

Supplementary information:

Table 1- Gradient elution program for HPLC separation

Time (minutes)	% Water (5 mM ammonium acetate)	% Methanol (5 mM ammonium acetate)
0	80	20
0.3	65	35
5.0	50	50
5.1	35	65
5.5	35	65
10.0	1	99
12.0	1	99
12.1	80	20
16.0	80	20

Table 2- Gradient elution program for UPLC separation

Time (minutes)	% Water (10 mM ammonium acetate)	% Methanol (10 mM ammonium acetate)
0.0	85	15
0.3	85	15
5.0	0	100
6.0	0	100
6.1	85	15
7.1	85	15

Table 3- Injection reproducibility for the selected compounds (n=5). RSD is calculated from the response of 5 replicate spiked samples.

	Peak area					Mean	RSD (%)
	1	2	3	4	5		
Amphetamine	15791	17406	20784	21254	21919	19431	13
Atenolol	7272	6334	6074	5831	5603	6223	10
Bendroflumethiazide	1494	1644	1692	1516	1413	1552	7.4
Benzoylecgonine	41173	34704	41273	40682	40242	39615	7.0
Carbamazepine	53636	54140	52545	51213	52088	52724	.2
Citalopram	15416	16155	15714	14443	14398	15225	5.1
Cocaine	55802	52588	54960	54959	54239	54510	2.2
Diclofenac	4490	4554	4206	3922	3896	4214	7.3
Ibuprofen	840	691	602	516	437	617	25
Methamphetamine	67480	64254	73553	72024	71430	69748	5.5
Salbutamol	14214	14434	15140	14853	14683	14665	2.5
Triclocarban	15275	11403	13431	14209	13550	13574	10
Atenolol d7	4227	4317	4562	4635	4567	4462	4.0
Benzoylecgonine d3	84040	62212	65272	61679	57341	66109	15
Cocaine d3	105398	90118	96814	93863	90853	95409	6.5
Codeine d3	1102	874	780	810	700	853	17
Ibuprofen d3	396	385	412	368	417	396	5.1
Methamphetamine d5	48894	36017	32452	31809	29613	35757	21
Phenacetin d5	391196	380009	363884	350272	331634	363399	6.5

Table 4. Recovery data for the extraction methods.

Appendix 1A- Recovery data for replicate extractions using a 100% methanol (0.1% formic acid) extraction.

Matrix	Spike Conc (ng)	Amoxicillin (%)	Amphetamine (%)	Atenolol (%)	Bendroflumethiazide (%)	Benzylecgonine (%)	Carbamazepine (%)	Cocaine (%)	Codeine (%)	Ciprofloxacin (%)	Ciprofloxacin Metabolite (%)
Hydromatrix	20	nd	89	129	56	119	106	114	nd	nd	34
	50	nd	124	158	63	144	115	137	nd	nd	58
	100	nd	137	151	98	117	102	130	nd	nd	38
	200	nd	156	144	58	133	105	130	nd	nd	54
Sediment A	20	nd	95	162	64	136	100	121	nd	nd	nd
	20	nd	90	176	72	127	109	131	nd	nd	nd
	20	nd	76	193	67	123	105	113	nd	nd	nd
	20	nd	89	238	70	154	135	175	nd	nd	nd
	50	nd	84	173	62	128	112	127	nd	nd	15
	50	nd	105	173	62	124	107	124	nd	nd	17
	50	nd	82	132	67	126	110	122	nd	nd	25
	50	nd	114	143	64	128	113	125	nd	nd	21
Sediment B	100	nd	79	178	74	127	108	129	nd	nd	nd
	100	nd	102	154	104	123	116	144	nd	nd	nd
	100	nd	78	102	93	93	107	112	nd	nd	nd
	100	nd	80	105	96	108	113	106	nd	nd	nd
Sludge A	200	nd	126	150	54	104	97	90	150	nd	15
	200	nd	148	155	44	138	111	113	161	nd	22
	200	nd	116	119	27	106	58	87	156	nd	15
	200	nd	155	150	32	129	65	97	139	nd	22
Sludge B	500	nd	154	134	32	123	83	109	157	nd	74
	500	nd	167	163	37	146	95	129	208	nd	97
	500	nd	158	137	28	130	83	108	112	nd	79
	500	nd	154	131	29	122	80	107	153	nd	69
Sludge C	1000	nd	142	182	105	127	120	135	nd	nd	nd
	1000	nd	148	134	136	104	131	132	nd	nd	nd
	1000	nd	149	183	143	132	133	152	nd	nd	nd
	1000	nd	178	164	126	153	126	157	nd	nd	nd

Appendix 1A- continued. Recovery data for replicate extractions using a 100% methanol (0.1% formic acid) extraction.

Matrix	Spike Conc (ng)	Citalopram (%)	Diclofenac (%)	Fluoxetine (%)	Ibuprofen (%)	Levothyroxine (%)	Methamphetamine (%)	Salbutamol (%)	Simvastatin (%)	Triclocarban (%)	Triclosan (%)
Hydromatrix	20	93	115	112	123	nd	115	27	nd	17	14
	50	105	103	147	131	nd	130	43	12	7	13
	100	99	92	nd	84	nd	113	74	nd	nd	nd
	200	76	101	146	106	nd	160	41	11	6	13
Sediment A	20	21	69	167	107	nd	108	80	nd	nd	nd
	20	22	77	132	102	nd	119	84	nd	nd	nd
	20	19	95	137	nd	nd	107	98	nd	nd	nd
	20	26	93	163	116	nd	143	79	nd	nd	nd
	50	18	105	189	124	nd	122	91	nd	nd	nd
	50	8	101	128	99	nd	123	139	nd	nd	nd
	50	21	99	134	112	nd	114	90	nd	nd	nd
	50	11	103	130	123	nd	124	151	nd	nd	nd
Sediment B	100	14	64	nd	73	nd	105	nd	nd	164	nd
	100	24	78	nd	98	nd	130	nd	nd	139	nd
	100	38	70	nd	95	nd	113	nd	nd	167	nd
	100	21	59	nd	93	nd	103	nd	nd	179	nd
Sludge A	200	24	nd	nd	nd	nd	108	83	nd	2	3
	200	19	nd	nd	nd	nd	133	91	nd	2	2
	200	10	nd	nd	nd	nd	103	96	nd	2	3
	200	12	nd	nd	nd	nd	131	106	nd	2	3
Sludge B	500	13	36	nd	117	nd	137	131	nd	1	nd
	500	15	91	nd	254	nd	158	136	nd	4	2
	500	14	90	nd	167	nd	150	131	nd	6	3
	500	15	70	nd	156	nd	150	140	nd	6	3
Sludge C	1000	89	70	nd	87	nd	120	268	71	34	nd
	1000	103	85	nd	89	nd	117	200	56	109	nd
	1000	129	75	nd	108	nd	119	260	53	181	nd
	1000	110	73	nd	110	nd	140	204	83	351	nd

Appendix 1B- Recovery data for replicate extractions using a 100% methanol extraction

Matrix	Spike conc (ng)	Amoxicillin (%)	Amphetamine (%)	Atenolol (%)	Bendroflumethiazide (%)	Benzylecgonine (%)	Carbamazepine (%)	Cocaine (%)	Codeine (%)	Ciprofloxacin (%)	Ciprofloxacin Metabolite (%)
Hydromatrix	20	nd	115	113	24	108	112	103	nd	nd	nd
	50	nd	118	126	30	110	112	107	nd	nd	nd
	100	nd	95	110	63	103	111	114	nd	nd	nd
	200	nd	nd	127	29	120	116	119	112	nd	nd
Sediment A	20	nd	114	100	43	112	129	121	nd	nd	nd
	20	nd	413	120	48	105	138	115	nd	nd	nd
	20	nd	123	111	53	125	127	122	nd	nd	nd
	20	nd	120	125	53	119	128	113	nd	nd	nd
	50	nd	709	107	47	115	132	123	nd	nd	nd
	50	nd	121	111	52	121	119	121	nd	nd	nd
	50	nd	133	138	52	131	137	126	nd	nd	nd
	50	nd	120	132	57	127	132	130	nd	nd	nd
Sediment B	100	nd	79	142	127	107	97	112	nd	nd	nd
	100	nd	123	nd	153	131	110	144	nd	nd	nd
	100	nd	154	188	154	125	104	129	nd	nd	nd
	100	nd	68	199	122	112	96	110	nd	nd	nd
Sludge A	200	nd	125	131	31	120	111	101	164	nd	7
	200	nd	139	145	30	108	116	103	198	nd	8
	200	nd	143	136	29	118	108	115	145	nd	11
	200	nd	122	128	39	110	121	105	135	nd	8
Sludge B	500	nd	160	166	65	128	115	122	161	nd	8
	500	nd	127	129	53	113	110	114	140	nd	5
	500	nd	127	111	84	129	130	118	146	nd	6
	500	nd	123	131	83	110	60	108	nd	nd	nd
Sludge C	1000	nd	135	129	81	113	66	115	nd	nd	nd
	1000	nd	121	127	81	110	110	123	nd	nd	nd
	1000	nd	141	121	109	117	73	129	nd	nd	nd