



**Water and Waste
Eaux et déchets**

Kale Black, Sr. Drinking Water Officer
Office of Drinking Water, Manitoba Conservation and Climate
309 – 25 Tupper Street North
Portage La Prairie, MB R1N 3K1

June 7, 2022

RE: MAY 2022 WATER QUALITY COMPLIANCE SUBMISSION FOR THE CITY OF WINNIPEG WATER SUPPLY SYSTEM

Please find attached on-line and grab turbidity summary reports, on-line and grab chlorine summary reports and the UV summary report for the Water Treatment Plant for May 2022.

The May on-line and grab sampling turbidity reports include results obtained for the Water Treatment Plant raw water and the eight filters. The turbidity results for the filter effluent met the licence requirements.

The May on-line and grab sampling chlorine reports include results obtained for the Deacon Booster Pumping Station at the Water Treatment Plant. The free chlorine results at the Water Treatment Plant met the licence requirements.

The May UV summary report includes results obtained for the six UV reactors at the Water Treatment Plant. The UV disinfection results met the licence requirements.

Please let me know of any concerns or questions respecting this submission. I can be reached by telephone at 204-986-8359 or by e-mail at rgrosselle@winnipeg.ca.

Yours sincerely,

R. Grosselle
Manager of Environmental Standards

Enclosures

cc: Dr. L. Richards, Winnipeg Regional Health Authority (email)
Dr. H. Chang, Winnipeg Regional Health Authority (email)
Dr. S. Roberecki, Manitoba Health and Seniors Care (email)
T. Shanks, M. Eng., P. Eng. (e-mail)
M. Szmon, M. Eng. (e-mail)
C. Diduck (email)



CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
WATER SERVICES

Water System Code: **252.00**
Licence Number: **PWS-09-412-02**

WATER TREATMENT PLANT TURBIDITY ON-LINE MONITORING REPORT

May 2022 Turbidity (NTU)

Date	Raw		Filter #1		Filter #2		Filter #3		Filter #4		Filter #5		Filter #6		Filter #7		Filter #8	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
1/05/2022	0.74	0.05	0.10		0.08	0.14	0.05	0.08	0.04	0.09	OL	OL	0.04	0.09	0.06	0.09	0.04	0.07
2/05/2022	0.74	0.04	0.10		0.07	0.10	0.04	0.11	0.04	0.09	OL	OL	0.03	0.06	0.07	0.12	0.04	0.08
3/05/2022	0.75	0.04	0.09		0.08	0.13	0.04	0.10	0.04	0.06	OL	OL	0.03	0.07	0.06	0.11	0.03	0.08
4/05/2022	0.75	0.04	0.08		0.06	0.13	0.04	0.10	0.04	0.08	OL	OL	0.03	0.07	0.06	0.12	0.04	0.07
5/05/2022	0.77	0.05	0.06		0.05	0.11	0.03	0.07	0.03	0.08	0.00	0.18	0.03	0.06	0.05	0.11	0.04	0.08
6/05/2022	0.80	0.04	0.13		0.07	0.09	0.05	0.10	0.03	0.14	0.00	0.02	0.03	0.07	0.08	0.10	0.03	0.11
7/05/2022	0.83	0.03	0.13		0.06	0.13	0.03	0.13	0.04	0.07	0.01	0.04	0.02	0.07	0.05	0.13	0.04	0.10
8/05/2022	0.95	0.03	0.08		0.02	0.12	0.04	0.09	0.04	0.08	0.01	0.04	0.03	0.05	0.06	0.11	0.10	0.15
9/05/2022	0.91	0.05	0.10		0.09	0.11	0.03	0.05	0.03	0.09	0.01	0.04	0.03	0.07	0.04	0.12	0.08	0.19
10/05/2022	0.96	0.04	0.13		0.06	0.14	0.05	0.11	0.03	0.08	0.01	0.02	0.02	0.06	0.07	0.09	0.07	0.16
11/05/2022	0.98	0.03	0.11		0.09	0.13	0.03	0.11	0.05	0.08	0.02	0.16	0.01	0.06	0.05	0.14	0.08	0.12
12/05/2022	0.98	0.03	0.05		0.05	0.14	0.03	0.12	0.04	0.10	0.01	0.05	0.02	0.04	0.05	0.13	0.10	0.14
13/05/2022	1.05	0.03	0.11		0.06	0.28	0.06	0.08	0.04	0.13	0.01	0.02	0.01	0.05	0.04	0.05	0.07	0.15
14/05/2022	1.10	0.03	0.10		0.09	0.11	0.05	0.19	0.06	0.08	0.02	0.05	0.02	0.10	0.03	0.10	0.08	0.13
15/05/2022	1.11	0.03	0.05		0.07	0.16	0.04	0.11	0.06	0.11	0.02	0.05	0.02	0.05	0.03	0.09	0.12	0.15
16/05/2022	1.11	0.04	0.09		0.07	0.12	0.06	0.09	0.05	0.12	0.01	0.04	0.02	0.07	0.03	0.05	0.09	0.15
17/05/2022	1.36	0.03	0.08		0.06	0.11	0.06	0.11	0.06	0.12	0.02	0.08	0.02	0.05	0.05	0.08	0.10	0.16
18/05/2022	1.31	0.03	0.09		0.09	0.13	0.06	0.13	0.09	0.12	0.02	0.05	0.02	0.07	0.04	0.10	0.11	0.16
19/05/2022	1.26	0.04	0.06		0.04	0.10	0.04	0.10	0.05	0.14	0.01	0.03	0.03	0.10	0.04	0.10	0.06	0.20
20/05/2022	1.14	0.04	0.10		0.03	0.09	0.02	0.06	0.04	0.11	0.00	0.02	0.02	0.05	0.05	0.06	0.05	0.09
21/05/2022	1.02	0.04	0.09		0.06	0.09	0.02	0.06	0.06	0.08	0.00	0.04	0.01	0.10	0.04	0.09	0.05	0.08
22/05/2022	1.03	0.04	0.07		0.04	0.10	0.02	0.06	0.05	0.10	0.00	0.04	0.02	0.09	0.04	0.10	0.07	0.10
23/05/2022	1.04	0.05	0.09		0.04	0.10	0.03	0.04	0.06	0.09	0.00	0.04	0.02	0.07	0.04	0.07	0.04	0.11
24/05/2022	1.21	0.03	0.09		0.05	0.09	0.02	0.07	0.05	0.09	0.02	0.05	0.01	0.08	0.04	0.11	0.05	0.10
25/05/2022	1.07	0.03	0.07		0.05	0.08	0.02	0.06	0.05	0.08	0.03	0.08	0.00	0.05	0.03	0.07	0.07	0.09
26/05/2022	1.10	0.04	0.06		0.04	0.11	0.02	0.03	0.06	0.10	0.02	0.06	0.01	0.04	0.03	0.08	0.05	0.10
27/05/2022	1.24	0.04	0.11		0.04	0.07	0.03	0.09	0.05	0.13	0.02	0.04	0.01	0.04	0.04	0.05	0.05	0.12
28/05/2022	1.26	0.04	0.11		0.07	0.13	0.03	0.11	0.06	0.09	0.03	0.09	0.01	0.07	0.04	0.09	0.08	0.10
29/05/2022	1.31	0.04	0.06		0.05	0.14	0.03	0.11	0.08	0.13	0.02	0.09	0.01	0.03	0.04	0.10	0.08	0.13
30/05/2022	1.37	0.07	0.12		0.06	0.16	0.05	0.07	0.07	0.16	0.03	0.09	0.02	0.08	0.04	0.11	0.07	0.16
31/05/2022	1.49	0.05	0.13		0.05	0.14	0.04	0.14	0.06	0.15	0.03	0.05	0.01	0.07	0.05	0.12	0.07	0.15

Total Number of Measurements Taken, A: 12642 12445 13198 13367 10947 14122 14037 14671
Turbidity Standard for Monitoring Location (NTU): 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
Number of Measurements Meeting Standard, B: 12642 12445 13198 13367 10947 14122 14037 14671
Compliance with Turbidity Standard, C = B/A X 100%: 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000%
OL= Offline

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Turbidity\2022\05-May

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew



Water and Waste
Eaux et déchets

CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENVIRONMENTAL STANDARDS DIVISION

WATER TREATMENT PLANT TURBIDITY GRAB MONITORING REPORT

Water System Code: 252.00 Licence No. PWS-09-412-02	Turbidity (NTU)																		
	Date	Raw Water		Filter 1		Filter 2		Filter 3		Filter 4		Filter 5		Filter 6		Filter 7		Filter 8	
		Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser		
	01-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns		
	02-May-2022	0.51	0.71	0.12	0.09	0.08	0.09	0.10	0.06	0.07	0.05	o/l	o/l	0.07	0.03	0.07	0.07	0.07	0.03
	03-May-2022	0.53	0.72	0.07	0.05	0.09	0.09	0.09	0.06	0.08	0.05	o/l	o/l	0.07	0.03	0.09	0.08	0.07	0.03
	04-May-2022	0.51	0.73	0.07	0.05	0.09	0.09	0.07	0.04	0.08	0.06	o/l	o/l	0.07	0.04	0.06	0.06	0.07	0.04
	05-May-2022	0.52	0.76	0.07	0.05	0.07	0.07	0.07	0.04	0.07	0.05	0.10	<0.02	0.08	0.04	0.06	0.06	0.08	0.05
	06-May-2022	0.53	0.75	0.10	0.07	0.09	0.08	0.09	0.06	0.07	0.05	0.06	<0.02	0.11	0.08	0.08	0.07	0.07	0.04
	07-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.07	0.03	ns	ns	ns	ns	ns	ns
	08-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	09-May-2022	0.55	0.87	0.08	0.05	0.07	0.10	0.07	0.05	0.08	0.05	0.10	0.02	0.08	0.04	0.07	0.06	0.10	0.12
	10-May-2022	0.53	0.92	0.08	0.06	0.06	0.09	0.08	0.06	0.07	0.04	0.06	<0.02	0.11	0.07	0.07	0.07	0.10	0.13
	11-May-2022	0.59	0.95	0.07	0.04	0.08	0.10	0.10	0.08	0.07	0.05	0.07	0.04	0.07	0.02	0.07	0.07	0.07	0.10
	12-May-2022	0.65	0.96	0.06	0.04	0.07	0.10	0.07	0.05	0.08	0.07	0.07	0.03	0.07	0.03	0.07	0.06	0.07	0.11
	13-May-2022	0.68	0.99	0.07	0.05	0.06	0.09	0.07	0.07	0.06	0.06	0.06	0.02	0.07	0.03	0.07	0.03	0.07	0.12
	14-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	15-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	16-May-2022	0.67	1.02	0.06	0.04	0.07	0.10	0.07	0.07	0.08	0.09	0.06	0.03	0.09	0.03	0.07	0.04	0.07	0.12
	17-May-2022	0.68	1.05	0.07	0.05	0.06	0.09	0.07	0.08	0.06	0.08	0.06	0.02	0.09	0.04	0.07	0.04	0.06	0.12
	18-May-2022	0.68	1.33	0.06	0.05	0.07	0.10	0.08	0.10	0.07	0.10	0.08	0.04	0.08	0.03	0.08	0.05	0.07	0.13
	19-May-2022	0.69	1.24	0.07	0.04	0.09	0.07	0.09	0.09	0.08	0.13	0.09	0.02	0.08	0.04	0.08	0.04	0.09	0.16
	20-May-2022	0.65	0.93	0.07	0.06	0.07	0.07	0.10	0.03	0.06	0.07	0.07	<0.02	0.09	0.03	0.08	0.04	0.10	0.07
	21-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	22-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	23-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	24-May-2022	0.67	1.06	0.07	0.05	0.08	0.07	0.09	0.04	0.08	0.08	0.08	<0.02	0.09	0.03	0.09	0.05	0.08	0.07
	25-May-2022	0.70	1.09	0.06	0.05	0.07	0.08	0.09	0.05	0.07	0.07	0.07	0.06	0.07	0.02	0.09	0.04	0.07	0.07
	26-May-2022	0.74	1.04	0.08	0.05	0.10	0.08	0.08	0.03	0.08	0.08	0.06	0.05	0.08	0.02	0.07	0.03	0.08	0.07
	27-May-2022	0.75	1.21	0.10	0.07	0.08	0.07	0.09	0.04	0.11	0.13	0.06	0.04	0.10	0.02	0.08	0.03	0.07	0.07
	28-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	29-May-2022	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	30-May-2022	0.75	1.33	0.11	0.08	0.10	0.09	0.11	0.06	0.12	0.12	0.08	0.04	0.11	0.03	0.09	0.04	0.11	0.12
	31-May-2022	0.78	1.53	0.12	0.08	0.09	0.08	0.10	0.06	0.11	0.12	0.07	0.05	0.11	0.04	0.09	0.04	0.08	0.09

Total number of measurements taken, A: 21
Turbidity Standard for Monitoring Location (NTU): 0.30
Number of measurements meeting standard, B: 21
Compliance with Turbidity Standard, C= B/A X 100%: 100%

na: not analyzed nr: no result ns: no sample o/l: offline im: instrument maintenance

Comments:

Filter 5 was offline for maintenance from March 25 at 6:36 PM to May 5 at 4:30 PM

Report Date: 7-Jun-2022



City Of Winnipeg

Water and Waste Department

Water Services

WATER TREATMENT PLANT FREE CHLORINE ON-LINE MONITORING REPORT
Deacon Booster Pumping Station

Water System Code: **252.00**

Licence Number: **PWS-09-412-02**

Report Created: 01 June 2022

Report Period: May 2022

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
01/05/2022	1.20	1.12	1.20	1.16
02/05/2022	1.18	1.05	1.21	1.14
03/05/2022	1.15	1.09	1.20	1.13
04/05/2022	1.48	1.07	1.27	1.08
05/05/2022	1.16	1.09	1.18	1.13
06/05/2022	1.14	0.94	1.14	1.05
07/05/2022	1.07	0.95	1.06	1.01
08/05/2022	1.06	0.96	1.07	0.98
09/05/2022	1.13	1.08	1.09	1.01
10/05/2022	1.17	1.00	1.11	1.04
11/05/2022	1.13	1.02	1.10	1.02
12/05/2022	1.01	0.93	1.04	0.98
13/05/2022	1.18	0.99	1.11	1.02
14/05/2022	1.21	1.16	1.18	1.13
15/05/2022	1.16	1.02	1.19	1.14
16/05/2022	1.09	1.04	1.21	1.16
17/05/2022	1.18	1.05	1.23	1.13
18/05/2022	1.15	1.05	1.19	1.13
19/05/2022	1.20	1.09	1.23	1.11
20/05/2022	1.16	1.05	1.20	1.07
21/05/2022	1.25	1.14	1.23	1.11
22/05/2022	1.27	1.03	1.23	0.97
23/05/2022	1.29	1.19	1.29	1.22
24/05/2022	1.34	1.18	1.32	1.23
25/05/2022	1.35	1.19	1.34	1.23
26/05/2022	1.27	1.15	1.27	1.21
27/05/2022	1.30	1.18	1.24	1.16
28/05/2022	1.28	1.14	1.21	1.12
29/05/2022	1.30	1.14	1.25	1.16
30/05/2022	1.23	1.12	1.25	1.17
31/05/2022	1.15	1.02	1.22	1.03

Total Number of Measurements, A: 21600 21600

Minimum Free Chlorine Standard: 0.5 0.5

Number of Measurements Meeting Standard, B: 21600 21600

COMPLIANCE, C = B/A X 100%: 100.00 100.00

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2022\05-May

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew



WATER TREATMENT PLANT CHLORINE GRAB MONITORING REPORT

Water System Code: 252.00 Licence No. PWS-09-412-02	Deacon Booster Pumping Station Branch 1			Deacon Booster Pumping Station Branch 2		
	Date	Free Chlorine (mg/L)	Total Chlorine (mg/L)	Free Chlorine (mg/L)	Total Chlorine (mg/L)	
		Analyser	Grab	Grab	Analyser	Grab
01-May-2022		ns	ns	ns	ns	ns
02-May-2022		1.27	1.09	1.29	1.18	1.21
03-May-2022		1.14	1.14	1.31	1.18	1.25
04-May-2022		1.12	1.10	1.28	1.14	1.19
05-May-2022		1.16	1.13	1.31	1.19	1.26
06-May-2022		1.16	1.10	1.29	1.18	1.19
07-May-2022		ns	ns	ns	ns	ns
08-May-2022		ns	ns	ns	ns	ns
09-May-2022		1.13	1.13	1.30	1.07	1.10
10-May-2022		1.13	1.11	1.32	1.12	1.10
11-May-2022		1.17	1.00	1.14	1.10	1.08
12-May-2022		1.00	0.96	1.13	1.04	1.07
13-May-2022		1.02	1.01	1.20	1.04	1.09
14-May-2022		ns	ns	ns	ns	ns
15-May-2022		ns	ns	ns	ns	ns
16-May-2022		1.09	1.16	1.33	1.21	1.22
17-May-2022		1.25	1.18	1.37	1.24	1.21
18-May-2022		1.13	1.20	1.43	1.20	1.26
19-May-2022		1.21	1.25	1.47	1.27	1.30
20-May-2022		1.12	1.13	1.36	1.17	1.24
21-May-2022		ns	ns	ns	ns	ns
22-May-2022		ns	ns	ns	ns	ns
23-May-2022		ns	ns	ns	ns	ns
24-May-2022		1.30	1.34	1.53	1.29	1.31
25-May-2022		1.39	1.40	1.63	1.36	1.41
26-May-2022		1.30	1.32	1.51	1.28	1.34
27-May-2022		1.34	1.30	1.52	1.28	1.30
28-May-2022		ns	ns	ns	ns	ns
29-May-2022		ns	ns	ns	ns	ns
30-May-2022		1.28	1.28	1.49	1.30	1.31
31-May-2022		1.16	1.17	1.36	1.21	1.20
Total number of measurements taken, A:		21			21	
Chlorine Standard for Monitoring Location (mg/L):		0.50			0.50	
Number of measurements meeting standard, B:		21			21	
Compliance with Chlorine Standard, C= B/A X 100%:		100%			100%	

na: not analyzed nr: no result ns: no sample o/l: offline im: instrument maintenance

Comments:

Report Date: 1-Jun-2022



CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
WATER SERVICES

Water System Code: 252.00
Licence Number: PWS-09-412-02

WATER TREATMENT PLANT UV REPORT

Report Period: May 2022

Report Created: Wednesday, June 01, 2022

Date	UVR-D100A				UVR-D200A				UVR-D300A				UVR-D400A				UVR-D500A				UVR-D600A				Total				% Volume Treated To Dose	
	Water Volume [ML]				Water Volume [ML]				Water Volume [ML]				Water Volume [ML]				Water Volume [ML]				Water Volume [ML]				Water Volume [ML]					
	Untreated	Below	To	Total	Untreated	Below	To	Total																						
01/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	61.53	61.53	0.00	0.26	50.94	51.19	0.00	0.00	0.00	0.00	0.00	0.00	63.12	63.12	0.00	0.00	0.00	0.00	0.00	0.26	175.58	175.84	99.85	
02/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	62.46	62.46	0.00	0.04	52.29	52.32	0.00	0.00	0.00	0.00	0.00	0.04	64.18	64.22	0.00	0.00	0.00	0.00	0.00	0.08	178.93	179.01	99.95	
03/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	62.29	62.29	0.00	0.11	52.45	52.57	0.00	0.00	0.00	0.00	0.00	0.05	64.09	64.13	0.00	0.00	0.00	0.00	0.00	0.16	178.83	178.99	99.91	
04/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	62.75	62.75	0.00	0.38	51.81	52.18	0.00	0.00	0.00	0.00	0.00	0.00	64.10	64.10	0.00	0.00	0.00	0.00	0.00	0.38	178.65	179.03	99.79	
05/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	62.78	62.78	0.00	0.53	51.44	51.97	0.00	0.00	0.00	0.00	0.00	0.05	64.17	64.22	0.00	0.00	0.00	0.00	0.00	0.57	178.40	178.97	99.68	
06/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	62.37	62.37	0.00	0.26	52.18	52.44	0.00	0.00	0.00	0.00	0.00	0.18	64.04	64.21	0.00	0.00	0.00	0.00	0.00	0.44	178.58	179.02	99.76	
07/05/2022	0.00	0.00	0.00	0.00	0.17	0.17	18.85	18.85	0.00	0.50	50.31	50.82	0.00	0.00	38.36	38.36	0.00	0.40	76.31	76.70	0.00	0.00	0.00	0.00	0.17	1.07	183.50	184.73	99.33	
08/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	49.96	50.67	0.00	0.00	55.38	55.38	0.00	0.35	82.63	82.98	0.00	0.00	0.00	0.00	0.00	1.05	187.98	189.03	99.45	
09/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	49.85	50.31	0.00	0.00	55.70	55.70	0.00	0.23	82.74	82.97	0.00	0.00	0.00	0.00	0.00	0.69	188.29	188.97	99.64		
10/05/2022	0.03	0.93	0.14	1.11	0.04	0.04	0.04	0.12	0.00	0.56	49.45	50.01	0.00	0.00	56.19	56.19	0.23	0.52	81.04	81.79	0.00	0.00	0.01	0.01	0.31	2.05	186.87	189.23	98.75	
11/05/2022	0.01	0.04	0.00	0.05	0.00	0.00	42.47	42.47	0.00	0.07	55.10	55.17	0.00	0.00	18.88	18.88	0.00	0.17	72.25	72.42	0.00	0.00	0.00	0.00	0.01	0.29	188.70	188.99	99.85	
12/05/2022	0.00	0.22	16.85	17.07	0.00	0.00	47.09	47.09	0.00	0.97	57.63	58.61	0.00	0.00	0.00	0.00	0.00	0.05	68.19	68.24	0.00	0.00	0.00	0.00	0.00	1.24	189.77	191.01	99.35	
13/05/2022	0.00	0.26	57.20	57.47	0.00	0.00	0.55	0.55	0.00	1.17	58.63	59.79	0.00	0.00	5.17	5.17	0.00	0.31	71.71	72.02	0.00	0.00	0.00	0.00	0.00	1.74	193.27	195.00	99.11	
14/05/2022	0.00	0.00	63.56	63.56	0.00	0.00	0.00	0.00	0.00	1.01	59.55	60.57	0.00	0.00	0.00	0.00	0.00	0.15	70.74	70.89	0.00	0.00	0.00	0.00	0.00	1.16	193.85	195.01	99.41	
15/05/2022	0.00	0.00	57.34	57.34	0.00	0.00	23.62	23.62	0.14	0.73	37.60	38.47	0.00	0.00	0.00	0.00	0.00	0.35	72.29	72.65	0.00	0.00	0.00	0.00	0.00	1.08	190.86	192.08	99.36	
16/05/2022	0.00	0.00	47.52	47.52	0.00	0.00	65.60	65.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	76.44	76.87	0.00	0.00	0.00	0.00	0.00	0.43	189.57	190.00	99.78	
17/05/2022	0.00	0.00	47.48	47.48	0.00	0.00	65.62	65.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	76.47	76.90	0.00	0.00	0.00	0.00	0.00	0.43	189.58	190.00	99.78	
18/05/2022	0.00	0.00	47.41	47.41	0.00	0.00	65.61	65.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	76.69	77.01	0.00	0.00	0.00	0.00	0.00	0.32	189.70	190.03	99.83	
19/05/2022	0.00	0.20	55.02	55.22	0.00	0.00	19.36	19.36	0.00	0.15	35.23	35.38	0.00	0.00	3.75	3.75	0.00	0.11	23.22	23.33	0.00	0.00	44.39	44.39	0.00	0.46	180.96	181.42	99.74	
20/05/2022	0.00	0.21	59.30	59.51	0.00	0.00	0.00	0.00	0.00	0.23	56.04	56.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	180.17	180.75	99.68		
21/05/2022	0.00	0.46	60.01	60.48	0.00	0.00	0.00	0.00	0.00	0.15	54.40	54.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	62.50	62.89	99.43		
22/05/2022	0.09	0.74	48.32	49.15	0.00	0.04	19.72	19.76	0.07	0.58	34.08	34.73	0.00	0.00	15.71	15.71	0.00	0.00	16.43	16.43	0.09	0.60	41.24	41.93	0.25	1.97	175.48	177.70	98.75	
23/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	70.61	70.61	0.00	0.00	0.00	0.00	0.00	0.00	54.83	54.83	0.00	0.00	57.24	57.24	0.00	0.00	0.00	0.00	0.00	0.00	182.68	182.68	100.00	
24/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	76.52	76.52	0.00	0.00	0.00	0.00	0.00	0.00	51.34	51.34	0.00	0.00	57.03	57.03	0.00	0.00	0.00	0.00	0.00	0.00	184.90	184.90	100.00	
25/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	80.10	80.10	0.00	0.00	0.00	0.00	0.00	0.00	51.61	51.61	0.00	0.04	58.43	58.47	0.00	0.00	0.00	0.00	0.00	0.04	190.14	190.18	99.98	
26/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	80.87	80.87	0.00	0.00	0.00	0.00	0.00	0.00	51.94	51.94	0.00	0.00	59.17	59.17	0.00	0.00	0.00	0.00	0.00	0.00	191.98	191.98	100.00	
27/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	81.08	81.08	0.00	0.00	0.00	0.00	0.00	0.00	51.96	51.96	0.00	0.00	58.98	58.98	0.00	0.00	0.00	0.00	0.00	0.00	192.02	192.02	100.00	
28/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	81.02	81.02	0.00	0.00	0.00	0.00	0.00	0.00	52.20	52.20	0.00	0.00	58.79	58.79	0.00	0.00	0.00	0.00	0.00	0.00	192.01	192.01	100.00	
29/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	80.32	80.32	0.00	0.00	0.00	0.00	0.00	0.00	52.69	52.69	0.00	0.04	58.95	58.99	0.00	0.00	0.00	0.00	0.00	0.04	191.96	192.00	99.98	
30/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	71.24	71.24	0.00	0.00	0.00	0.00	0.00	0.00	57.59	57.59	0.00	0.00	63.14	63.14	0.00	0.00	0.00	0.00	0.00	0.00	191.97	191.97	100.00	
31/05/2022	0.00	0.00	0.00	0.00	0.00	0.00	68.97	68.97	0.00	0.00	0.00	0.00	0.00	0.00	58.89	58.89	0.00	0.00	66.60	66.60	0.00	0.00	0.00	0.00	0.00	0.00	194.47	194.47	100.00	

Notes: 1. UV Comparative Dose: 18.1 mJ/cm²

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew

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CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 WATER SERVICES

Water System Code: 252.00
 Licence Number: PWS-09-412-02

Report Period: May 2022

Report Created: Wednesday, June 01, 2022

WATER TREATMENT PLANT UV REPORT

Date	Transmittance (%)				UVR_D100A			UVR_D200A			UVR_D300A			UVR_D400A			UVR_D500A			UVR_D600A		
	Branch 1		Branch 2		UV Dose [mJ/cm ²]																	
01/05/2022	95.2	84.8	96.2	95.7	OL	OL	OL	15.7	30.4	21.5	17.6	24.8	21.4	OL	OL	OL	17.8	21.9	21.2	OL	OL	OL
02/05/2022	95.6	82.8	96.3	95.1	OL	OL	OL	18.1	27.6	21.6	17.4	23.7	21.3	OL	OL	OL	17.7	21.8	21.2	OL	OL	OL
03/05/2022	95.8	91.8	96.4	96.0	OL	OL	OL	18.3	27.6	21.6	17.5	23.6	21.3	OL	OL	OL	17.6	22.6	21.2	OL	OL	OL
04/05/2022	96.2	85.6	96.6	96.2	OL	OL	OL	18.3	26.7	21.6	16.9	22.8	21.3	OL	OL	OL	17.5	22.4	21.2	OL	OL	OL
05/05/2022	96.6	90.1	96.7	96.1	OL	OL	OL	18.5	26.5	21.6	16.8	23.3	21.2	OL	OL	OL	17.7	21.9	21.2	OL	OL	OL
06/05/2022	96.8	94.4	96.7	96.1	OL	OL	OL	18.4	26.3	21.6	16.8	22.8	21.2	OL	OL	OL	17.4	22.3	21.1	OL	OL	OL
07/05/2022	97.1	92.0	96.9	95.8	OL	OL	OL	0.0	26.1	21.6	16.9	22.9	21.2	17.6	89.9	23.0	17.2	29.6	21.2	OL	OL	OL
08/05/2022	97.6	83.0	97.2	96.5	OL	OL	OL	OL	OL	OL	17.1	23.1	21.3	19.4	24.0	22.2	17.4	21.8	21.2	OL	OL	OL
09/05/2022	97.8	91.6	97.1	96.7	OL	OL	OL	OL	OL	OL	17.1	22.1	21.3	18.8	23.7	21.5	17.3	21.8	21.2	OL	OL	OL
10/05/2022	98.0	88.5	97.2	96.8	0.0	62.2	11.8	0.0	68.6	27.7	16.9	24.0	21.3	18.7	26.7	21.3	0.0	94.7	21.3	0.0	84.6	65.3
11/05/2022	98.1	88.2	97.1	96.6	0.0	22.3	10.8	18.5	75.6	21.6	16.3	23.9	21.2	0.0	36.9	21.3	16.4	22.5	21.2	OL	OL	OL
12/05/2022	97.8	78.3	96.8	95.7	0.0	81.6	24.4	0.0	30.2	21.6	16.5	29.4	21.3	OL	OL	OL	17.3	29.6	21.2	OL	OL	OL
13/05/2022	97.3	83.7	96.3	95.5	0.0	94.5	31.7	0.0	71.3	22.9	16.4	30.4	21.5	0.0	86.7	21.7	17.2	22.8	21.3	OL	OL	OL
14/05/2022	96.6	85.8	95.7	95.1	19.0	37.7	24.1	OL	OL	OL	16.5	22.5	21.5	OL	OL	OL	17.3	22.2	21.3	OL	OL	OL
15/05/2022	96.4	93.3	95.4	95.1	18.7	35.8	25.1	18.2	65.4	21.5	0.0	23.2	21.5	OL	OL	OL	16.8	22.3	21.3	OL	OL	OL
16/05/2022	96.3	90.2	95.4	95.1	20.9	43.8	26.7	18.5	24.3	21.5	OL	OL	OL	OL	OL	OL	17.4	21.9	21.3	OL	OL	OL
17/05/2022	96.0	92.1	95.2	92.2	20.1	43.4	25.8	16.5	29.7	21.2	OL	OL	OL	OL	OL	OL	17.3	21.9	21.3	OL	OL	OL
18/05/2022	95.7	92.9	95.0	94.3	19.6	43.6	25.1	18.6	24.0	21.1	OL	OL	OL	OL	OL	OL	17.3	21.9	21.3	OL	OL	OL
19/05/2022	96.0	94.6	95.3	95.0	17.4	37.9	23.1	0.0	25.4	21.1	16.5	79.7	21.3	0.0	85.7	22.1	0.0	28.3	21.2	19.4	84.6	26.5
20/05/2022	95.8	94.3	95.0	94.3	17.3	36.4	21.4	OL	OL	OL	17.3	24.3	21.3	OL	OL	OL	OL	OL	OL	17.4	24.8	23.2
21/05/2022	94.7	91.2	94.9	94.6	17.0	37.1	21.3	OL	OL	OL	17.2	30.5	21.3	OL	OL	OL	OL	OL	OL	16.5	29.6	21.8
22/05/2022	94.6	88.3	94.8	94.5	0.0	33.4	21.1	16.3	80.8	21.2	0.0	26.6	21.3	15.8	82.3	21.4	15.7	92.5	21.4	0.0	23.0	21.4
23/05/2022	94.7	84.2	94.9	94.3	OL	OL	OL	18.6	23.2	21.1	OL	OL	OL	18.6	22.6	21.2	18.0	22.6	21.2	OL	OL	OL
24/05/2022	94.8	77.6	95.1	93.8	OL	OL	OL	15.9	29.3	21.1	OL	OL	OL	18.7	25.4	21.3	17.9	24.7	21.2	OL	OL	OL
25/05/2022	95.6	87.8	96.0	95.0	OL	OL	OL	18.5	21.5	21.1	OL	OL	OL	18.6	23.1	21.3	17.9	21.8	21.2	OL	OL	OL
26/05/2022	96.3	93.3	96.8	96.3	OL	OL	OL	18.6	21.5	21.1	OL	OL	OL	18.8	23.6	21.4	18.1	22.0	21.2	OL	OL	OL
27/05/2022	96.3	76.0	96.7	96.4	OL	OL	OL	18.5	21.6	21.1	OL	OL	OL	18.7	23.7	21.4	18.0	22.0	21.2	OL	OL	OL
28/05/2022	96.1	83.4	96.6	96.1	OL	OL	OL	18.5	21.7	21.1	OL	OL	OL	18.6	23.6	21.3	17.8	22.0	21.2	OL	OL	OL
29/05/2022	96.1	88.0	96.5	96.1	OL	OL	OL	18.5	22.4	21.1	OL	OL	OL	18.6	23.7	21.3	17.8	23.0	21.2	OL	OL	OL
30/05/2022	95.7	81.6	96.0	94.9	OL	OL	OL	18.4	23.8	21.2	OL	OL	OL	18.7	22.6	21.3	18.0	23.0	21.2	OL	OL	OL
31/05/2022	96.2	76.2	96.6	96.0	OL	OL	OL	18.6	27.0	21.5	OL	OL	OL	18.4	30.8	21.3	18.2	28.1	21.2	OL	OL	OL

Notes: 1. UV Comparative Dose: 18.1 mJ/cm²

2. OL - Off Line

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew

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