Supplemental Information: *Demonstrating organic contaminant removal in an ozone-based water reuse process at full scale*

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Table SI1: Details of analytes and limits of reporting (LOR)

Group	Analyte	Units	Notes	LOR
Nitrosamines	NDMA	ng/L	b	5
	NDEA	ng/L		10
	Nitroso-piperidine	ng/L		20
	NDBA	ng/L		20
	Nitroso-morpholine (NMOR)	ng/L		10
Endocrine Disrupting Compounds (EDCs)	4-*t*-Octylphenol	ng/L	c	10
	Nonylphenol	ng/L	c	100
	Bisphenol A	ng/L	c	10
	Estrone	ng/L	c	2
	17β-Estradiol	ng/L	c	2
	Estriol	ng/L	c	5
	17α-Ethynylestradiol	ng/L	c	4
	Norgestrel	ng/L	c	5
	Testosterone	ng/L	c	10
	Androsterone	ng/L	c	5
	Etiocholanolone	ng/L	c	5
	Cholesterol (not an EDC)	ng/L	c	100
	Equilenin	ng/L		3
	Equilin	ng/L		3
	Mestranol	ng/L		5
	Cumylphenol	ng/L	c	25
	17α-Estradiol	ng/L		2
	Norethindrone	ng/L		5
	Progesterone	ng/L		20
	Predicted estradiol equivalent	ng/L	d	2
Pharmaceuticals (KWDRUG)	Acesulfame K (sweetener)	µg/L		0.01
	Acetylsalicylic acid	µg/L		0.01
	Atenolol	µg/L		0.01
	Atorvastatin	µg/L		0.01
	Caffeine	µg/L		0.02
	Carbamazepine	µg/L		0.01
	Cephalexin	µg/L		0.01
	Chloramphenicol	µg/L		0.1
	Ciprofloxacin	µg/L		0.15
	Citalopram	µg/L		0.01
	Codeine	µg/L		0.1
	Cyclophosphamide	µg/L		0.01
	Dapsone	µg/L		0.01
	DEET	µg/L		0.01
	Desmethyl Citalopram	µg/L		0.01
	Desmethyl Diazepam	µg/L		0.01
	Diatrizoate sodium	µg/L		0.05

	Diazepam	µg/L		0.01
	Diclofenac	µg/L		0.01
	Doxylamine	µg/L		0.01
	Erythromycin	µg/L		0.01
	Erythromycin anhydrate	µg/L		0.01
	Fluoxetine	µg/L		0.01
	Fluvastatin	µg/L		0.01
	Frusemide	µg/L		0.01
	Gabapentin	µg/L		0.05
	Gemfibrozol	µg/L		0.01
	Hydrochlorthiazide	µg/L		0.01
	Ibuprofen	µg/L		0.07
	Ifosfamide	µg/L		0.01
	Indomethacin	µg/L		0.01
	Iopromide	µg/L		0.2
	Lincomycin	µg/L		0.3
	Metoprolol	µg/L		0.01
	Naproxen	µg/L		0.1
	Norfloxacin	µg/L		0.05
	Oxazepam	µg/L		0.01
	Oxycodone	µg/L		0.01
	Paracetamol	µg/L		0.02
	Phenytoin	µg/L		0.01
	Praziquantel	µg/L		0.01
	Primidone	µg/L		0.01
	Propranolol	µg/L		0.01
	Ranitidine	µg/L		0.05
	Roxithromycin	µg/L		0.02
	Salicylic acid	µg/L		0.1
	Sertraline	µg/L		0.01
	Sulfasalazine	µg/L		0.01
	Sulfadiazine	µg/L		0.01
	Sulfamethoxazole	µg/L		0.01
	Sulfathiazole	µg/L		0.01
	Temazepam	µg/L		0.01
	Tramadol	µg/L		0.01
	Triclosan	µg/L		0.01
	Trimethoprim	µg/L		0.01
	Tylosin	µg/L		0.05
	Venlafaxine	µg/L		0.01
	Warfarin	µg/L		0.01
Herbicides and Other Compounds by LCMS	Ametryn	µg/L		0.01
	Asulam	µg/L		0.01
	Atrazine	µg/L		0.01

	Bromacil	µg/L		0.01
	Bromoxynil	µg/L		0.01
	Carbaryl	µg/L		0.01
	Desethyl Atrazine	µg/L		0.01
	Desisopropyl Atrazine	µg/L		0.02
	Diazinon	µg/L		0.02
	Diuron	µg/L		0.01
	3,4-Dichloroaniline	µg/L		0.01
	Flamprop-methyl	µg/L		0.01
	Fluometuron	µg/L		0.02
	Hexazinone	µg/L		0.01
	Metolachlor	µg/L		0.01
	Prometryn	µg/L		0.01
	Propoxur	µg/L		0.01
	Simazine	µg/L		0.01
	Tebuthiuron	µg/L		0.01
	Terbutryn	µg/L		0.01
	Haloxyfop (acid)	µg/L		0.01
	Haloxyfop-2-etotyl	µg/L		0.01
	Haloxyfop-methyl	µg/L		0.01
	Total Diuron	µg/L		0.03
	Total Haloxyfop	µg/L		0.04
Phenoxy Herbicides, Dalapon	Dicamba	µg/L		0.01
	Mecoprop	µg/L		0.01
	MCPA	µg/L		0.01
	2,4-DP (Dichlorprop)	µg/L		0.01
	2,4-D	µg/L		0.01
	Triclopyr	µg/L		0.01
	MCPB	µg/L		0.01
	Fluroxypyr	µg/L		0.01
	2,4-DB	µg/L		0.01
	Picloram	µg/L		0.02
	Dalapon (2,2-DPA)	µg/L		0.05
Haloacetic Acids	Monochloroacetic Acid	µg/L		5
	Dichloroacetic Acid	µg/L		5
	Trichloroacetic Acid	µg/L		5
	Bromochloroacetic Acid	µg/L		5
	Monobromoacetic Acid	µg/L		5
	Dibromoacetic Acid	µg/L		5
	Bromodichloroacetic acid	µg/L		5
	Chlorodibromoacetic acid	µg/L		5
	Dalapon (2,2-DPA)	µg/L		10
Herbicides by GCMS	Amitraz	µg/L		0.1
	Diclofop-methyl	µg/L		0.1

	Fluazifop-butyl	µg/L		0.1
	Fluometuron	µg/L		0.1
	Haloxyfop-2-etotyl	µg/L		0.1
	Haloxyfop-methyl	µg/L		0.1
	Metribuzin	µg/L		0.1
	Molinate	µg/L		0.1
	Oxyfluorfen	µg/L		0.1
	Pendimethalin	µg/L		0.1
	Propanil	µg/L		0.1
	Propazine	µg/L		0.1
	Terbuthylazine	µg/L		0.1
	Triallate	µg/L		0.1
	Trifluralin	µg/L		0.1
	Ametryn	µg/L		0.1
	Atrazine	µg/L		0.1
	Bromacil	µg/L		0.1
	Desethyl Atrazine	µg/L		0.1
	Desisopropyl Atrazine	µg/L		0.1
	Hexazinone	µg/L		0.1
	Metolachlor	µg/L		0.1
	Prometryn	µg/L		0.1
	Simazine	µg/L		0.1
	Tebuthiuron	µg/L		0.1
	Terbutryn	µg/L		0.1
Organochlorine Pesticides	Aldrin (HHDN)	µg/L		0.1
	Dieldrin (HEOD)	µg/L		0.1
	cis-Chlordane	µg/L		0.1
	trans-Chlordane	µg/L		0.1
	Chlordene	µg/L		0.1
	Chlordene Epoxide	µg/L		0.1
	Chlordene-1-hydroxy	µg/L		0.1
	Chlordene-1-hydroxy-2,3-epoxide	µg/L		0.1
	p,p-DDD	µg/L		0.1
	p,p-DDE	µg/L		0.1
	o,p-DDT	µg/L		0.1
	p,p-DDT	µg/L		0.1
	o,p-DDD	µg/L		0.1
	o,p-DDE	µg/L		0.1
	Dicofol	µg/L		2.0
	α-Endosulfan	µg/L		0.2
	β-Endosulfan	µg/L		0.2
	Endosulfan Sulfate	µg/L		0.2
	Endosulfan Ether	µg/L		0.1
	Endosulfan Lactone	µg/L		0.5

	Endrin	µg/L		0.1
	Endrin aldehyde	µg/L		0.1
	HCB	µg/L		0.2
	α-HCH (α-BHC)	µg/L		0.1
	β-HCH (β-BHC)	µg/L		0.1
	δ-HCH (δ-BHC)	µg/L		0.1
	Heptachlor	µg/L		0.1
	Heptachlor Epoxide	µg/L		0.1
	Lindane (γ-HCH)	µg/L		0.1
	Methoxychlor	µg/L		0.1
	cis-Nonachlor	µg/L		0.1
	trans-Nonachlor	µg/L		0.1
	Oxychlordane	µg/L		0.1
Organo-phosphorus Pesticides	Azinphos-ethyl	µg/L		0.1
	Azinphos-methyl	µg/L		0.1
	Bromophos-ethyl	µg/L		0.1
	Cadusafos	µg/L		0.1
	Carbophenothion	µg/L		0.1
	Chlorfenvinphos	µg/L		0.1
	Chlorpyrifos	µg/L		0.1
	Chlorpyrifos-methyl	µg/L		0.1
	Chlorpyrifos oxon	µg/L		0.1
	Coumaphos	µg/L		0.1
	Demeton-S	µg/L		0.1
	Demeton-S-methyl	µg/L		0.1
	Diazinon	µg/L		0.1
	Dichlorvos	µg/L		0.1
	Dimethoate	µg/L		0.1
	Omethoate	µg/L		0.5
	Dioxathion	µg/L		0.1
	Disulfoton	µg/L		0.1
	Ethion	µg/L		0.1
	Ethoprophos	µg/L		0.1
	Etrimphos	µg/L		0.1
	Famphur	µg/L		0.1
	Fenamiphos	µg/L		0.1
	Fenchlorphos	µg/L		0.1
	Fenitrothion	µg/L		0.1
	Fenthion-ethyl	µg/L		0.1
	Fenthion (methyl)	µg/L		0.1
	Isofenphos	µg/L		0.1
	Malathion (Maldison)	µg/L		0.1
	Methidathion	µg/L		0.1
	Mevinphos	µg/L		0.1

	Monocrotophos	µg/L		0.5
	Oxydemeton-methyl	µg/L		0.1
	Parathion (ethyl)	µg/L		0.1
	Parathion-methyl	µg/L		0.1
	Phorate	µg/L		0.1
	Phosmet	µg/L		0.1
	Phosphamidon	µg/L		0.1
	Pirimiphos-methyl	µg/L		0.1
	Profenofos	µg/L		0.1
	Prothiophos	µg/L		0.1
	Pyrazophos	µg/L		0.1
	Sulprofos	µg/L		0.1
	Temephos	µg/L		0.1
	Terbufos	µg/L		0.1
	Tetrachlorvinphos	µg/L		0.1
Other Pesticides	Benalaxyl	µg/L		0.1
	Bendiocarb	µg/L		0.1
	Bitertanol	µg/L		0.1
	Captan	µg/L		0.2
	Carbaryl	µg/L		0.1
	Dimethomorph	µg/L		0.2
	Fipronil	µg/L		0.1
	Furalaxyl	µg/L		0.1
	Metalaxyl	µg/L		0.1
	Methoprene	µg/L		0.1
	Oxadiazon	µg/L		0.1
	Piperonyl Butoxide	µg/L		0.1
	Pirimicarb	µg/L		0.1
	Procymidone	µg/L		0.1
	Propargite	µg/L		0.2
	Propiconazole	µg/L		0.1
	Propoxur	µg/L		0.1
	Rotenone	µg/L		0.1
	Tebuconazole	µg/L		0.1
	Tetradifon	µg/L		0.1
	Thiabendazole	µg/L		0.2
	Triadimefon	µg/L		0.3
	Triadimenol	µg/L		0.1
	Vinclozolin	µg/L		0.2
	DEET	µg/L		0.1
Synthetic Pyrethroids	Bifenthrin	µg/L		0.1
	Bioresmethrin	µg/L		0.1
	Cyhalothrin	µg/L		0.2
	Cyfluthrin	µg/L		1

	Cypermethrin	µg/L		0.5
	Deltamethrin	µg/L		1
	Fenvalerate	µg/L		0.5
	Fluvalinate	µg/L		0.5
	Permethrin	µg/L		0.2
	Phenothrin	µg/L		0.1
	Tetramethrin	µg/L		0.2
	Transfluthrin	µg/L		0.1
Other GCMS Compounds	1H-Benzotriazole	µg/L		0.5
	1H-Benzotriazole, 1-methyl	µg/L		0.1
	1H-Benzotriazole, 5-methyl	µg/L		0.2
	2,6-Di-*t*-butyl-*p*-cresol (BHT)	µg/L		0.1
	2,6-Di-*t*-butylphenol	µg/L		0.3
	4-Chloro-3,5-dimethylphenol	µg/L		0.1
	Galaxolide	µg/L		0.1
	Moclobemide	µg/L		1
	Musk Ketone	µg/L		0.1
	Musk Xylene	µg/L		0.1
	N-Butyl benzenesulfonamide	µg/L		0.2
	N-Butyltoluenesulfonamide	µg/L		0.1
	Tonalid	µg/L		0.1
	Triclosan	µg/L		0.1
	Triclosan methyl ether	µg/L		0.1
	Triethyl phosphate	µg/L		0.1
	Tri-n-butyl phosphate	µg/L		0.1
	Tris(chloroethyl) phosphate	µg/L		0.1
	Tris(chloropropyl) phosphate isomers	µg/L		0.1
	Tris(dichloropropyl) phosphate	µg/L		0.2
Totals (Residue Definition)	Total Aldrin & Dieldrin			0.2
	Total Chlordane	µg/L		0.2
	Total DDT	µg/L		0.4
	Total Endosulfan	µg/L		0.6
	Total Heptachlor	µg/L		0.2
	Total Dimethoate	µg/L		0.7
	Total Triadimefon	µg/L		0.4
Phenolics	Phenol	µg/L		0.25
	2-Chlorophenol	µg/L		1
	4-Chlorophenol	µg/L		0.3
	2-Methylphenol	µg/L		1
	4-Methylphenol	µg/L		1
	2-Nitrophenol	µg/L		1
	2,4-Dimethylphenol	µg/L		1
	2,4-Dichlorophenol	µg/L		1

	2,6-Dichlorophenol	µg/L		1
	4-Chloro-3-methylphenol	µg/L		1
	2,4,6-Trichlorophenol	µg/L		1
	2,4,5-Trichlorophenol	µg/L		1
	2,4-Dinitrophenol	µg/L	g	1
	4-Nitrophenol	µg/L		1
	2,3,4,6-Tetrachlorophenol	µg/L		1
	2-Methyl-4,6-dinitrophenol	µg/L		1
	Pentachlorophenol	µg/L		1
	Coumarin	µg/L		0.3
Polycyclic aromatic hydrocarbons (PAHs)	Benzo[ghi]perylene	µg/L		0.01
	Dibenzo[a,h]anthracene	µg/L		0.01
	Indeno[1,2,3-cd]pyrene	µg/L		0.01
	Benzo[a]pyrene	µg/L		0.01
	Benzo[b+k]fluoranthene	µg/L		0.01
	Chrysene	µg/L		0.01
	Benz[a]anthracene	µg/L		0.01
	Pyrene	µg/L		0.01
	Fluoranthene	µg/L		0.01
	Anthracene	µg/L		0.01
	Phenanthrene	µg/L		0.01
	Fluorene	µg/L		0.01
	Acenaphthene	µg/L		0.01
	Acenaphthylene	µg/L		0.01
	Naphthalene	µg/L		0.02
	1,2-Dimethylnaphthalene	µg/L		0.01
	1,4-Dimethylnaphthalene	µg/L	h	0.01
	1,7-Dimethylnaphthalene	µg/L	h	0.01
	1,8-Dimethylnaphthalene	µg/L		0.01
	1-Methylfluorene	µg/L		0.01
	2,2-Dimethylbiphenyl	µg/L		0.01
	2,6-Dimethylnaphthalene	µg/L	h	0.01
	2-Ethylnaphthalene	µg/L	h	0.01
	2-Methoxynaphthalene	µg/L	h	0.01
	2-Methylanthracene	µg/L		0.01
	3,3-Dimethylbiphenyl	µg/L		0.01
	4,4-Dimethylbiphenyl	µg/L		0.01
	9-Methylanthracene	µg/L		0.01
	Biphenyl	µg/L		0.01
	TEQ		i	
Trihalomethanes	Chloroform	µg/L		1
	Bromodichloromethane	µg/L		1
	Dibromochloromethane	µg/L		1
	Bromoform	µg/L		1

	Total Trihalomethanes	µg/L		4
Iodinated Halomethanes	Dichloroiodomethane	µg/L		0.5
	Bromochloroiodomethane	µg/L		0.5
	Dibromoiodomethane	µg/L		0.5
	Chlorodiiodomethane	µg/L		1
	Bromodiiodomethane	µg/L		0.5
Perfluorinated compounds	Perfluorobutanoic acid	µg/L		0.005
	Perfluoropentanoic acid	µg/L		0.005
	Perfluorohexanoic acid	µg/L		0.005
	Perfluoroheptanoic acid	µg/L		0.005
	Perfluorooctanoic acid	µg/L		0.005
	Perfluorononanoic acid	µg/L		0.005
	Perfluorodecanoic acid	µg/L		0.005
	Perfluoroundecanoic acid	µg/L		0.005
	Perfluorododecanoic acid	µg/L		0.005
	Perfluorotridecanoic acid	µg/L		0.005
	Perfluorotetradecanoic acid	µg/L		0.005
	Perfluorohexadecanoic acid	µg/L		0.005
	Perfluorooctadecanoic acid	µg/L		0.005
	Perfluorobutanesulfonate	µg/L		0.005
	Perfluorohexanesulfonate	µg/L		0.005
	Perfluorooctanesulfonate	µg/L		0.005
	Perfluordecanesulfonate	µg/L		0.005
Other Compounds	Acetaldehyde	mg/L		0.05
	Formaldehyde	mg/L		0.05
	Glutaraldehyde	mg/L		0.05
	Furfuraldehyde	mg/L		0.05
Other Disinfection Byproducts	1,1,1-Trichloropropan-2-one	µg/L		1
	1,1,3-Trichloropropan-2-one	µg/L		1
	1,1-Dichloropropan-2-one	µg/L		1
	1,3-Dichloropropan-2-one	µg/L		1
	Bromochloroacetonitrile	µg/L		1
	Chloral hydrate	µg/L		1
	Chloropicrin	µg/L		1
	Dibromoacetonitrile	µg/L		1
	Dibromonitromethane	µg/L		1
	Dichloroacetonitrile	µg/L		1
	Trichloroacetonitrile	µg/L		1

Notes:
NA means not analysed for this compound; [b] NDMA result only is corrected for recovery; [c] The EDC LORs given are for PRW (post recycled water) or RO water. LORs for other water types are given below. Norgestrel cannot be determined in effluent at trace levels. [d] for all listed EDC compounds except Norgestrel, Mestranol, Progesterone and Norethindrone. Results for phthalates, when measured, are included in this calculation. [g] The reporting limits for the Phenols marked are higher than for the other phenols due to poor chromatography and/or loss of instrument sensitivity.

Table SI1 (continue): Details of analytes and limits of reporting

Analyte	Units	LOR
4-*t*-Octylphenol	ng/L	100
Nonylphenol	ng/L	300
Bisphenol A	ng/L	50
Estrone	ng/L	10
17β-Estradiol	ng/L	20
Estriol	ng/L	10
17α-Ethynylestradiol	ng/L	15
Testosterone	ng/L	50
Androsterone	ng/L	20
Etiocholanolone	ng/L	20
Cholesterol (not an EDC)	ng/L	200

Table SI2: Characteristics of bottles preparation and preservatives used

Group	Bottle	Type	Volume	Preservative	Washing
Nitrosamines	Amber	Glass	1L	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Endocrine Disrupting Compounds (EDCs)	Amber	Glass	1L	Sodium Thiosulphate 80mg3	Ethanol + Acetone + dried
Pharmaceuticals	Amber	Glass	1L	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Herbicides and Other Compounds by LCMS					Ethanol + Acetone + dried
Phenoxy Herbicides, Dalapon					Ethanol + Acetone + dried
Haloacetic Acids	Amber	Glass	200 mL	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Herbicides by GCMS	Amber	Glass	1L	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Organochlorine Pesticides					Ethanol + Acetone + dried
Organo-phosphorus Pesticides					Ethanol + Acetone + dried
Other Pesticides					Ethanol + Acetone + dried
Synthetic Pyrethroids					Ethanol + Acetone + dried
Other GCMS Compounds					Ethanol + Acetone + dried
Totals (Residue Definition)					Ethanol + Acetone + dried
Phenolics	Amber	Glass	1L	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Polycyclic aromatic hydrocarbons (PAHs)	Amber	Glass	1L	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Trihalomethanes	Amber	Glass	200 mL	Ammonium Chloride 0.2g	Ethanol + Acetone + dried
Iodinated Halomethanes	Amber	Glass	1L	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Aldehydes	Amber	Glass	200 mL	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Haloacetonitriles	Amber	Glass	200 mL	Sodium Thiosulphate 80mg	Ethanol + Acetone + dried
Perfluorinated compounds	HDPE	Plastic	1L	Nil	
Bromates, Bromides	HDPE	Plastic	200 mL		Detergent washed

Table SI3: Key operating data for the pre-ozone process

Date	**Pre-ozone Dose (mg/L)**			
	Average	**Minimum**	**Maximum**	**Standard Deviation**
22/05/2013	9.59	9.24	10.74	0.26
27/05/2013	9.45	7.90	12.09	1.00
28/05/2013	9.29	8.05	11.10	0.43
30/05/2013	10.51	7.99	12.67	1.01
26/07/2013*	9.22	7.91	10.12	0.63

*Sampling during wet-weather event with ~50% increased flow.

Table SI4: Key operating data for the BMF process

Number of Filters	32
Cross Sectional Area per Filter	79 m^2
Top Filtration Layer – Filter Coal	1350 mm
Bottom Filtration Layer – Fine Garnet	300 mm
Gravel Support Layer – Coarse Garnet	100 mm

Table SI5: Key operating data for post-ozone process

Date	**Post-BMF Ozone Dose (mg/L)**			
	Average	**Minimum**	**Maximum**	**Standard Deviation**
22/05/2013	4.52	3.51	6.43	0.53
27/05/2013	4.14	3.26	6.79	0.45
28/05/2013	4.70	4.13	5.16	0.23
30/05/2013	5.57	4.35	7.78	0.79
26/07/2013*	3.99	3.37	4.87	0.30

*Sampling during wet-weather event with ~50% increased flow.

Table SI6: Key operating data for UV process

Validated minimum Log Reduction Value (*Cryptosporidium*)	4

Table SI7: Key operating data for the Chlorination process

Date	**Measured Total Chlorine Residual after Dosing Point (mg/L)**			
	Average	**Minimum**	**Maximum**	**Standard Deviation**
22/05/2013	3.24	1.12	7.95	0.52
27/05/2013	2.31	1.67	3.17	0.26
28/05/2013	2.29	1.95	2.73	0.14
30/05/2013	2.22	1.79	2.78	0.11
26/07/2013*	3.18	2.29	4.19	0.30

*Sampling during wet-weather event with ~50% increased flow.

Table SI8: Summary of inflow concentrations of contaminants into the ETP tertiary plant for each day of sampling
Only results with 2 or more samples > LOR are included and the values < LOR are taken as 0.5 X LOR.

Group	Analyte	Units	LOR	Count samples with conc. >LOR	Sample 1 22/05/2013	Sample 2 27/05/2013	Sample 3 28/05/2013	Sample 4 30/05/2013	Sample 5* 26/07/2013	Avg conc.	STDV	COV (STDV/Avg)
Nitrosamines	NDMA	ng/L	5	5	12	8	7	22	32	15.27	10.64	0.697
	Nitroso-morpholine (NMOR)	ng/L	10	5	65	540	265	150	29	209.12	205.74	0.984
Endocrine Disrupting Compounds (EDCs)	4-*t*-Octylphenol	ng/L	10	4	380	120	21	5	93	128.34	151.07	1.177
	Nonylphenol	ng/L	100	2	550	50	50	50	430	229.12	244.70	1.068
	Bisphenol A	ng/L	10	3	45	5	20	5	57	25.94	23.66	0.912
	Estrone	ng/L	2	4	7	4	5	1	11	5.29	3.71	0.701
	Cholesterol (not an EDC)	ng/L	100	2	810	50	600	50	50	321.06	366.36	1.141
Pharmaceuticals (KWDRUG)	Acesulfame K (sweetener)	µg/L	0.01	5	7.89	6.92	7.28	6.75	9.98	6.69	1.31	0.196
	Atenolol	µg/L	0.01	5	0.26	0.3	0.3	0.22	0.53	0.29	0.12	0.414
	Caffeine	µg/L	0.02	5	0.04	0.06	0.06	0.06	0.29	0.10	0.11	1.100
	Carbamazepine	µg/L	0.01	5	0.72	0.81	1.1	1.1	0.64	0.76	0.21	0.276
	Diclofenac	µg/L	0.01	5	0.6	0.64	0.53	0.5	0.42	0.46	0.09	0.196
	Frusemide	µg/L	0.01	5	1.500	1.540	1.600	1.200	1.400	1.23	0.16	0.130
	Gabapentin	µg/L	0.05	5	1.624	1.660	3.800	2.800	1.700	2.09	0.97	0.464
	Gemfibrozol	µg/L	0.01	5	0.110	0.160	0.120	0.130	0.210	0.13	0.04	0.308
	Hydrochlorthiazide	µg/L	0.01	5	1.200	1.620	1.750	1.910	1.500	1.37	0.27	0.197
	Iopromide	µg/L	0.2	4	0.780	0.100	1.800	1.700	0.550	0.94	0.74	0.787
	Metoprolol	µg/L	0.01	5	0.410	0.330	0.300	0.340	0.250	0.28	0.06	0.214
	Oxazepam	µg/L	0.01	5	0.260	0.480	0.640	0.740	0.440	0.46	0.19	0.413
	Salicylic acid	µg/L	0.1	3	0.130	0.230	0.050	0.050	0.100	0.11	0.07	0.636
	Sulfamethoxazole	µg/L	0.01	5	0.130	0.160	0.220	0.200	0.160	0.15	0.04	0.267
	Temazepam	µg/L	0.01	5	0.510	0.510	0.480	0.460	0.310	0.39	0.08	0.205
	Tramadol	µg/L	0.01	5	0.670	0.630	1.000	1.500	0.440	0.78	0.42	0.538
	Triclosan	µg/L	0.01	5	0.020	0.030	0.020	0.020	0.020	0.02	0.00	0.000
	Trimethoprim	µg/L	0.01	5	0.370	0.260	0.190	0.190	0.260	0.22	0.07	0.318
	Venlafaxine	µg/L	0.01	5	0.930	0.720	1.600	1.100	0.500	0.88	0.42	0.477
	Warfarin	µg/L	0.01	5	0.030	0.040	0.040	0.040	0.070	0.04	0.02	0.500

	Atrazine	µg/L	0.01	5	0.510	0.100	0.090	0.080	0.020	0.17	0.20	1.176
	Bromoxynil	µg/L	0.01	2	0.005	0.040	0.010	0.005	0.005	0.01	0.02	2.000
	Desisopropyl Atrazine	µg/L	0.02	3	0.010	0.030	0.050	0.030	0.010	0.02	0.02	1.000
	Diuron	µg/L	0.01	5	0.170	0.180	0.140	0.140	0.120	0.13	0.02	0.154
	3,4-Dichloroaniline	µg/L	0.01	5	0.020	0.010	0.060	0.020	0.030	0.03	0.02	0.667
	Hexazinone	µg/L	0.01	2	0.005	0.050	0.030	0.005	0.005	0.02	0.02	1.000
	Metolachlor	µg/L	0.01	5	0.040	0.570	0.200	0.040	0.060	0.19	0.23	1.211
	Simazine	µg/L	0.01	5	0.460	0.630	0.360	0.340	0.070	0.34	0.20	0.588
	Terbutryn	µg/L	0.01	3	0.010	0.005	0.005	0.010	0.010	0.01	0.00	0.000
	Total Diuron	µg/L	0.03	5	0.205	0.198	0.245	0.175	0.170	0.17	0.03	0.176
Phenoxy Herbicides, Dalapon	Dicamba	µg/L	0.01	5	0.030	0.080	0.040	0.030	0.070	0.05	0.02	0.400
	Mecoprop	µg/L	0.01	5	0.060	0.070	0.060	0.100	0.050	0.06	0.02	0.333
	MCPA	µg/L	0.01	5	0.320	1.500	0.520	0.320	0.400	0.59	0.50	0.847
	2,4-D	µg/L	0.01	5	0.420	3.250	1.130	0.290	0.260	1.10	1.27	1.155
	Triclopyr	µg/L	0.01	5	0.210	0.160	0.080	0.060	0.040	0.10	0.07	0.700
	Fluroxypyr	µg/L	0.01	4	0.01	0.07	0.03	0.005	0.01	0.03	0.03	1.000
	Atrazine	µg/L	0.1	2	0.4	0.1	0.05	0.05	0.05	0.13	0.15	1.154
	Metolachlor	µg/L	0.1	2	0.05	0.4	0.22	0.05	0.05	0.15	0.16	1.067
	Simazine	µg/L	0.1	4	0.4	0.4	0.3	0.3	0.05	0.27	0.14	0.519
	Metalaxyl	µg/L	0.1	2	0.05	0.05	0.231	0.4	0.05	0.16	0.16	1.000
	Tebuconazole	µg/L	0.1	2	0.231	0.05	0.1	0.05	0.05	0.09	0.08	0.889
Other GCMS Compounds	1H-Benzotriazole	µg/L	0.5	4	1.143	0.5	0.617	0.606	0.25	0.57	0.33	0.579
	1H-Benzotriazole, 5-methyl	µg/L	0.2	5	0.9	0.4	0.531	0.6	0.5	0.52	0.19	0.365
	Galaxolide	µg/L	0.1	5	1.311	1.1	1.133	1.136	1.2	0.99	0.08	0.081
	N-Butyl benzenesulfonamide	µg/L	0.2	2	0.1	0.1	0.1	0.2	0.3	0.15	0.09	0.600
	Tonalid	µg/L	0.1	4	0.1	0.1	0.05	0.142	0.1	0.09	0.03	0.333
	Triclosan	µg/L	0.1	3	0.1	0.05	0.05	0.1	0.1	0.07	0.03	0.429
	Triethyl phosphate	µg/L	0.1	5	0.2	0.2	0.213	0.2	0.1	0.16	0.05	0.313
	Tris(chloroethyl) phosphate	µg/L	0.1	5	0.3	0.3	0.388	0.399	0.2	0.28	0.08	0.286
	Tris(chloropropyl) phosphate isomers	µg/L	0.1	5	0.7	0.7	0.779	0.722	0.5	0.58	0.11	0.190
	Tris(dichloropropyl) phosphate	µg/L	0.2	5	0.3	0.2	0.232	0.238	0.2	0.20	0.04	0.200
Perfluorinated compounds	Perfluorobutanoic acid	µg/L	0.005	5	0.007	0.007	0.006	0.008	0.018	0.01	0.01	1.000
	Perfluoropentanoic acid	µg/L	0.005	5	0.011	0.020	0.018	0.016	0.018	0.01	0.00	0.000

	Perfluorohexanoic acid	µg/L	0.005	5	0.017	0.028	0.024	0.026	0.033	0.02	0.01	0.500
	Perfluoroheptanoic acid	µg/L	0.005	5	0.007	0.008	0.006	0.007	0.014	0.01	0.00	0.000
	Perfluorooctanoic acid	µg/L	0.005	5	0.022	0.037	0.032	0.033	0.033	0.03	0.01	0.333
	Perfluorodecanoic acid	µg/L	0.005	2	0.003	0.003	0.003	0.005	0.005	0.00	0.00	-
	Perfluorohexanesulfonate	µg/L	0.005	3	0.006	0.003	0.003	0.007	0.016	0.01	0.01	1.000
	Perfluorooctanesulfonate	µg/L	0.005	5	0.018	0.014	0.020	0.028	0.082	0.03	0.03	1.000

*Sampling during wet-weather event with ~50% increased flow.

Table SI9: Average concentrations of the detected CECs throughout the treatment process

Group	Analyte	Units	LOR	(1) Second. Eff.	(2) Pre-ozone outflow	(3) BMF outflow	(4) Post-ozone outflow	(5) UV outflow	(6) Cl out/ Final Eff.
Nitrosamines	NDMA	ng/L	5.00	15.27	31.40	5	4.10	6.10	3.90
	NMOR	ng/L	10.0	209.12	194.40	217.40	168.20	100.60	114.20
Endocrine disrupting chemicals EDCs	4-t-Octylphenol	ng/L	10.0	162.75	60.60	50.00	63.67	69.00	50.33
	Nonylphenol	ng/L	100.0	229.12	118.00	148.00	164.00	-	-
	Bisphenol A	ng/L	10.0	25.94	12.80	14.60	1024.40	66.40	63.80
	Estrone	ng/L	2.00	5.29	-	-	-	-	-
	Cholesterol (not an EDC)	ng/L	100.0	321.06	-	124.00	74.00	-	-
Pharma-ceuticals (KWDRUG)	Acesulfame K (sweetener)	µg/L	0.01	6.69	2.624	2.86	0.93	0.75	0.75
	Atenolol	µg/L	0.01	0.29	0.074	0.07	-	-	-
	Atorvastatin	µg/L	0.01	0.11	-	-	-	-	-
	Caffeine	µg/L	0.02	0.10	0.032	0.04	-	-	-
	Carbamazepine	µg/L	0.01	0.76	-	0.03	-	-	-
	Cephalexin	µg/L	0.01	0.26	-	-	-	-	-
	Citalopram	µg/L	0.01	0.07	0.009	0.01	-	-	-
	Codeine	µg/L	0.10	0.34	-	-	-	-	-
	DEET	µg/L	0.01	0.05	0.018	0.02	0.01	-	0.01
	Desmethyl Citalopram	µg/L	0.01	0.06	0.012	0.01	-	-	-
	Desmethyl Diazepam	µg/L	0.01	0.02	-	-	-	-	-
	Diatrizoate Sod.	µg/L	0.05	3.12	3.812	3.64	1.89	1.20	1.64
	Diclofenac	µg/L	0.01	0.46	-	0.01	-	-	-
	Doxylamine	µg/L	0.01	0.10	0.013	0.01	-	-	-
	Erythromycin	µg/L	0.01	0.05	-	-	-	-	-
	Erythromycin anhydrate	µg/L	0.01	0.16	-	0.01	-	-	-
	Fluoxetine	µg/L	0.01	0.02	-	-	-	-	-
	Frusemide	µg/L	0.01	1.23	-	0.03	-	-	-
	Gabapentin	µg/L	0.05	2.09	0.820	0.88	0.20	-	-
	Gemfibrozol	µg/L	0.01	0.13	-	-	-	-	-
	Hydro-chlorthiazide	µg/L	0.01	1.37	0.234	0.31	-	-	-
	Indomethacin	µg/L	0.01	0.05	-	-	-	-	-
	Iopromide	µg/L	0.20	0.94	0.644	0.65	0.17	-	-
	Metoprolol	µg/L	0.01	0.28	0.046	0.07	-	-	-
	Naproxen	µg/L	0.10	0.07	-	-	-	-	-
	Norfloxacin	µg/L	0.05	0.06	-	-	-	-	-
	Oxazepam	µg/L	0.01	0.46	0.122	0.14	0.05	0.04	0.01
	Oxycodone	µg/L	0.01	0.03	-	-	-	-	-
	Phenytoin	µg/L	0.01	0.08	0.020	0.02	-	-	-
	Primidone	µg/L	0.01	0.11	0.040	0.04	0.02	0.01	0.01
	Propranolol	µg/L	0.01	0.06	-	-	-	-	-
	Ranitidine	µg/L	0.05	0.26	-	-	-	-	-

	Roxithromycin	µg/L	0.02	0.08	-	-	-	-	-
	Salicylic acid	µg/L	0.10	0.11	0.100	0.09	-	0.11	0.09
	Sertraline	µg/L	0.01	0.04	-	-	-	-	-
	Sulfasalazine	µg/L	0.01	0.28	0.011	0.02	-	-	-
	Sulfa-methoxazole	µg/L	0.01	0.15	0.015	0.02	-	-	-
	Temazepam	µg/L	0.01	0.39	0.152	0.13	0.03	0.04	0.03
	Tramadol	µg/L	0.01	0.78	0.074	0.10	-	-	-
	Triclosan	µg/L	0.01	0.02	-	-	-	-	-
	Trimethoprim	µg/L	0.01	0.22	-	-	-	-	-
	Venlafaxine	µg/L	0.01	0.88	0.090	0.11	-	-	0.02
	Warfarin	µg/L	0.01	0.04	-	-	-	-	-
	Atrazine	µg/L	0.01	0.17	0.094	0.09	0.05	0.05	0.04
	Bromoxynil	µg/L	0.01	0.01	-	-	-	-	-
	Desethyl Atrazine	µg/L	0.01	-	0.019	0.02	0.03	0.03	0.02
	Desisopropyl Atrazine	µg/L	0.02	0.02	0.098	0.09	0.14	0.11	0.10
	Diuron	µg/L	0.01	0.13	0.030	0.03	-	-	-
	3,4-Dichloroaniline	µg/L	0.01	0.03	-	-	-	-	-
	Hexazinone	µg/L	0.01	0.02	-	0.01	-	-	-
	Metolachlor	µg/L	0.01	0.19	0.050	0.04	0.01	0.01	0.01
	Simazine	µg/L	0.01	0.34	0.210	0.21	0.10	0.10	0.09
	Terbutryn	µg/L	0.01	0.01	-	-	-	-	-
	Total Diuron	µg/L	0.03	0.17	0.027	0.03	-	-	-
Phenoxy Herbicides, Dalapon	Dicamba	µg/L	0.01	0.05	0.024	0.03	0.01	0.01	0.01
	Mecoprop	µg/L	0.01	0.06	0.015	0.02	-	-	-
	MCPA	µg/L	0.01	0.59	0.146	0.13	0.02	0.02	0.02
	2,4-D	µg/L	0.01	1.10	0.460	0.26	0.09	0.10	0.10
	Triclopyr	µg/L	0.01	0.10	0.074	0.07	0.05	0.05	0.04
	Fluroxypyr	µg/L	0.01	0.03	-	0.01	-	-	-
	Atrazine	µg/L	0.10	0.13	-	-	-	-	-
	Metolachlor	µg/L	0.10	0.15	-	-	-	-	-
	Simazine	µg/L	0.10	0.27	0.165	0.19	0.09	0.08	0.08
	Metalaxyl	µg/L	0.10	0.16	-	-	-	-	-
	Tebuconazole	µg/L	0.10	0.09	-	-	-	-	-
Other GCMS Compounds	1H-Benzotriazole	µg/L	0.50	0.57	-	-	-	-	-
	1H-Benzotriazole, 5-methyl	µg/L	0.20	0.52	-	-	-	-	-
	Galaxolide	µg/L	0.10	0.99	0.278	0.28	-	-	-
	N-Butyl benzene.	µg/L	0.20	0.15	-	-	-	-	-
	Tonalid	µg/L	0.10	0.09	-	-	-	-	-
	Triclosan	µg/L	0.10	0.07	-	-	-	-	-
	Triethyl phosphate	µg/L	0.10	0.16	0.135	0.12	0.14	0.13	0.13
	Tris(chloroethyl) phosphate	µg/L	0.10	0.28	0.283	0.30	0.24	0.25	0.23
	Tris(chloropropyl) phosphate isomers	µg/L	0.10	0.58	0.622	0.62	0.56	0.55	0.57
	Tris(dichloro-propyl) phosphate	µg/L	0.20	0.20	0.188	0.19	0.18	0.18	0.18

Perfluorinated compounds	Perfluorobutanoic acid	µg/L	0.01	0.01	0.015	0.01	0.04	0.01	0.01
	Perfluoropentanoic acid	µg/L	0.01	0.01	0.018	0.02	0.02	0.02	0.02
	Perfluorohexanoic 3acid	µg/L	0.01	0.02	0.032	0.03	0.04	0.04	0.04
	Perfluoro-heptanoic acid	µg/L	0.01	0.01	0.010	0.01	0.01	0.01	0.01
	Perfluorooctanoic acid	µg/L	0.01	0.03	0.037	0.04	0.04	0.04	0.04
	Perfluorodecanoic acid	µg/L	0.01	0.00	0.006	0.005	0.01	0.00	0.00
	Perfluoro-hexanesulf-onate	µg/L	0.01	0.01	0.006	0.01	0.01	0.01	0.01
	Perfluoro-octanesulf-onate	µg/L	0.01	0.03	0.033	0.03	0.04	0.03	0.03

Table SI10: Percentage removal for the Pre-ozone process

Only well established percentage removals are shown (i.e. with concentrations > 5 x LOR and a STDV < 20%)

Group	Analyte	Units	Pre-ozone process			
			Average percentage removal	STDV	Minimum percentage removal	Maximum percentage removal
Pharmaceuticals (KWDRUG)	Acesulfame K (sweetener)	µg/L	66%	4%	61%	71%
	Atenolol	µg/L	76%	8%	64%	83%
	Atorvastatin	µg/L	95%	2%	93%	97%
	Carbamazepine	µg/L	99%	0%	99%	100%
	Cephalexin	µg/L	96%	4%	90%	99%
	Citalopram	µg/L	89%	8%	75%	93%
	Desmethyl Citalopram	µg/L	83%	8%	71%	92%
	Diclofenac	µg/L	99%	0%	99%	99%
	Erythromycin	µg/L	87%	13%	67%	94%
	Erythromycin anhydrate	µg/L	94%	7%	84%	98%
	Frusemide	µg/L	100%	0%	100%	100%
	Gabapentin	µg/L	64%	5%	59%	71%
	Gemfibrozol	µg/L	96%	1%	95%	98%
	Hydrochlorthiazide	µg/L	85%	6%	80%	94%
	Indomethacin	µg/L	91%	1%	90%	92%
	Metoprolol	µg/L	86%	5%	79%	92%
	Oxazepam	µg/L	77%	4%	71%	81%
	Oxycodone	µg/L	90%	0%	90%	90%
	Phenytoin	µg/L	78%	4%	73%	82%
	Primidone	µg/L	70%	3%	67%	73%
	Propranolol	µg/L	93%	2%	90%	94%
	Ranitidine	µg/L	93%	2%	90%	94%
	Roxithromycin	µg/L	91%	1%	90%	92%
	Sertraline	µg/L	89%	4%	83%	93%

	Sulfasalazine	µg/L	96%	3%	94%	99%
	Sulfamethoxazole	µg/L	92%	3%	88%	97%
	Temazepam	µg/L	67%	15%	42%	78%
	Tramadol	µg/L	91%	4%	84%	95%
	Trimethoprim	µg/L	98%	1%	97%	99%
	Venlafaxine	µg/L	90%	5%	83%	96%
	Atrazine	µg/L	41%	3%	38%	44%
	Diuron	µg/L	80%	8%	71%	88%
	Metolachlor	µg/L	77%	6%	72%	83%
	Simazine	µg/L	43%	3%	39%	46%
	Total Diuron	µg/L	86%	9%	75%	94%
	Mecoprop	µg/L	78%	9%	67%	90%
	MCPA	µg/L	77%	6%	72%	88%
	Triclopyr	µg/L	32%	5%	25%	38%
	Galaxolide	µg/L	76%	8%	66%	85%

Table SI11: Percentage removal for the BMF process

Only well established percentage removals are shown (i.e. with concentrations > 5 x LOR and a STDV < 20%)

Group	**Analyte**	**Units**	**BMF process**			
			Average percentage removal	STDV	Minimun percentage removal	Maximun percentage removal
Nitrosamines	NDMA	ng/L	91%	2%	90%	93%

Table SI12: Percentage removal for the Post-ozone process

Only well established percentage removals are shown (i.e. with concentrations > 5 x LOR and a STDV < 20%).

Group	Analyte	Units	Post ozone process			
			Average percentage removal	STDV	Minimum percentage removal	Maximum percentage removal
Pharmaceuticals (KWDRUG)	Acesulfame K (sweetener)	µg/L	67%	1%	63%	70%
	Atenolol	µg/L	92%	1%	90%	94%
	Hydrochlorthiazide	µg/L	98%	0%	98%	99%
	Iopromide	µg/L	85%	0%	85%	85%
	Metoprolol	µg/L	93%	1%	92%	94%
	Oxazepam	µg/L	61%	10%	43%	77%
	Primidone	µg/L	63%	3%	60%	67%
	Temazepam	µg/L	72%	5%	67%	79%
	Tramadol	µg/L	93%	3%	89%	96%
	Atrazine	µg/L	46%	8%	40%	57%
	Metolachlor	µg/L	68%	8%	60%	77%
	Simazine	µg/L	52%	7%	42%	58%
	MCPA	µg/L	82%	5%	75%	88%
	2,4-D	µg/L	61%	6%	56%	71%
	Triclopyr	µg/L	27%	7%	20%	33%
	Tris(chloropropyl) phosphate isomers	µg/L	12%	4%	6%	17%

Table SI13: Percentage removal for the UV process
Only well established percentage removals are shown (i.e. with concentrations > 5 x LOR and a STDV < 20%)

Group	Analyte	Units	UV process			
			Average percentage removal	STDV	Minimum percentage removal	Maximum percentage removal
Nitrosamines	Nitroso-morpholine (NMOR)	ng/L	38%	16%	24%	55%
Endocrine Disrupting Compounds (EDCs)	Bisphenol A	ng/L	86%	14%	64%	100%
Pharmaceuticals (KWDRUG)/	Acesulfame K (sweetener)	µg/L	19%	5%	13%	25%
	Diatrizoate sodium	µg/L	32%	17%	13%	54%
	Gabapentin	µg/L	95%	0%	94%	95%
	Oxazepam	µg/L	25%	10%	20%	40%

Bisphenol A concentration was excessively high in the first day of sampling, implying that the sample may have been contaminated due to inadequate cleaning of the sampling equipment.

Table SI14: Percentage removal for the Chlorination process
Only well established percentage removals are shown (i.e. with concentrations > 5 x LOR and a STDV < 20%).

Group	Analyte	Units	Chlorination process			
			Average percentage removal	STDV	Minimum percentage removal	Maximum percentage removal
Pharmaceuticals (KWDRUG	Perfluorooctanesulfonate	µg/L	15%	7%	10%	20%

Table SI15: Chemical formation observed across the tertiary plant processes (gains in concentrations from inlet to outlet)

Analyte	Units	LOR	ATTP TSPS				ATTP FINEFF			
			Count >LOR	Avg conc.	Min conc.	Max conc.	Count >LOR	Avg Conc.	Min conc.	Max conc.
Bisphenol A	ng/L	10.00	3	25.94	5.00	57.00	2	63.80	5.00	270.00
Desethyl Atrazine	µg/L	0.01	0	<LOR	<LOR	<LOR	4	0.02	0.01	0.05
Desisopropyl Atrazine	µg/L	0.02	3	0.02	0.01	0.05	5	0.10	0.03	0.14
Chloroform	µg/L	1.00	0	<LOR	<LOR	<LOR	5	4.80	3.00	6.00
Bromodichloromethane	µg/L	1.00	0	<LOR	<LOR	<LOR	5	6.20	5.00	7.00
Dibromochloromethane	µg/L	1.00	0	<LOR	<LOR	<LOR	5	9.20	8.00	11.00
Perfluoropentanoic acid	µg/L	0.01	5	0.01	0.00	0.02	5	0.02	0.01	0.03
Perfluorohexanoic acid	µg/L	0.01	5	0.02	0.01	0.03	5	0.04	0.02	0.04
Perfluorooctanoic acid	µg/L	0.01	5	0.03	0.01	0.04	5	0.04	0.02	0.05
Chloral hydrate	µg/L	1.00	0	<LOR	<LOR	<LOR	5	7.88	6.10	10.00

For analytes with all 5 samples below the level of reporting (LOR), the mean result was reported as <LOR.

Table SI16: Chemical formation observed during each process (gains in concentrations across the ETP tertiary treatment)

Analytes	Units	Pre-ozone		BMF		Post-ozone		UV		Chlorination	
		Avg conc. in	Avg conc. out	Avg conc. In	Avg conc. out	Avg conc. in	Avg conc. out	Avg conc. in	Avg conc. out	Avg conc. in	Avg conc. out
NDMA	ng/L	17.80 (±12.21)	33.00 (±11.96)	33.00 (±11.96)	5.00 (±0.00)	5.00 (±0.00)	6.33 (±0.58)	6.33 (±0.58)	6.60 (±2.30)	6.60 (±2.30)	6.00 (±1.41)
Bisphenol A*	ng/L	15.24	12.80	12.80	14.60	14.60	1024.40	1024.40	66.40	66.40	63.80
Diatrizoate sodium	µg/L	3.530 (±1.04)	3.812 (±2.16)	3.812 (±2.16)	3.644 (±0.48)	3.644 (±0.48)	1.888 (±0.87)	1.888 (±0.87)	1.200 (±0.38)	1.200 (±0.38)	1.644 (±1.25)
Desethyl Atrazine	µg/L	<0.01	0.023 (±0.019)	0.023 (±0.019)	0.023 (±0.025)	0.023 (±0.025)	0.040 (±0.040)	0.040 (±0.040)	0.030 (±0.027)	0.030 (±0.027)	0.025 (±0.017)
Desisopropyl Atrazine	µg/L	0.037 (±0.012)	0.098 (±0.049)	0.098 (±0.049)	0.094 (±0.045)	0.094 (±0.045)	0.144 (±0.074)	0.144 (±0.074)	0.112 (±0.052)	0.112 (±0.052)	0.104 (±0.045)
Chloroform	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.80 (±1.10)
Bromodichloromethane	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.20 (±1.10)
Dibromochloromethane	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	9.20 (±1.30)
Perfluorobutanoic acid	µg/L	0.009 (±0.005)	0.015 (±0.015)	0.015 (±0.015)	0.013 (±0.009)	0.013 (±0.009)	0.035 (±0.043)	0.035 (±0.043)	0.013 (±0.008)	0.013 (±0.008)	0.013 (±0.008)
Perfluoropentanoic acid	µg/L	0.017 (±0.004)	0.018 (±0.004)	0.018 (±0.004)	0.019 (±0.005)	0.019 (±0.005)	0.021 (±0.004)	0.021 (±0.004)	0.021 (±0.005)	0.021 (±0.005)	0.021 (±0.005)
Perfluorohexanoic acid	µg/L	0.026 (±0.006)	0.032 (±0.007)	0.032 (±0.007)	0.032 (±0.006)	0.032 (±0.006)	0.038 (±0.011)	0.038 (±0.011)	0.037 (±0.011)	0.037 (±0.011)	0.036 (±0.009)
Perfluorooctanoic acid	µg/L	0.031 (±0.006)	0.037 (±0.009)	0.037 (±0.009)	0.036 (±0.010)	0.036 (±0.010)	0.041 (±0.008)	0.041 (±0.008)	0.040 (±0.009)	0.040 (±0.009)	0.038 (±0.010)
Chloral hydrate	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	7.88 (±1.92)

*Bisphenol A concentration was excessively high in the first day of sampling, possibly due to sample contamination by inadequate cleaning of the sampling equipment or leaching from the piping material.