

**Table 12.** Statistical summaries for field replicate samples for organic wastewater compounds (OWCs) detected in any sample for any primary/replicate sample pair.

[Bold text indicates suspected endocrine-disrupting compound (EDC)]

Compound	Footnote	Statistical summary of field replicate results						
		Number of field primary/replicate sample pairs	Number of field primary/replicate sample pairs that compound was detected at concentration greater than study reporting level in:		Summary statistics for relative percent differences for primary/replicate sample pairs that the compound was detected in both samples			
			Either sample	Both samples	Minimum	Median	Maximum	
Human pharmaceutical compounds (HPCs)								
Caffeine (method 1), dissolved	1	6	2	2	4.1	6.4	8.6	
Caffeine (method 4), dissolved	1	4	3	3	3.6	7.4	8.0	
Caffeine (method 3), whole water	1	6	1	1	8.2	8.2	8.2	
Carbamazepine, dissolved	1	6	2	2	5.9	7.3	8.8	
Codeine, dissolved	1	6	1	1	16	16	16	
Cotinine (method 1), dissolved	1	6	4	4	2.5	6.8	24	
Cotinine (method 4), dissolved	1	4	2	2	4.1	4.1	4.1	
Diltiazem, dissolved	1	6	1	1	11.6	12	12	
Diphenhydramine, dissolved	1	6	2	2	5.7	7.1	8.5	
Metformin, dissolved	1	6	1	1	5.3	5.3	5.3	
Human and veterinary antibiotic compounds (HVACs)								
Ciprofloxacin, dissolved	1	10	1	1	12	12	12	
Erythromycin (method 2), dissolved	1	10	3	3	1.1	7.5	13	
Erythromycin-H <sub>2</sub> O, dissolved	1	10	4	4	2.4	17	19	
Ofloxacin, dissolved	1	10	1	1	22	22	22	
Sulfamethoxazole (method 1), dissolved	1	6	1	1	6.5	6.5	6.5	
Trimethoprim (method 1), dissolved	1	7	2	2	3.7	13	21	
Trimethoprim (method 2), dissolved	1	10	3	3	3.6	13	22	
Tylosin, dissolved	1	10	1	1	39	39	39	
Major agricultural herbicides (MAHs)								
<b>Atrazine</b> , whole water	1	7	5	5	3.9	9.5	17	
Metolachlor, dissolved	1	4	2	2	0	2.9	6	
Metolachlor, whole water	1	7	4	4	1.6	8.4	14	
Household, industrial, and minor agricultural use compounds (HIACs)								
1,4-Dichlorobenzene, dissolved	1	4	2	2	3.8	12	21	
1,4-Dichlorobenzene, whole water	4	7	2	2	3.2	41	79	
3,4-Dichlorophenyl isocyanate, whole water	4	6	3	3	23	46	86	
<b>4-tert-Octylphenol</b> , whole water	1	7	2	2	5.4	12	19	
<b>7-Acetyl-1,1,3,4,4,6-hexamethyl tetrahydronaphthalene (AHTN)</b> , dissolved	1	4	2	2	0	2.3	4.7	
<b>7-Acetyl-1,1,3,4,4,6-hexamethyl tetrahydronaphthalene (AHTN)</b> , whole water	1	7	2	2	5.4	22	39	
Anthraquinone, dissolved	1	4	2	2	6.9	7.8	8.7	
Anthraquinone, whole water	1	7	1	1	18	18	18	
<b>Benzophenone</b> , dissolved	1	4	2	2	7.4	9.0	11	

**Table 12.** Statistical summaries for field replicate samples for organic wastewater compounds (OWCs) detected in any sample for any primary/replicate sample pair.—Continued

[Bold text indicates suspected endocrine-disrupting compound (EDC)]

Compound	Footnote	Statistical summary of field replicate results					
		Number of field primary/replicate sample pairs	Number of field primary/replicate sample pairs that compound was detected at concentration greater than study reporting level in:		Summary statistics for relative percent differences for primary/replicate sample pairs that the compound was detected in both samples		
			Either sample	Both samples	Minimum	Median	Maximum
Household, industrial, and minor agricultural use compounds (HIACs)—Continued							
Bromoform, dissolved	1	4	2	2	4.7	6.0	7.4
Camphor, dissolved	1	4	1	1	9.8	9.8	9.8
<b>Carbaryl</b> , dissolved	1	4	1	1	7.4	7.4	7.4
N,N-Diethyl- <i>meta</i> -toluamide (DEET), dissolved	1	4	3	3	0	0	1.2
N,N-Diethyl- <i>meta</i> -toluamide (DEET), whole water	1	7	3	3	7.8	30	40
<b>1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethyl cyclopenta-g-2-benzopyran (HHCB)</b> , dissolved	1	4	2	2	5.1	5.8	6.5
<b>1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethyl cyclopenta-g-2-benzopyran (HHCB)</b> , whole water	1	7	2	2	15	33	50
Indole, dissolved	1	4	2	2	12	13	15
Isophorone, dissolved	1	4	1	1	5.6	5.6	5.6
<b>Nonylphenol diethoxylate (NP2EO)</b> , dissolved	1	4	2	2	4.5	28	52
<b>Nonylphenol diethoxylate (NP2EO)</b> , whole water	1	7	1	1	11	11	11
<b>Octylphenol diethoxylate (OP2EO)</b> , dissolved	1	4	1	1	19	19	19
<b>Octylphenol monoethoxylate (OP1EO)</b> , dissolved	3	4	1	1	46	46	46
<i>para</i> -Cresol, dissolved	1	4	2	2	0	6.8	14
<b><i>para</i>-Nonylphenol (NP)</b> , dissolved	1	4	3	3	0	2.2	9.5
<b><i>para</i>-Nonylphenol (NP)</b> , whole water	1	7	1	1	12	12	12
<b>Pentachlorophenol</b> , dissolved	1	4	1	1	10	10	10
Phenol, dissolved	3	4	1	1	55	55	55
Tetrachloroethylene, dissolved	1	4	1	1	20	20	20
Tributyl phosphate, dissolved	1	4	3	3	0	5.4	7.7
Tributyl phosphate, whole water	1	7	3	3	0	5.2	8.0
<b>Triclosan</b> , dissolved	1	4	2	2	0	9.1	18
Triethyl citrate (ethyl citrate), dissolved	1	4	2	2	0	3.2	6.5
Triethyl citrate (ethyl citrate), whole water	1	7	2	2	1.2	13	26
Triphenyl phosphate, dissolved	1	4	3	3	0	3.4	4.1
Triphenyl phosphate, whole water	1	7	1	1	5.9	5.9	5.9
Tri(2-butoxyethyl)phosphate, dissolved	1	4	1	1	5.3	5.3	5.3

**Table 12.** Statistical summaries for field replicate samples for organic wastewater compounds (OWCs) detected in any sample for any primary/replicate sample pair.—Continued

[Bold text indicates suspected endocrine-disrupting compound (EDC)]

Compound	Footnote	Statistical summary of field replicate results						
		Number of field primary/replicate sample pairs	Number of field primary/replicate sample pairs that compound was detected at concentration greater than study reporting level in:		Summary statistics for relative percent differences for primary/replicate sample pairs that the compound was detected in both samples			
			Either sample	Both samples	Minimum	Median	Maximum	
Household, industrial, and minor agricultural use compounds (HIACs)—Continued								
Tri(2-butoxyethyl)phosphate, whole water	2	7	2	1	4.5	4.5	4.5	
Tri(2-chloroethyl)phosphate, dissolved	1	4	3	3	2.9	3.5	7.1	
Tri(2-chloroethyl)phosphate, whole water	2	7	3	2	1.7	16	30	
Tri(dichloroisopropyl)phosphate, dissolved	1	4	2	2	0	3.3	6.6	
Tri(dichloroisopropyl)phosphate, whole water	1	7	2	2	22	30	38	
Polyaromatic hydrocarbons (PAHs)								
1-Methylnaphthalene, whole water	1	7	1	1	9.5	9.5	9.5	
2-Methylnaphthalene, whole water	1	7	1	1	23	23	23	
Carbazole, dissolved	1	4	1	1	2.0	2.0	2.0	
Fluoranthene, dissolved	1	4	1	1	5.6	5.6	5.6	
Naphthalene, dissolved	1	4	1	1	4.0	4.0	4.0	
<b>Phenanthrene</b> , dissolved	1	4	1	1	6.5	6.5	6.5	
<b>Phenanthrene</b> , whole water	1	7	2	2	4.3	31	58	
<b>Pyrene</b> , dissolved	1	4	1	1	0	0	0	
<b>Pyrene</b> , whole water	3	7	1	1	68	68	68	
Sterol compounds (SCs)								
3- <i>beta</i> -Coprostanol, dissolved	1	4	2	2	17	26	35	
3- <i>beta</i> -Coprostanol, whole water	1	7	2	2	20	27	33	
<i>beta</i> -Sitosterol, dissolved	1	4	1	1	29	29	29	
<i>beta</i> -Stigmastanol, dissolved	3	4	1	1	55	55	55	
Cholesterol, dissolved	1	4	2	2	0	16	32	
Cholesterol, whole water	2	7	6	5	1.9	29	49	

<sup>1</sup>When compound was detected at concentrations greater than the study reporting level in either sample of a primary/replicate sample pair, compound was always detected in both samples; median relative percent difference acceptable (less than 40 percent); field replicate results judged to be acceptable.

<sup>2</sup>For one primary/replicate sample pair, compound was detected at a concentration greater than the study reporting level in either the primary or replicate sample, but not both; median relative percent difference acceptable (less than 40 percent); all other quality-assurance/quality-control results for compound were acceptable; field replicate results judged to be acceptable.

<sup>3</sup>Compound was detected at a concentration greater than the study reporting level in both samples of a single primary/replicate sample pair; relative percent difference exceeded 40 percent; all other quality-assurance/quality-control results for compound were acceptable; field replicate results judged to be acceptable.

<sup>4</sup>Compound was detected at a concentration greater than the study reporting level in multiple primary/replicate sample pairs; median relative percent difference exceeded 40 percent; compound excluded from analyses and discussion related to occurrence of emerging contaminants in drinking water, wastewater effluents, and the Big Sioux River.