50337	Sulfometuron-methyl	0.038
82670	Tebuthiuron	0.026
04032	Terbacil	0.016
49235	Triclopyr (Garlon, Grandstand)	0.026

Analyses of volatile organic compounds in surface-water and ground-water samples (laboratory schedule 2020)

Surface-water and ground-water samples from Brooklyn and Queens Aquifer Study sites were analyzed for volatile organic compounds (VOC's) in 2004. The National Water Quality Laboratory (NWQL) created a method for accurate determination of VOC's in water in the nanogram per liter range (laboratory schedules 2020). The method described in USGS Open-File Report 97-829, Connor and others, (1997) is similar to USEPA method 524-2 (Mund, 1995), and the method described by Rose and Schroeder (1995). This table lists the volitile organic compounds on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only VOC's detected by the laboratory in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--The sample water is actively purged with helium to extract the volatile organic compounds. The volatile compounds are trapped onto a sorbent trap, thermally desorbed, separated by a megabore gas chromatographic capillary column, and finally determined by a full scan quadropole mass spectrometer. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions.

SAMPLE REQUIREMENTS.--Water collected in three 40 milliliter vials. Hydrochloric acid is added for preservation. Chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--40 milliliter baked amber septum glass vial.

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Chemical name.

OTHER NAME.--Common or trade name(s).

NDV.--Non-detection value.

PCode	Compound name	Other name(s)	NDV (µg/L)
77353	(1,1-Dimethylethyl)benzene	*tert*-butylbenzene	0.06

PCode	Compound name	Other name(s)	NDV (µg/L)
77223	(1-Methylethyl)benzene	Isopropylbenzene	0.04
77350	(1-Methylpropyl)benzene	*sec*-butylbenzene	0.06
34396	Hexachloroethane		0.2
77562	1,1,1,2-Tetrachloroethane		0.03
34506	1,1,1-Trichloroethane	TCA	0.03
34516	1,1,2,2-Tetrachloroethane		0.08
77652	1,1,2-Trichloro-1,2,2-trifluoroethane	Freon-113	0.06
34511	1,1,2-Trichloroethane		0.04
34496	1,1-Dichloroethane		0.04
34501	1,1-Dichloroethene		0.02
77168	1,1-Dichloropropene		0.03
49999	1,2,3,4-Tetramethylbenzene	Prehnitene	0.14
50000	1,2,3,5-Tetramethylbenzene	Isodurene	0.14
77613	1,2,3-Trichlorobenzene		0.18
77443	1,2,3-Trichloropropane		0.18
77221	1,2,3-Trimethylbenzene		0.06
34551	1,2,4-Trichlorobenzene		0.1
77222	1,2,4-Trimethylbenzene		0.06
82625	1,2-Dibromo-3-chloropropane	DBCP	0.5
77651	1,2-Dibromoethane		0.04
34536	1,2-Dichlorobenzene		0.05
32103	1,2-Dichloroethane		0.1
34541	1,2-Dichloropropane		0.03
77135	1,2-Dimethylbenzene	*o*-xylene	0.04
85795	1,3- & 1,4-Dimethylbenzene	*m*- & *p*-xylene	0.06
77226	1,3,5-Trimethylbenzene		0.04
34566	1,3-Dichlorobenzene		0.05
77173	1,3-Dichloropropane		0.06
34571	1,4-Dichlorobenzene		0.03
77275	1-Chloro-2-methylbenzene	2-chlorotoluene	0.04
77277	1-Chloro-4-methylbenzene	4-chlorotoluene	0.05
77356	1-Isopropyl-4methylbenzene	*p*-Isopropyltoluene	0.12
77170	2,2-Dichloropropane		0.05
81595	2-Butanone	Methyl ethyl ketone, MEK	2.0
77220	2-Ethyltoluene		0.06
77103	2-Hexanone		0.4
34215	2-Propenenitrile	Acrylonitrile	1
78109	3-Chloro-1-propene		0.5
78133	4-Methyl-2-pentanone	Methyl isobutyl ketone	0.4
81552	Acetone		6
34030	Benzene		0.02
81555	Bromobenzene		0.03
77297	Bromochloromethane		0.12
32101	Bromodichloromethane		0.03
50002	Bromoethene	Vinyl bromide	0.1
34413	Bromomethane	Methyl bromide	0.3
77041	Carbon disulfide		0.04
34301	Chlorobenzene		0.03
34311	Chloroethane		0.1
39175	Chloroethene	Vinyl chloride	0.1
34418	Chloromethane	Methyl chloride	0.2
77093	*cis*-1,2-Dichloroethene		0.02
34704	*cis*-1,3-Dichloropropene		0.05
32105	Dibromochloromethane		0.1
30217	Dibromomethane		0.05
34668	Dichlorodifluoromethane	Freon-12	0.18
34423	Dichloromethane	Methylene chloride	0.1
81576	Diethyl ether		0.08
81577	Diisopropyl ether		0.10
77128	Ethenylbenzene	Styrene	0.03
73570	Ethyl methacrylate		0.2
50004	Ethyl *tert*-butyl ether	Ethyl *t*-butyl ether, ETBE	0.03
34371	Ethylbenzene		0.03
39702	Hexachlorobutadiene		0.1
77424	Iodomethane	Methyl iodide	0.50
49991	Methyl acrylate		1.0
81593	Methyl acrylonitrile		0.4
81597	Methyl methacrylate		0.2
78032	Methyl *tert*-butyl ether	Methyl *t*-butyl ether, MTBE	0.2
34010	Methylbenzene	Toluene	0.05
77342	*n*-Butylbenzene		0.12
77224	*n*-Propylbenzene		0.04
34696	Naphthalene		0.5
50005	*tert*-Amyl methyl ether	*t*-Amyl methyl ether, TAME	0.08
34475	Tetrachloroethene	PCE	0.06
32102	Tetrachloromethane	Carbon tetrachloride	0.06
81607	Tetrahydrofuran	THF	2
34546	*trans*-1,2-Dichloroethene		0.03
34699	*trans*-1,3-Dichloropropene		0.09
73547	*trans*-1,4-Dichloro-2-butene		0.7
32104	Tribromomethane	Bromoform	0.10
39180	Trichloroethene	Trichloroethylene,TCE	0.04
34488	Trichlorofluoromethane	Freon-11	0.16
32106	Trichloromethane	Chloroform	0.02

Analysis of organochlorine pesticides, gross polychlorinated biphenyls and polychlorinated napthalenes in surface-water and ground-water samples (laboratory schedule 1324)

Surface-water and ground-water samples from Brooklyn and Queens Aquifer Study sites were analyzed for pesticides, gross polychlorinated biphenyls (PCB) and napthalenes (PCN) on laboratory schedule 1324 during the 2004 water year. This table lists the pesticides, PCB's, and PCN's on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only pesticides residues, gross PCB, or PCN measured at or above the minimum reporting level in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--Organochlorine pesticides with PCB's and PCN's, recoverable from whole water samples, analyzed by GC/ECD. A description of the methods for determination of organic substances in water can be found in USGS TWRI Book 5, Chapter A3 (Wershaw and other, 1987).

SAMPLE REQUIREMENTS.--800 milliliter of raw water, chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Chemical name.

MRL.--Minimum reporting level.

PCode	Compound name	MRL (µg/L)
39330	Aldrin	0.01
39350	Chlordane, technical mix	0.08
39380	Dieldrin	0.017
39390	Endrin	0.01
99776	alpha-HCH-d6	0.01
39410	Heptachlor	0.01
39420	Heptachlor epoxide	0.009
39340	Lindane	0.014
39755	Mirex	0.006
39516	Polychlorinated biphenyls (PCB's)	0.1
39400	Toxaphene	1
39388	alpha-Endosulfan	0.01
39360	*p,p´*-DDD	0.016
39365	*p,p´*-DDE	0.014
39370	*p,p´*-DDT	0.010
39480	*p,p´*-Methoxychlor	0.006

Analysis of semivolatile organic compounds in surface-water and ground-water samples (laboratory schedule 1383)

Surface-water and ground-water samples from Brooklyn and Queens Aquifer Study sites were analyzed for semivolatile organic compounds (SVOC) on laboratory schedule 1383 during the 2004 water year. The method is referred to as base/neutral and acid extractable compounds, with analysis by gas chromatography/mass spectrometry. The reference for schedule 1383 is USGS Open-File Report 93-125", Fishman, ed. (1993). Although it is not referenced in the report, the method is derived from EPA method 625. This table lists the SVOC on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only SVOC measured at or above the minimum reporting level in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--Acid and base/neutral extractable organic compounds from whole water samples, analyzed using GCMS technology.

SAMPLE REQUIREMENTS.--1 liter of raw water, chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Chemical name.

MRL.--Minimum reporting level.

PCode	Compound name	MRL (µg/L)
34551	1,2,4-Trichlorobenzene	1.2
34536	1,2-Dichlorobenzene	1.5
82626	1,2-Diphenylhydrazine	2.2
34566	1,3-Dichlorobenzene	1.2
34571	1,4-Dichlorobenzene	1.4
34621	2,4,6-Trichlorophenol	1.4
34601	2,4-Dichlorophenol	2.5
34606	2,4-Dimethylphenol	2.0
34616	2,4-Dinitrophenol	3.3
34611	2,4-Dinitrotoluene	1.4
34626	2,6-Dinitrotoluene	2
34581	2-Chloronaphthalene	1
34586	2-Chlorophenol	1.2
34591	2-Nitrophenol	1
34631	3,3´-Dichlorobenzidine	0.9
34657	4,6-Dinitro-2-methylphenol	1.8
34636	4-Bromophenyl phenyl ether	2.1
34452	4-Chloro-3-methylphenol	1.6
34641	4-Chlorophenyl phenyl ether	1.2
34646	4-Nitrophenol	2.4
34205	Acenaphthene	2
34200	Acenaphthylene	2
34220	Anthracene	2
34526	Benzo[*a*]anthracene	2
39120	Benzidine	1000
34247	Benzo[*a*]pyrene	1
34230	Benzo[*b*]fluoranthene	2
34521	Benzo[*g h i*]perylene	2
34242	Benzo[*k*]fluoranthene	1
34292	*n*-Butyl benzyl phthalate	2
34320	Chrysene	1.2
39110	Di-*n*-butyl phthalate	2
34596	Di-*n*-octyl phthalate	2
34556	Dibenzo[*a,h*]anthracene	2.2
34336	Diethyl phthalate	2
34341	Dimethyl phthalate	1
34376	Fluoranthene	1
34381	Fluorene	1.2
39700	Hexachlorobenzene	1
39702	Hexachlorobutadiene	1.2
34396	Hexachloroethane	1.6
34403	Indeno[1,2,3-*cd*]pyrene	2
34408	Isophorone	2
34428	*N*-Nitrosodi-*n*-propylamine	2
34438	*N*-Nitrosodimethylamine	2
34433	*N*-Nitrosodiphenylamine	2
34696	Naphthalene	1.6
34447	Nitrobenzene	1.4
39032	Pentachlorophenol	2
34461	Phenanthrene	1
34694	Phenol	1.6
34469	Pyrene	2
34278	Bis(2-chloroethoxy) methane	1
34273	Bis(2-chloroethyl) ether	1
39100	Bis(2-ethylhexyl) phthalate	2
34283	Bis(2-chloroisopropyl) ether	1

Analysis of semivolatile organic compounds in surface-water and ground-water samples (laboratory schedule 1433)

Surface-water and ground-water samples from Wastewater Compounds in Suffolk County Study, Shelter Island Study, and the South Fork Evaluation Study sites were analyzed for waste water compounds on laboratory schedule 1433 during the 2004 water year. The method focuses on the determination of alkylphenolethoxylate surfactant compounds and their alkylphenol degradates that are persistent indicators of wastewater. Other method compounds are representative of food additives, fragrances, antioxidants, flame retardants, plasticizers, industrial solvents, disinfectants, fecal sterols, polycyclic aromatic hydrocarbons, and high-

use domestic pesticides. The reference for schedule 1433 is USGS Open-File Report 01-4186, Zaugg and others (2002). This table lists the waste water compounds on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only waste water compounds measured at or above the minimum reporting level in at least one sample are listed in the organic water-quality tables.**

SCHEDULE DESCRIPTION.--Solid phase extraction of waste water compounds in filtered water, analyzed using GCMS technology.

SAMPLE REQUIREMENTS.--1 liter of raw water, chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter of water filtered through a 0.7 micron glass-fiber depth filter, and chilled at 4°C (packed in ice) in a baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Chemical name.

MRL.--Minimum reporting level.

PCode	Compound name	MRL (µg/L)
34572	1,4-Dichlorobenzene	0.5
62054	1-Methylnaphthalene	0.5
62055	2,6-Dimethylnaphthalene	0.5
62056	2-Methylnaphthalene	0.5
62057	3-beta-Coprostanol	2
62058	3-Methyl-1(*H*)-indole (Skatole)	1
62059	3-*tert*-Butyl-4-hydroxy anisole (BHA)	5
62060	4-Cumylphenol	1
62085	4-Nonylphenol	5
62061	4-*n*-Octylphenol	1
62062	4-*tert*-Octylphenol	1
62063	5-Methyl-1*H*-benzotriazole	2
62064	Acetophenone	0.5
62065	Acetyl hexamethyl tetrahydronaphthalene (AHTN)	0.5
34221	Anthracene	0.5
62066	Anthraquinone	0.5
34248	Benzo[*a*]pyrene	0.5
62067	Benzophenone	0.5
62068	beta-Sitosterol	2
62086	beta-Stigmastanol	2
62069	Bisphenol A	1
04029	Bromacil	0.5
50305	Caffeine	0.5
62070	Camphor	0.5
82680	Carbaryl	1
62071	Carbazole	0.5
38933	Chlorpyrifos	0.5
62072	Cholesterol	2
62005	Cotinine	1
62073	d-Limonene	0.5
39572	Diazinon	0.5
38775	Dichlorvos	1
34377	Fluoranthene	0.5
62075	Hexadydrohexamethylcyclopentabenzopyran (HHCB)	0.5
62076	Indole	0.5
62077	Isoborneol	0.5
34409	Isophorone	0.5
62078	Isopropylbenzene	0.5
62079	Isoquinoline	0.5
62080	Menthol	0.5
50359	Metalaxyl	0.5
62081	Methyl salicylate	0.5
39415	Metolachlor	0.5
62082	*N,N*-diethyl-meta-toluamide (DEET)	0.5
34443	Naphthalene	0.5
62083	Diethoxy-Nonylphenol (total)	5
61705	Diethoxy-Octylphenol	1
61706	Ethoxy-Octylphenol	1
62084	*p*-Cresol	1
34459	Pentachlorophenol	2
34462	Phenanthrene	0.5
34466	Phenol	0.5
04037	Prometon	0.5
34470	Pyrene	0.5
34288	Tribromomethane	0.5
34476	Tetrachloroethylene	0.5
62093	Tri(2-butoxyethyl)phosphate	0.5
62087	Tri(2-chloroethyl)phosphate	0.5
62089	Tributyl phosphate	0.5
62090	Triclosan	1
62091	Triethyl citrate (ethyl citrate)	0.5
62092	Triphenyl phosphate	0.5
62088	Tris(dichlorisopropyl)phosphate	0.5

Analyses of mosquito insecticides and a synergist in surface-water samples (laboratory schedule GCM)

Selected surface-water and ground-water samples from the Mosquito Insecticides in Surface-Water Study sites were analyzed for pesticides on laboratory schedule GCM during the 2004 water year. The method uses liquid-liquid extraction and gas chromatography/mass spectrometry. The method was developed and preformed at the USGS Organic Geochemistry Research Laboratory in Lawrence, Kansas. The reference for the method is U.S. Geological Survey Open-File Report 01-273, Zimmerman and others (2001). This table lists the compounds on the schedule, the National Water Information System parameter code, the unit of measure (micrograms per liter, µg/L), and the reporting level. **Only compounds detected in at least one sample are listed in the water-quality tables.**

SCHEDULE DESCRIPTION.--Four inesticides and a synergist in filtered water are isolated using liquid-liquid extraction. Gas chromatography/mass spectrometry are used to identify and quantify these compounds.

SAMPLE REQUIREMENTS.--1 liter of water filtered through 0.7-micron glass-fiber depth filter, processed by chilling at 4° C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC).

PCODE.--The National Water Information System parameter code.

COMPOUND NAME.--Pesticide name.

OTHER NAME.--Common or trade name(s) for constituent

MRL.--Minimum reporting level.

PCode	Compound name (other names)	MRL (µg/L)
61757	Methoprene, (Altosid)	0.005
62765	Piperonyl butoxide	0.005
62768	Resmethrin, (Scourge)	0.005
62763	Phenothrin, (Anvil)	0.005
39523	Malathion	0.005

Analysis of inorganic substances: major ions and trace metals, cyanide and isotopes in surface-water and ground-water samples (laboratory schedules 2701, 2702, 1294, 1087, and 101)

Surface-water and ground-water samples from Brooklyn and Queens Aquifer Study, South Fork Evaluation Study, and Manhasset Neck Study sites were analyzed for inorganic substances on laboratory schedules 2701, 2702, 1294, 1087 and 101 during the 2004 water year. All of these schedules contain similar constituents. Specific methods of analysis for each constituent can be found in the reference cited in the table below. This table lists the National Water Information System parameter code, the bottle type, the constituent, the reporting level (MRL), the unit of measure (micrograms per liter, µg/L, or milligrams per liter, mg/L), and the USGS reference for the method of analysis of the constituent. **Only constituents measured at or above the minimum reporting level in at least one sample are listed in the inorganic water-quality table.**

SAMPLE REQUIREMENTS.--500 milliliters of water filtered through a 0.45 micron cellulose filter (FU, FCC), 250 milliliters of raw water acidified (RA), 250 milliliters of filtered water through a 0.45 micron cellulose filter then acidified (RU), 250 milliliters of raw water fixed with 2 milliliters of 50% hydrochloric acid (RAM), 250 milliliters of raw water fixed with 5 milliliters of sodium hydroxide, and 250 milliliters of raw water (MBAS), 125 milliliters raw water acidified with sulfuric acid (WCA), 125 milliliters acidified with 1 ml of 4.5N sulfuric acid (DOC), all chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--One 500-ml clear poly bottle (FU), one 125-ml brown poly bottle (FCC), two 250-ml acid rinsed clear poly bottle (RA, FA), three 250-ml clear poly bottles (RU, MBAS, RCN), 125-ml clear poly bottle (WCA), 250-ml glass bottle (RAM), and one 125-ml brown glass baked bottle (DOC) all from Ocala Quality Water Service Unit.

PCODE.--The National Water Information System parameter code.

PCode	Bottle type	Constituent	MRL	Report unit	Reference
00929	FA	Sodium	0.5	mg/L	OFR 98-165
38260	MBAS	MBAS	0.10	mg/L	OFR 95-189
01002	RA	Arsenic	2	ug/L	OFR 99-464
90410	RU	Acid Neutralizing Capacity (ANC), laboratory	2	mg/L	TWRI B5-A1/89
01092	RA	Zinc	2	ug/L	OFR 98-165
01034	RA	Chromium	0.8	ug/L	OFR 93-449
01007	RA	Barium	0.16	ug/L	OFR 98-165
01042	RA	Copper	0.6	ug/L	OFR 98-165
00945	RU	Sulfate	0.2	mg/L	TWRI B5-A1/89
01027	RA	Cadmium	0.04	ug/L	OFR 98-165
00950	FU	Fluoride	0.2	mg/L	TWRI B1-A1/89
01045	RA	Iron	6	ug/L	OFR 98-165
01055	RA	Manganese	0.2	ug/L	OFR 98-165
01051	RA	Lead	0.06	ug/L	OFR 98-165
01147	RA	Selenium	0.4	ug/L	OFR 98-165
71900	RAM	Mercury	0.02	ug/L	WRI 01-4132
00927	RA	Magnesium	0.008	mg/L	OFR 98-165
00720	RCN	Cyanide	0.008	mg/L	TWRI B5-A1/89
00916	RA	Calcium	0.020	mg/L	OFR 98-165
01077	RA	Silver	0.16	ug/L	OFR 98-165
00937	RA	Potassium	0.1	mg/L	TWRI B5-A1/89
00955	FU	Silica	0.04	mg/L	TWRI B5-A1/89
00940	FU	Chloride	0.20	mg/L	TWRI B5-A1/89
70300	FU	Residue, 180 degrees Celsius	10	mg/L	TWRI B5-A1/89
00915	FA	Calcium	0.010	mg/L	OFR 98-165
01046	FA	Iron	6	ug/L	OFR 98-165
00925	FA	Magnesium	0.008	mg/L	OFR 98-165
01056	FA	Manganese	0.6	ug/L	OFR 98-165
00935	FA	Potassium	0.16	mg/L	OFR 98-165
00625	FCC	Ammonia + organic nitrogen, as nitrogen	0.1	mg/L	OFR 93-125
00671	FCC	Orthophosphate, as phosphorous	0.02	mg/L	OFR 93-125
00631	FCC	Nitrite + nitrate, as nitrogen	0.06	mg/L	OFR 93-125
00613	FCC	Nitrite, as nitrogen	0.008	mg/L	OFR 93-125
00608	FCC	Ammonia, as nitrogen	0.04	mg/L	OFR 93-125
00623	WCA	Ammonia + organic nitrogen, as nitrogen	0.1	mg/L	OFR 92-146
00665	WCA	Phosphorus	0.004	mg/L	EPA 365.1
00666	FCC	Phosphorus	0.004	mg/L	EPA 365.1
00681	DOC	Organic carbon (dissolved)	0.33	mg/L	OFR92-480

Data qualifiers

Values in the analysis of samples collected at water-quality miscellaneous sites are sometimes preceded by remark codes. Values for analytes in the tables are preceded by an "M" indicate the compound was detected but not quantified. The minimum reporting limit (MRL) is a statistically defined reporting limit designed to limit false positives and

false negatives to less than 1 percent. Positive detections measured at less than MRL are reported as estimated concentrations (E) to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the tables are preceded by an "E" in the following situations:

1. When the calculated concentration is less than the lowest calibration standard. The analyte meets all identification criteria to be positively identified, but the amount detected is below where it can be reliably quantified.

2. If a sample is diluted for any reason. The method reporting level is multiplied by the dilution factor to obtain the adjusted method reporting level. Values below the lowest calibration standard, multiplied by the dilution factor are qualified with an "E". For example, a value of 0.19 from a 1:2 dilution is reported as E0.4.

3. If the set spike has recoveries out of the specified range (60-140%).

4. If the analyte is also detected in the set blank. If the value in the sample is less than five times the blank value and greater than the blank value plus the long term method detection limit, the value is preceded by an "E" to indicate that the analyte is positively identified but not positively quantified because the analyte was also detected in the blank.

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