

City of Baltimore
Back River WWTP
Digested Sludge Analysis Calendar Year 2024

Date	Al (mg/l)		As (mg/l)		Ba (mg/l)		Be (mg/l)		Cd (mg/l)		Ca (mg/l)		Cr (mg/l)		Co (mg/l)	
	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL
01/17/24	8,010	46.1	<9.2	9.2	261	4.6	<4.6	4.6	2.9	2.3	9,710	46.1	51.0	4.6	<4.6	4.6
01/24/24	7,950	50.2	<10.0	10.0	276	5.0	<5.0	5.0	2.6	2.5	11,200	50.2	54.3	5.0	<5.0	5.0
01/31/24	7,250	46.3	9.9	9.3	282	4.6	<4.6	4.6	2.5	2.3	10,500	46.3	55.0	4.6	<4.6	4.6
02/07/24	6,310	40.8	<8.2	8.2	339	4.1	<4.1	4.1	2.4	2.0	8,600	40.8	47.2	4.1	<4.1	4.1
02/14/24	7,460	48.6	<9.7	9.7	302	4.9	<4.9	4.9	<2.4	2.4	11,800	48.6	54.2	4.9	<4.9	4.9
02/21/24	6,290	46.1	<9.2	9.2	251	4.6	<4.6	4.6	<2.3	2.3	7,800	46.1	47.3	4.6	<4.6	4.6
02/28/24	6,680	42.4	8.8	8.5	271	4.2	<4.2	4.2	2.7	2.1	9,290	42.4	46.7	4.2	<4.2	4.2
03/06/24	6,720	42.2	9.4	8.4	278	4.2	<4.2	4.2	2.2	2.1	12,400	42.2	48.6	4.2	<4.2	4.2
03/13/24	8,030	45.9	9.2	9.2	313	4.6	<4.6	4.6	2.8	2.3	15,300	45.9	58.9	4.6	17.0	4.6
03/20/24	7,960	44.4	13.4	8.9	277	4.4	<4.4	4.4	3.8	2.2	12,700	44.4	48.7	4.4	<4.4	4.4
03/27/24	8,290	46.0	11.2	9.2	301	4.6	<4.6	4.6	<2.3	2.3	11,800	46.0	47.9	4.7	8.0	4.7
04/03/24	9,490	50.2	<10.0	10.0	295	5.0	<5.0	5.0	3.9	2.5	11,500	50.2	52.7	5.0	17.5	5.0
04/10/24	9,660	49.4	10.6	9.9	305	4.9	<4.9	4.9	4.1	2.5	12,700	49.4	54.8	4.9	15.8	4.9
04/17/24	8,710	45.7	10.1	9.1	286	4.6	<4.6	4.6	3.7	2.3	11,100	45.7	50.7	4.6	20.2	4.6
04/24/24	7,780	45.5	<9.1	9.1	268	4.5	<4.5	4.5	3.1	2.3	9,660	45.5	46.7	4.5	13.9	4.5
05/01/24	8,130	43.4	<8.7	8.7	286	4.3	<4.3	4.3	2.9	2.2	12,300	43.4	49.6	4.3	14.1	4.3
05/08/24	7,660	40.4	<8.1	8.1	280	4.0	<4.0	4.0	2.8	2.0	11,800	40.4	48.0	4.0	13.0	4.0
05/15/24	8,560	46.7	13.2	9.3	288	4.7	<4.7	4.7	2.8	2.3	12,000	46.7	51.1	4.7	12.8	4.7
05/22/24	7,730	39.5	8.8	7.9	284	4.0	<4.0	4.0	3.0	2.0	11,800	39.5	47.7	4.0	13.7	4.0
05/29/24	7,640	41.6	<8.3	8.3	278	4.2	<4.2	4.2	2.4	2.1	11,500	41.6	46.5	4.2	11.8	4.2
06/05/24	7,120	40.9	9.9	8.2	248	4.1	<4.1	4.1	2.9	2.0	12,800	40.9	43.9	4.1	13.1	4.1
06/12/24	7,030	38.9	7.9	7.8	250	3.7	<3.9	3.9	8.4	1.9	11,200	38.9	42.5	3.9	<3.9	3.9
06/19/24	8,700	44.1	<8.8	8.8	303	4.4	<4.4	4.4	5.1	2.2	11,800	44.1	52.5	4.4	18.9	4.4
06/26/24	8,180	40.1	<8.0	8.0	283	4.0	<4.0	4.0	7.2	2.0	11,500	40.1	49.5	4.0	19.9	4.0
07/03/24	8,850	40.2	9.1	8.3	272	4.2	<4.2	4.2	6.2	2.1	11,100	41.7	46.4	4.2	15.0	4.2

Date	Cu (mg/l)		Fe (mg/l)		Pb (mg/l)		Mg (mg/l)		Mn (mg/l)		Hg (mg/l)		Mo (mg/l)		Ni (mg/l)	
	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL
01/17/24	311	9.2	50,800	46.1	40.8	9.2	2,420	46.1	1,250	4.6	0.53	0.22	10.6	9.2	23.5	9.2
01/24/24	382	10.0	51,900	50.2	51.1	10.0	2,850	50.2	1,370	5.0	0.35	0.24	11.4	10.0	27.2	10.0
01/31/24	321	9.3	51,200	46.3	36.9	9.3	2,310	46.3	1,400	4.6	0.48	0.24	11.8	9.3	25.6	9.3
02/07/24	275	8.2	45,000	40.8	35.3	8.2	2,210	40.8	1,180	4.1	0.28	0.22	10.0	8.2	24.0	8.2
02/14/24	330	9.7	60,100	48.6	42.1	9.7	2,840	48.6	1,710	4.9	0.45	0.23	12.3	9.7	40.1	9.7
02/21/24	275	9.2	50,300	46.1	30.7	9.2	2,330	46.1	1,320	46.0	0.34	0.23	10.5	9.2	22.7	9.2
02/28/24	446	8.5	53,100	42.4	41.2	8.5	2,500	42.4	1,400	4.2	0.37	0.23	11.3	8.5	23.2	8.5
03/06/24	336	8.4	52,600	42.2	36.1	8.4	2,640	42.2	1,330	4.2	0.25	0.22	12.0	8.4	23.9	8.4
03/13/24	315	9.2	59,200	45.9	44.6	9.2	2,800	45.9	1,450	4.6	0.26	0.21	13.1	9.2	33.5	9.2
03/20/24	294	8.9	51,400	44.4	55.0	8.9	3,000	44.4	1,250	4.4	0.38	0.23	12.4	8.9	24.7	8.9
03/27/24	334	9.2	55,600	46.0	45.3	9.2	3,080	46.0	1,360	4.6	0.33	0.22	14.4	9.2	26.9	9.2
04/03/24	326	10.0	50,200	50.2	48.2	10.0	2,820	50.2	1,240	5.0	0.53	0.25	13.0	10.0	26.1	10.0
04/10/24	330	9.9	51,900	49.4	44.8	9.9	3,110	49.4	1,290	4.9	0.40	0.22	13.2	9.9	27.9	9.9
04/17/24	313	9.1	49,700	45.7	46.5	9.1	2,670	45.7	1,200	4.6	0.41	0.21	12.7	9.1	25.7	9.1
04/24/24	305	9.1	44,700	45.5	40.1	9.1	2,460	45.5	1,070	4.5	0.61	0.21	12.2	9.1	24.2	9.1
05/01/24	295	8.7	41,500	43	49.9	8.7	2,470	43.4	941	4.3	0.67	0.22	12.8	8.7	26.1	8.7
05/08/24	281	8.1	41,500	40.4	54.4	8.1	2,360	40.4	981	4.0	0.61	0.19	12.9	8.1	23.8	8.1
05/15/24	310	9.3	43,300	46.7	39.7	9.3	2,670	46.7	1,040	4.7	0.56	0.24	11.4	9.3	23.6	9.3
05/22/24	302	7.9	41,500	39.5	37.5	7.9	2,270	39.5	1,010	4.0	0.66	0.19	11.5	7.9	23.3	7.9
05/29/24	304	8.3	37,900	41.6	48.0	8.3	2,130	41.6	879	4.2	0.98	0.21	11.6	8.3	22.2	8.3
06/05/24	269	8.2	36,600	40.9	68.9	8.2	2,260	40.9	815	4.1	0.56	0.19	13.4	8.2	19.7	8.2
06/12/24	325	7.8	35,300	38.9	51.3	7.8	1,930	38.9	799	3.9	0.60	0.19	12.0	7.8	20.8	7.8
06/19/24	324	8.8	47,200	44.1	57.2	8.8	2,330	44.1	1,120	4.4	0.68	0.23	16.6	8.8	23.6	8.8
06/26/24	329	8.0	44,300	40.1	48.7	8.0	2,390	40.1	972	4.0	0.59	0.21	13.7	8.0	22.2	8.0
07/03/24	298	8.3	39,200	41.7	60.6	8.3	2,160	41.7	844	4.2	0.69	0.19	13.9	8.3	21.2	8.3

Date	K (mg/l)		Se (mg/l)		Ag (mg/l)		Sr (mg/l)		Ti (mg/l)		V (mg/l)		Zn (mg/l)		%T.S.	
	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL	result	DL
01/17/24	2,440	230	<23.0	23.0	<2.3	2.3	63.8	4.6	58.9	9.2	19.4	4.6	489	9.2	21.1	0.1
01/24/24	2,170	251	<25.1	25.1	<2.5	2.5	69.0	5.0	55.1	10.0	19.3	5.0	564	10.0	19.1	0.1
01/31/24	2,330	231	<23.1	23.1	<2.3	2.3	64.3	4.6	46.5	9.3	20.7	4.6	487	9.3	20.3	0.1
02/07/24	2,340	204	<20.4	20.4	<2.0	2.0	54.3	4.1	55.4	8.2	16.6	4.1	438	8.2	22.4	0.1
02/14/24	2,950	243	<24.3	24.3	<2.4	2.4	69.0	4.9	50.7	9.7	19.4	4.9	503	9.7	20.4	0.1
02/21/24	2,460	231	<23.1	23.1	<2.3	2.3	59.8	4.6	34.2	9.2	15.3	4.6	423	9.2	20.9	0.1
02/28/24	2,730	212	<21.2	21.2	2.3	2.1	64.4	4.2	33.6	8.5	14.0	4.2	472	8.5	21.2	0.1
03/06/24	2,640	211	<21.1	21.1	<2.1	2.1	67.7	4.2	32.9	8.4	14.3	4.2	535	8.4	22.0	0.1
03/13/24	2,940	229	<22.9	22.9	<2.3	2.3	72.6	4.6	45.0	9.2	15.2	4.6	556	9.2	21.8	0.1
03/20/24	3,670	222	<22.2	22.2	<2.2	2.2	64.0	4.4	54.2	8.9	14.6	4.4	513	8.9	20.6	0.1
03/27/24	4,340	230	<23	23.0	<2.3	2.3	69.7	4.6	39.2	9.2	15.9	4.6	603	9.2	20.6	0.1
04/03/24	2,860	251	<25.1	25.1	3.8	2.5	70.5	5.0	52.7	10.0	21.0	5.0	590	10.0	19.6	0.1
04/10/24	3,110	247	<24.7	24.7	3.5	2.5	73.1	4.9	55.6	9.9	22.7	4.9	623	9.9	19.3	0.1
04/17/24	2,280	228	<22.8	22.8	2.7	2.3	67.7	4.6	42.7	9.1	21.5	4.6	568	9.1	20.0	0.1
04/24/24	2,380	227	<22.7	22.7	3.1	2.3	65.5	4.5	37.0	9.1	19.0	4.5	545	9.1	20.6	0.1
05/01/24	2,260	217	<21.7	21.7	2.9	2.2	64.4	4.3	49.2	8.7	16.0	4.3	587	8.7	22.4	0.1
05/08/24	1,750	202	<20.2	20.2	3.2	2.0	61.1	4.0	36.0	8.1	14.7	4.0	557	8.1	23.8	0.1
05/15/24	2,370	234	<23.4	23.4	3.2	2.3	65.1	4.7	39.1	9.3	18.2	4.7	538	9.3	20.5	0.1
05/22/24	1,610	198	<19.8	19.8	4.2	2.0	66.2	4.0	28.6	7.9	16.5	4.0	558	7.9	23.5	0.1
05/29/24	1,940	208	<20.8	20.8	3.9	2.1	62.7	4.2	30.0	8.3	15.9	4.2	565	8.3	23.5	0.1
06/05/24	2,150	204	<20.4	20.4	2.7	2.0	59.2	4.1	35.5	8.2	14.7	4.1	545	8.2	23.2	0.1
06/12/24	1,760	194	<19.4	19.4	3.1	1.9	55.3	3.9	38.5	7.8	14.0	3.9	681	7.8	24.7	0.1
06/19/24	1,480	220	<22.0	22.0	3.1	2.2	74.5	4.4	29.7	8.8	17.5	4.4	680	8.8	21.9	0.1
06/26/24	1,360	201	<20.1	20.1	4.1	2.0	71.1	4.0	30.7	8.0	17.2	4.0	704	8.0	22.9	0.1
07/03/24	1,550	209	<20.9	20.9	3.6	2.1	66.1	4.2	25.9	8.3	15.5	4.2	684	8.3	23.4	0.1

Date	Classical Pollutant (weekly)								Total Polychlorinated Biphenyl				Plant influent total avg.		
	pH result	TKN (%)		NH ₃ (%)		TP (mg/l)		NO ₃ (mg/l)		(monthly)		PCB(mg/l)			
		result	DL	result	DL	result	DL	result	DL	Date	Sample No.	result	DL		
															4,444
01/17/24	6.25	5.864	1.000	0.346	0.015	22,190	1,000	<0.166	0.166	01/17/24	R401038-01	<0.15	0.15	(MG)	
01/24/24	6.72	4.582	1.000	0.257	0.015	16,020	1,000	<0.166	0.166	01/24/24	R401039-01	<0.17	0.17		143.3
01/31/24	6.72	5.923	1.000	0.268	0.015	22,010	1,000	<0.166	0.166	01/31/24	R401040-01	<0.16	0.16	(MGD)	
02/07/24	6.67	6.084	1.000	0.595	0.015	21,400	1,000	<0.166	0.166	02/07/24	R402034-01	<0.15	0.15		3,623
02/14/24	6.99	6.562	1.000	0.476	0.015	23,340	1,000	<0.166	0.166	02/14/24	R402035-01	<0.16	0.16	(MG)	
02/21/24	6.32	6.752	1.000	0.205	0.015	7,400	1,000	<0.166	0.166	02/21/24	R402036-01	<0.15	0.15		124.9
02/28/24	7.12	6.532	1.000	0.422	0.015	22,300	1,000	<0.166	0.166	02/28/24	R402037-01	<0.15	0.15	(MGD)	
03/06/24	6.04	9.896	1.000	0.340	0.015	34,640	1,000	<0.166	0.166	03/06/24	R403036-01	<0.15	0.15		4,327
03/13/24	6.77	3.500	1.000	0.270	0.015	12,200	1,000	<0.166	0.166	03/13/24	R403037-01	<0.15	0.15	(MG)	
03/20/24	6.80	7.828	1.000	0.175	0.015	28,340	1,000	<0.166	0.166	03/20/24	R403038-01	<0.16	0.16		
03/27/24	6.74	6.515	1.000	0.193	0.015	23,240	1,000	<0.166	0.166	03/27/24	R403039-01	<0.16	0.16		139.6
04/03/24	6.55	6.757	1.000	0.260	0.015	23,050	1,000	<0.166	0.166	04/03/24	R404035-01	<0.16	0.16	(MGD)	
04/10/24	7.01	3.544	1.000	0.170	0.015	11,140	1,000	<0.166	0.166	04/10/24	R404036-01	<0.17	0.17		4,302
04/17/24	6.61	7.597	1.000	0.457	0.015	30,150	1,000	<0.166	0.166	04/17/24	R404037-01	<0.16	0.16	(MG)	
04/24/24	6.14	6.165	1.000	0.100	0.015	22,690	1,000	<0.166	0.166	04/24/24	R404038-01	<0.16	0.16		143.4
05/01/24	7.26	5.819	1.000	0.166	0.015	18,020	1,000	<0.166	0.166	05/01/24	R404039-01	<0.14	0.14	(MGD)	
05/08/24	6.72	5.794	1.000	0.182	0.015	21,220	1,000	<0.166	0.166	05/08/24	R405032-01	<0.13	0.13		3,963
05/15/24	7.22	7.011	1.000	0.258	0.015	23,750	1,000	<0.166	0.166	05/15/24	R405033-01	<0.16	0.16	(MG)	
05/22/24	6.54	7.340	1.000	0.221	0.015	22,910	1,000	<0.166	0.166	05/22/24	R405034-01	<0.14	0.14		127.8
05/29/24	6.48	5.730	1.000	0.195	0.015	21,590	1,000	<0.166	0.166	05/29/24	R405035-01	<0.14	0.14	(MGD)	
06/05/24	6.69		1.000	0.132	0.015		1,000	<0.166	0.166	06/05/24	R406035-01	<0.28	0.28		3,610
06/12/24	7.87	7.155	1.000	0.189	0.015	25,320	1,000	<0.166	0.166	06/12/24	R406036-01	<0.13	0.13	(MG)	
06/19/24	6.20	3.436	1.000	0.332	0.015	12,210	1,000	<0.166	0.166	06/19/24	R406037-01				
06/26/24	6.83	6.697	1.000	0.248	0.015	25,720	1,000	<0.166	0.166	06/26/24	R406038-01	<0.14	0.14		120.3
07/03/24	6.51	6.647	1.000	0.247	0.015	25,530	1,000	<0.166	0.166	07/03/24	R407056-01	<0.14	0.14	(MGD)	