

Environmental Landfill, Inc. Sampling and Field Data

Sampling Conducted: 1/5/2023

	BBCU-1	UTBBC-1	BBC-5	CABJD-1
Arsenic, Total (ug/L)	ND	1.2*	0.624*	0.94*
Copper, Total (ug/L)	1.52*	2.09*	1.47*	1.72*
Lead, Total (ug/L)	1.03*	0.826*	1.09*	1.14*
Nickel, Total (ug/L)	2.14*	1.73*	2.03*	1.93*
Zinc, Total (ug/L)	4.57*	7.55	4.32*	5.18
Nitrogen, Ammonia (mg/L)	0.114	0.157	0.119	0.131
bis(2-Ethylhexyl) phthalate (ug/L)	5.1*	3.39*	3.37*	ND
2-Butanone (MEK) (ug/L)	ND	28.1*	ND	ND
Acetone (ug/L)	ND	104.4	ND	ND
Oil and Grease, Total (mg/L)	ND	ND	ND	1.75
Chemical Oxygen Demand (mg/L)	26.2	74.9	75.1	ND
Solids, Settleable (ml/L/Hr)	ND	ND	0.2*	ND
Solids, Total Dissolved (mg/L)	135	133	453	71
Solids, Total Suspended (mg/L)	44	16	45	24
BOD 5 Day (mg/L)	2.14*	97.2*	2.54*	2.25*
Calcium (mg/L) (for hardness calc)	5.36	17.9	5.2	11.9
Magnesium (mg/L) (for hardness calc)	1.76	6.95	2.23	3.55
Hardness (mg/L)	20.6	73.3	22.2	44.3
Turbidity (NTU)	36.1	26	50.9	39.8
Temperature (C)	11.49	12.31	11.69	12.55
pH	6.39	6.88	6.82	6.97
DO (% Sat)	91.2	86.5	91.3	93.1
DO (mg/L)	9.83	9.13	9.79	9.78
Conductivity (µS/cm)	40.7	168.2	61.4	95.7

Sampling Conducted: 1/17/2023

	BBCU-1	UTBBC-1	BBC-5	CABJD-1
Aluminum, Dissolved (mg/L)	0.129*	0.218	0.121*	0.089*
Iron, Dissolved (mg/L)	0.188*	0.586	0.176*	0.151*
Manganese, Dissolved (mg/L)	0.051*	0.287	0.069*	0.040*
Arsenic, Dissolved (ug/L)	ND	0.823*	ND	ND
Arsenic, Total (ug/L)	ND	1.31*	ND	ND
Chromium, Dissolved (ug/L)	0.337*	0.528*	0.331*	ND
Copper, Dissolved (ug/L)	0.958*	2.55*	1.87*	1.75*
Copper, Total (ug/L)	1.42*	3.13*	1.67*	1.16*
Lead, Dissolved (ug/L)	ND	ND	ND	ND
Lead, Total (ug/L)	0.816*	1.47*	0.821*	ND
Nickel, Dissolved (ug/L)	ND	0.998*	0.905*	ND
Nickel, Total (ug/L)	1.28*	2.02*	1.84*	1.24*
Zinc, Dissolved (ug/L)	2.05*	3.32*	1.62*	ND
Zinc, Total (ug/L)	3.83*	9.83	5.88	3.01*
Nitrogen, Ammonia (mg/L)	ND	0.205	0.0641	ND
bis(2-Ethylhexyl) phthalate (ug/L)	ND	ND	ND	ND
2-Butanone (MEK) (ug/L)	ND	ND	ND	ND
Acetone (ug/L)	ND	3.02*	2.99*	ND
Oil and Grease, Total (mg/L)	3.75*	6	ND	ND
Chemical Oxygen Demand (mg/L)	11*	18*	73	ND
Solids, Settleable (ml/L/Hr)	0.2	0.1	0.1	0.1
Solids, Total Dissolved (mg/L)	25	77	47	82
Solids, Total Suspended (mg/L)	25	52	17	10
BOD 5 Day (mg/L)	4.23*	2.72	3.50*	4.13*
Calcium (mg/L) (for hardness calc)	5.14	16.3	7.11	17.2
Magnesium (mg/L) (for hardness calc)	1.83	5.87	3.21	4.23
Hardness (mg/L)	20.4	64.9	31	60.4
Turbidity (NTU)	30.3	41.5	29	17.3
Temperature (C)	10.86	11.5	10.99	10.51
pH	5.94	6.15	6.51	6.89
DO (% Sat)	93.4	90.3	93.4	94.6
DO (mg/L)	10.39	9.83	10.3	10.54
Conductivity (µS/cm)	54	169	124	145

*These results should be considered estimates based upon laboratory qualifiers

Sampling Conducted: 1/25/2023

	BBCU-1	UTBBC-1	BBC-5	CABJD-1
Turbidity (NTU)	125	27.5	114	33.1
Temperature (C)	10.7	11.92	10.9	10.84
pH	6.93	6.39	7	6.98
DO (% Sat)	96	94	95.4	93.9
DO (mg/L)	10.66	10.14	10.54	10.39
Conductivity (µS/cm)	47	157	78	108

Sampling Conducted: 2/1/2023

	BBCU-1	UTBBC-1	BBC-5	CABJD-1
Turbidity (NTU)	17.9	14.8	17.6	18.8
Temperature (C)	10.88	11.12	11.22	11.71
pH	6.3	6.34	6.86	7.02
DO (% Sat)	95.5	93	95.8	95.5
DO (mg/L)	10.56	10.22	10.51	10.36
Conductivity (µS/cm)	48	209	93	127

Sampling Conducted: 2/9/2023

	BBCU-1	UTBBC-1	BBC-5	CABJD-1
Aluminum, Dissolved (mg/L)	0.063*	0.048*	0.049*	0.048*
Iron, Dissolved (mg/L)	0.170*	0.283	0.147*	0.146*
Arsenic, Dissolved (ug/L)	ND	0.735*	ND	ND
Arsenic, Total (ug/L)	ND	0.923*	ND	ND
Chromium, Dissolved (ug/L)	ND	0.378	ND	ND
Copper, Dissolved (ug/L)	ND	1.10*	ND	ND
Copper, Total (ug/L)	ND	1.44*	ND	ND
Lead, Dissolved (ug/L)	ND	ND	ND	ND
Lead, Total (ug/L)	ND	ND	ND	ND
Nickel, Dissolved (ug/L)	ND	1.18*	0.79*	0.782*
Nickel, Total (ug/L)	ND	1.41*	ND	1.10*
Zinc, Dissolved (ug/L)	ND	2.06*	ND	1.62*
Zinc, Total (ug/L)	ND	3.29*	ND	8.7
Nitrogen, Ammonia (mg/L)	ND	ND	ND	ND
bis(2-Ethylhexyl) phthalate (ug/L)	ND	ND	ND	ND
2-Butanone (MEK) (ug/L)	ND	ND	ND	ND
Acetone (ug/L)	ND	ND	ND	ND
Oil and Grease, Total (mg/L)	ND	ND	ND	ND
Chemical Oxygen Demand (mg/L)	ND	26	ND	ND
Solids, Total Dissolved (mg/L)	31	173	156	87
Solids, Total Suspended (mg/L)	7*	5*	8*	6*
BOD 5 Day (mg/L)	2.63*	3.23*	2.82*	2.53*
Calcium (mg/L) (for hardness calc)	4.77	23	6.86	13.2
Magnesium (mg/L) (for hardness calc)	1.77	8.11	3.3	5.4
Hardness (mg/L)	19.2	90.8	30.7	55.2
Turbidity (NTU)	10.5	11.5	12.5	8.05
Temperature (C)	13.39	13.65	13.9	14.03
pH	6.16	6.9	6.83	6.96
DO (% Sat)	95.3	98.1	99.2	99.1
DO (mg/L)	9.95	10.18	10.24	10.2
Conductivity (µS/cm)	51	229	140	156

*These results should be considered estimates based upon laboratory qualifiers

Sampling Conducted: 2/15/2023

	BBCU-1	UTBBC-1	BBC-5	CABJD-1*
Turbidity (NTU)	12.8	24	14.1	
Temperature (C)	12.21	12.68	12.37	
pH	6.31	6.7	7.24	
DO (% Sat)	94.8	93.3	95.7	
DO (mg/L)	10.17	9.89	10.22	
Conductivity (µS/cm)	49	222	107	

*No longer have access to CABJD-1

*These results should be considered estimates based upon laboratory qualifiers
ND = Nondetect

Note: Arsenic - naturally occurring element found at varying levels in air, soil, and water based on many factors including locality

Note: Presence appears to be a result of lab contamination.

Note: Acetone can be released because of biomass combustion. ADEM will continue to monitor these parameters and may conduct additional investigations based on future results.

Corrected data from original publication.

ADEM has conducted instream water quality sampling at the locations shown on the map. The sampling locations include a location upstream of the drainage area of Environmental Landfill, Inc., in Big Black Creek (BBCU-1); two locations near the site in an unnamed tributary to Big Black Creek (UTBBC-1) and in Big Black Creek (BBC-5), both downstream of drainage areas of the site; and in the Cahaba River downstream of the confluence of Big Black Creek (CABJD-1).

The Department will continue to monitor the status of the fire and firefighting activities and intends to conduct additional sampling.

A summary of field and sampling data is located to the left.

