



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

September 7, 2021

RE: AUGUST 2021 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 August 2021.

The August on-line and grab sampling turbidity reports include results obtained for the Water Treatment Plant raw water and the eight filters. The maximum turbidity was greater than 0.30 NTU on several occasions; the elevated turbidities occurred for less than 12 consecutive hours. The turbidity results for the filter effluent met the licence requirements.

The August 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 August 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,

*Original signed by,
(Signed original available upon request)*

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, Seniors and Active Living (email)
M. L. Geer, CPA, CA (email)
T. Shanks, M. Eng., P. Eng. (e-mail)
C. Wiebe, P. Eng., CAMP (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

August 2021 Turbidity (NTU)

Date	Raw		Filter #1		Filter #2		Filter #3		Filter #4		Filter #5		Filter #6		Filter #7		Filter #8	
	Avg	Avg	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
1/08/2021	3.19	0.04	0.09		0.05	0.09	0.06	0.09	0.07	0.11	0.05	0.10	0.03	0.15	0.06	0.10	0.06	0.12
2/08/2021	2.38	0.05	0.13		0.06	0.12	0.06	0.11	0.07	0.14	0.05	0.09	0.04	0.12	0.06	0.14	0.06	0.16
3/08/2021	2.13	0.04	0.10		0.05	0.10	0.05	0.11	0.06	0.11	0.04	0.09	0.03	0.08	0.05	0.09	0.06	0.10
4/08/2021	2.55	0.04	0.08		0.05	0.09	0.05	0.10	0.06	0.11	0.04	0.21	0.03	0.08	0.05	0.08	0.05	0.40
5/08/2021	1.93	0.04	0.09		0.05	0.10	0.06	0.08	0.06	0.11	0.04	0.10	0.04	0.14	0.06	0.12	0.06	0.12
6/08/2021	2.27	0.05	0.10		0.05	0.08	0.06	0.10	0.07	0.12	0.06	0.08	0.04	0.10	0.07	0.12	0.05	0.09
7/08/2021	1.81	0.06	0.17		0.07	0.10	0.06	0.10	0.07	0.16	0.06	0.10	0.05	0.09	0.07	0.18	0.04	0.09
8/08/2021	2.37	0.08	0.18		0.07	0.13	0.08	0.11	0.08	0.12	0.07	0.27	0.05	0.17	0.08	0.13	0.04	0.13
9/08/2021	2.41	0.07	0.19		0.07	0.12	0.07	0.11	0.10	0.15	0.07	0.14	0.05	0.12	0.08	0.17	0.05	0.10
10/08/2021	2.52	0.03	0.17		0.07	0.11	0.07	0.11	0.09	0.15	0.06	0.12	0.04	0.14	0.07	0.13	0.05	0.09
11/08/2021	3.00	OL	OL		0.07	0.12	0.07	0.13	0.09	0.17	0.07	0.15	0.05	0.10	0.08	0.15	0.05	0.11
12/08/2021	2.31	0.04	0.22		0.06	0.28	0.07	0.32	0.07	0.31	0.07	0.28	0.05	0.21	0.07	0.20	0.04	0.25
13/08/2021	2.34	0.15	0.21		0.09	0.17	0.08	0.15	0.12	0.17	0.09	0.30	0.07	0.11	0.09	0.21	0.06	0.11
14/08/2021	2.36	0.13	0.17		0.07	0.13	0.07	0.13	0.10	0.15	0.09	0.15	OL	OL	0.08	0.16	0.05	0.11
15/08/2021	2.17	0.12	0.17		0.06	0.11	0.06	0.11	0.10	0.16	0.08	0.12	OL	OL	0.07	0.14	0.04	0.14
16/08/2021	2.26	0.12	0.18		0.07	0.13	0.07	0.14	0.12	0.16	0.10	0.26	OL	OL	0.09	0.14	0.05	0.11
17/08/2021	2.33	0.13	0.17		0.07	0.13	0.07	0.16	0.12	0.21	0.12	0.17	OL	OL	0.09	0.15	0.05	0.08
18/08/2021	2.01	0.12	0.18		0.08	0.14	0.07	0.14	0.14	0.21	0.13	0.19	OL	OL	0.09	0.18	0.05	0.09
19/08/2021	2.04	0.07	0.19		0.09	0.14	0.08	0.16	0.12	0.24	0.11	0.17	OL	OL	0.08	0.15	0.05	0.12
20/08/2021	2.20	0.04	0.10		0.08	0.15	0.08	0.13	0.10	0.16	0.09	0.13	OL	OL	0.07	0.14	0.04	0.10
21/08/2021	2.02	0.03	0.08		0.06	0.13	0.06	0.10	0.09	0.13	0.09	0.16	OL	OL	0.07	0.10	0.03	0.11
22/08/2021	2.02	0.02	0.06		0.06	0.11	0.06	0.13	0.09	0.16	0.11	0.13	OL	OL	0.06	0.13	0.03	0.08
23/08/2021	1.96	0.02	0.07		0.06	0.08	0.06	0.13	0.10	0.18	0.14	0.16	OL	OL	0.06	0.12	0.04	0.07
24/08/2021	1.70	0.03	0.20		0.07	0.24	0.03	0.18	0.12	0.31	0.13	0.34	OL	OL	0.06	0.20	0.04	0.24
25/08/2021	1.69	0.03	0.10		0.05	0.17	0.07	0.18	0.11	0.24	0.15	0.24	0.07	0.15	0.04	0.16	0.04	0.11
26/08/2021	1.62	0.02	0.16		0.08	0.14	0.06	0.18	0.08	0.16	0.11	0.25	0.04	0.17	0.06	0.14	0.03	0.16
27/08/2021	1.59	0.04	0.05		0.07	0.19	0.06	0.15	0.04	0.14	0.06	0.18	0.06	0.10	0.09	0.16	0.03	0.14
28/08/2021	1.53	0.03	0.13		0.07	0.17	0.05	0.30	0.04	0.14	0.05	0.18	0.08	0.18	0.07	0.19	0.03	0.06
29/08/2021	1.44	0.03	0.12		0.06	0.10	0.09	0.18	0.04	0.15	0.06	0.09	0.06	0.17	0.08	0.18	0.03	0.15
30/08/2021	1.33	0.02	0.10		0.10	0.20	0.06	0.19	0.05	0.11	0.06	0.19	0.08	0.19	0.07	0.21	0.03	0.13
31/08/2021	1.45	0.03	0.04		0.08	0.21	0.07	0.19	0.07	0.17	0.05	0.19	0.08	0.22	0.11	0.13	0.03	0.13

Total Number of Measurements Taken, A: 12639 14240 13667 14757 15273 9681 14977 15980
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: 12639 14240 13666 14755 15272 9681 14977 15979
Compliance with Turbidity Standard, C = B/A X 100%: 100.000% 100.000% 99.993% 99.986% 99.993% 100.000% 100.000% 99.994%

OL=Offline

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Turbidity\2021\08-August

Submitted By (Print): M.Szmon

Signature: Original signed by M.Szmon



WATER TREATMENT PLANT TURBIDITY GRAB MONITORING REPORT																		
Water System Code: 252.00		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	Grab	Analyser
01-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
02-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
03-Aug-2021	1.70	2.09	0.11	0.06	0.13	0.08	0.14	0.05	0.10	0.07	0.08	0.05	0.10	0.04	0.11	0.05	0.09	0.06
04-Aug-2021	1.63	2.18	0.13	0.07	0.09	0.05	0.09	0.06	0.11	0.09	0.08	0.05	0.09	0.04	0.08	0.04	0.09	0.05
05-Aug-2021	2.30	2.14	0.09	0.05	0.10	0.05	0.10	0.06	0.13	0.10	0.10	0.05	0.11	0.06	0.10	0.06	0.15	0.11
06-Aug-2021	2.07	2.12	0.10	0.06	0.10	0.06	0.11	0.07	0.09	0.07	0.08	0.05	0.14	0.08	0.12	0.08	0.09	0.03
07-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
08-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
09-Aug-2021	1.87	2.32	0.15	0.09	0.17	0.10	0.12	0.07	0.13	0.10	0.12	0.12	0.14	0.06	0.12	0.07	0.11	0.04
10-Aug-2021	1.74	2.49	0.15	0.09	0.17	0.10	0.12	0.07	0.13	0.10	0.16	0.10	0.12	0.06	0.11	0.07	0.12	0.04
11-Aug-2021	2.05	IM	OL	OL	0.12	0.07	0.11	0.07	0.13	0.12	0.11	0.09	0.12	0.07	0.12	0.07	0.12	0.06
12-Aug-2021	1.77	2.34	0.15	0.20	0.15	0.11	0.15	0.13	0.14	0.13	0.12	0.10	0.16	0.10	0.14	0.10	0.13	0.07
13-Aug-2021	2.02	2.34	0.14	0.19	0.14	0.13	0.17	0.13	0.14	0.14	0.12	0.13	0.13	0.08	0.12	0.09	0.11	0.07
14-Aug-2021	NS	NS	0.12	0.14	NS	OL	OL	NS	NS	NS								
15-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	OL	OL	NS	NS	NS
16-Aug-2021	1.81	2.03	0.12	0.13	0.14	0.09	0.11	0.07	0.10	0.13	0.12	0.14	OL	OL	0.10	0.08	0.10	0.04
17-Aug-2021	1.97	2.07	0.13	0.14	0.17	0.12	0.11	0.08	0.12	0.15	0.16	0.17	OL	OL	0.11	0.09	0.11	0.05
18-Aug-2021	1.85	1.96	0.13	0.14	0.15	0.10	0.12	0.08	0.13	0.18	0.09	0.14	OL	OL	0.11	0.09	0.11	0.05
19-Aug-2021	2.17	2.14	0.13	0.14	0.15	0.12	0.11	0.08	0.16	0.21	0.11	0.16	OL	OL	0.11	0.10	0.11	0.05
20-Aug-2021	2.04	2.20	0.15	0.08	0.12	0.10	0.12	0.10	0.13	0.13	0.10	0.11	OL	OL	0.12	0.08	0.13	0.05
21-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	OL	OL	NS	NS	NS	NS
22-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	OL	OL	NS	NS	NS	NS
23-Aug-2021	1.92	2.04	0.07	0.02	0.07	0.07	0.08	0.07	0.07	0.11	0.08	0.14	OL	OL	0.11	0.09	0.12	0.02
24-Aug-2021	1.47	1.73	0.09	0.05	0.10	0.10	0.12	0.09	0.09	0.15	0.11	0.20	OL	OL	0.09	0.08	0.09	0.05
25-Aug-2021	1.49	1.68	0.10	0.05	0.10	0.08	0.08	0.08	0.09	0.14	0.09	0.19	0.17	0.08	0.15	0.14	0.12	0.05
26-Aug-2021	1.44	1.64	0.08	0.03	0.08	0.08	0.09	0.08	0.07	0.04	0.09	0.10	0.10	0.10	0.09	0.08	0.13	0.07
27-Aug-2021	1.53	1.53	0.10	0.06	0.12	0.11	0.09	0.09	0.10	0.06	0.12	0.11	0.10	0.09	0.10	0.09	0.09	0.04
28-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.10	0.10	NS	NS	NS	NS
29-Aug-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
30-Aug-2021	1.19	1.49	0.07	0.03	0.08	0.11	0.10	0.11	0.07	0.07	0.09	0.09	0.17	0.19	0.07	0.10	0.10	0.03
31-Aug-2021	1.36	1.42	0.08	0.04	0.10	0.13	NS	NS	0.08	0.09	0.09	0.09	0.08	0.11	0.08	0.10	0.07	0.03
Total number of measurements taken, A:			21		21		20		21		21		15		21		21	
Turbidity Standard for Monitoring Location (NTU):			0.30		0.30		0.30		0.30		0.30		0.30		0.30		0.30	
Number of measurements meeting standard, B:			21		21		20		21		21		15		21		21	
Compliance with Turbidity Standard, C= B/A X 100%:			100%		100%		100%		100%		100%		100%		100%		100%	

NS: No Sample NA: Not Analyzed OL: Off-Line NR: No Result IM: Instrument Maintenance

Comments:

Note: The raw water analyser is cleaned daily during warm water months because it is susceptible to frequent fouling.
Filter 6 was taken offline on August 13th at 12:53 pm due to a failure on the filter Backwash Supply valve and remained offline until August 25th at 1:25 am.

Compiled By: H. Demchenko

Authorized By: C. Diduck

Report Date: 7-Sep-21



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 September 2021**

Report Period: August 2021

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
01/08/2021	1.36	1.27	1.33	1.24
02/08/2021	1.40	1.29	1.38	1.23
03/08/2021	1.42	1.00	1.38	1.14
04/08/2021	1.51	1.35	1.45	1.33
05/08/2021	1.69	1.44	1.60	1.35
06/08/2021	1.51	1.25	1.45	1.22
07/08/2021	1.31	1.14	1.23	1.12
08/08/2021	1.28	1.15	1.21	1.09
09/08/2021	1.30	1.09	1.25	1.05
10/08/2021	1.41	1.28	1.43	1.33
11/08/2021	1.51	1.38	1.55	1.43
12/08/2021	1.44	1.05	1.45	1.04
13/08/2021	1.51	1.26	1.63	1.45
14/08/2021	1.42	1.29	1.52	1.41
15/08/2021	1.46	1.33	1.55	1.43
16/08/2021	1.52	1.42	1.62	1.49
17/08/2021	1.29	1.19	1.29	1.12
18/08/2021	1.42	1.28	1.37	1.24
19/08/2021	1.47	1.27	1.41	1.25
20/08/2021	1.59	1.49	1.44	1.33
21/08/2021	1.46	1.15	1.33	1.09
22/08/2021	1.38	1.31	1.25	1.20
23/08/2021	1.41	1.31	1.29	1.18
24/08/2021	1.42	1.13	1.41	1.06
25/08/2021	1.37	1.17	1.34	1.19
26/08/2021	1.44	1.22	1.40	1.20
27/08/2021	1.48	1.43	1.40	1.33
28/08/2021	1.48	1.39	1.38	1.29
29/08/2021	1.48	1.38	1.34	1.28
30/08/2021	1.45	1.38	1.41	1.24
31/08/2021	1.48	1.37	1.53	1.38

Total Number of Measurements, A:	21603	21602
Minimum Free Chlorine Standard:	0.5	0.5
Number of Measurements Meeting Standard, B:	21603	21602
COMPLIANCE, C = B/A X 100%:	100.00	100.00

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2021\08-August

Submitted By (Print): M.Szmon

Signature: Original signed by M.Szmon



Water and Waste
Eaux et déchets

CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENVIRONMENTAL STANDARDS DIVISION

WATER TREATMENT PLANT CHLORINE GRAB MONITORING REPORT

Water System Code: 252.00	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)	Grab	Grab
Date	Analyser	Grab	Grab	Analyser	Grab	Grab
01-Aug-2021	NS	NS	NS	NS	NS	NS
02-Aug-2021	NS	NS	NS	NS	NS	NS
03-Aug-2021	1.47	1.61	1.80	1.45	1.55	1.75
04-Aug-2021	1.46	1.67	1.87	1.42	1.57	1.79
05-Aug-2021	1.57	1.71	1.95	1.48	1.63	1.82
06-Aug-2021	1.42	1.48	1.69	1.37	1.37	1.57
07-Aug-2021	NS	NS	NS	NS	NS	NS
08-Aug-2021	NS	NS	NS	NS	NS	NS
09-Aug-2021	1.31	1.41	1.62	1.20	1.24	1.50
10-Aug-2021	1.42	1.47	1.67	1.44	1.45	1.67
11-Aug-2021	1.50	1.56	1.78	1.53	1.58	1.78
12-Aug-2021	1.49	1.50	1.76	1.49	1.55	1.70
13-Aug-2021	1.64	1.63	1.85	1.73	1.69	1.91
14-Aug-2021	NS	NS	NS	NS	NS	NS
15-Aug-2021	NS	NS	NS	NS	NS	NS
16-Aug-2021	1.51	1.55	1.78	1.62	1.58	1.82
17-Aug-2021	1.32	1.39	1.57	1.35	1.40	1.61
18-Aug-2021	1.44	1.53	1.75	1.38	1.46	1.70
19-Aug-2021	1.33	1.51	1.67	1.39	1.49	1.69
20-Aug-2021	1.58	1.56	1.80	1.44	1.40	1.58
21-Aug-2021	NS	NS	NS	NS	NS	NS
22-Aug-2021	NS	NS	NS	NS	NS	NS
23-Aug-2021	1.32	1.48	1.67	1.19	1.26	1.47
24-Aug-2021	1.57	1.62	1.84	1.48	1.48	1.71
25-Aug-2021	1.40	1.36	1.61	1.30	1.33	1.53
26-Aug-2021	1.53	1.48	1.71	1.51	1.47	1.66
27-Aug-2021	1.51	1.51	1.72	1.43	1.43	1.62
28-Aug-2021	NS	NS	NS	NS	NS	NS
29-Aug-2021	NS	NS	NS	NS	NS	NS
30-Aug-2021	1.40	1.46	1.70	1.45	1.45	1.69
31-Aug-2021	1.47	1.45	1.65	1.47	1.52	1.72
Total number of measurements taken, A:	21	21	21		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%	

NS: No Sample NA: Not Analyzed OL: Off-Line NR: No Result IM: Instrument Maintenance

Comments:

Compiled By: H. Demchenko

Authorized By: C. Diduck

CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 WATER SERVICES

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

Report Period: August 2021

Report Created: Wednesday, September 01, 2021

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]																	
	Avg.	Min.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	
01/08/2021	94.1	90.7	95.1	94.1	17.2	36.5	21.3	0.0	23.8	22.6	15.9	53.5	21.4	17.2	22.3	21.3	OL	OL	OL	16.2	23.9	21.3
02/08/2021	94.0	91.6	95.1	94.2	17.1	28.3	21.2	OL	OL	OL	17.1	23.2	21.3	17.3	22.4	21.4	OL	OL	OL	16.3	24.0	21.3
03/08/2021	94.1	91.3	95.2	94.1	0.0	77.4	21.3	16.3	77.4	21.1	0.0	70.2	21.3	0.0	37.0	21.4	OL	OL	OL	0.0	80.8	21.4
04/08/2021	93.9	90.6	95.4	94.3	16.9	29.4	21.3	18.4	23.2	21.1	17.5	21.9	21.2	OL	OL	OL	OL	OL	OL	16.4	23.9	21.3
05/08/2021	94.0	86.7	95.2	93.9	17.2	29.1	21.3	18.4	21.5	21.1	17.4	23.2	21.3	OL	OL	OL	OL	OL	OL	16.4	22.1	21.4
06/08/2021	94.1	91.7	94.6	93.9	17.1	28.9	21.4	18.6	21.8	21.1	17.5	23.3	21.3	OL	OL	OL	OL	OL	OL	16.2	22.4	21.4
07/08/2021	93.8	91.5	94.7	94.0	17.0	28.9	21.4	18.7	24.4	21.1	17.4	23.4	21.3	OL	OL	OL	OL	OL	OL	16.3	22.3	21.4
08/08/2021	93.4	91.5	94.1	93.4	17.1	27.8	21.3	18.7	21.7	21.1	17.2	22.1	21.3	OL	OL	OL	OL	OL	OL	16.3	22.2	21.4
09/08/2021	93.4	90.4	94.2	93.2	0.0	54.9	21.3	0.0	99.3	21.0	0.0	53.7	21.4	0.0	45.3	21.6	18.5	83.4	21.4	0.0	62.2	21.4
10/08/2021	93.6	88.5	94.6	0.0	17.2	33.0	21.4	18.7	23.4	21.2	16.2	29.4	21.3	OL	OL	OL	18.5	24.2	21.3	OL	OL	OL
11/08/2021	93.6	87.7	94.1	93.4	17.4	31.7	21.4	18.7	23.6	21.2	17.5	22.2	21.3	OL	OL	OL	18.4	23.2	21.2	OL	OL	OL
12/08/2021	92.7	3.8	93.0	92.1	0.0	38.0	21.2	0.0	22.5	21.2	0.0	51.7	21.2	OL	OL	OL	0.0	94.0	21.7	0.0	62.3	21.3
13/08/2021	93.3	86.8	93.5	92.6	OL	OL	OL	OL	OL	OL	16.6	36.3	21.2	OL	OL	OL	18.1	29.2	21.3	16.2	26.7	21.2
14/08/2021	94.1	87.6	94.3	93.9	OL	OL	OL	OL	OL	OL	16.7	22.0	21.2	OL	OL	OL	18.0	22.9	21.3	16.2	22.1	21.2
15/08/2021	94.4	89.9	94.4	93.5	OL	OL	OL	OL	OL	OL	16.7	21.9	21.2	OL	OL	OL	18.0	22.6	21.2	16.1	22.2	21.2
16/08/2021	94.4	87.6	94.2	93.0	OL	OL	OL	OL	OL	OL	16.8	21.9	21.2	OL	OL	OL	18.4	22.1	21.2	16.2	22.3	21.2
17/08/2021	94.6	81.6	94.5	93.3	13.3	56.8	21.3	OL	OL	OL	15.2	34.6	21.2	OL	OL	OL	18.0	29.7	21.4	16.3	43.0	21.4
18/08/2021	94.7	83.9	94.3	93.6	13.2	21.9	18.9	OL	OL	OL	16.4	22.7	21.2	OL	OL	OL	17.8	28.4	21.5	16.0	23.7	21.5
19/08/2021	94.4	85.1	94.3	92.7	0.0	98.8	17.8	18.4	63.7	21.2	9.9	27.1	21.3	0.0	36.4	18.9	17.7	32.3	21.6	15.9	24.0	21.4
20/08/2021	94.4	53.0	94.5	93.1	OL	OL	OL	20.6	21.5	21.2	16.6	22.8	21.3	OL	OL	OL	17.4	34.4	21.9	16.2	23.3	21.5
21/08/2021	95.0	87.0	95.4	94.2	16.0	97.2	21.8	0.0	21.6	21.2	0.0	67.6	21.4	OL	OL	OL	0.0	25.8	23.2	0.0	44.6	21.5
22/08/2021	95.1	90.0	95.6	94.8	17.2	29.4	21.2	OL	OL	OL	17.2	22.1	21.2	OL	OL	OL	OL	OL	OL	16.3	22.3	21.4
23/08/2021	94.9	89.2	95.6	94.5	17.1	27.9	21.2	OL	OL	OL	17.6	22.1	21.2	OL	OL	OL	OL	OL	OL	15.9	22.4	21.4
24/08/2021	93.8	3.0	94.1	3.0	0.0	75.6	21.4	OL	OL	OL	0.0	73.5	21.4	OL	OL	OL	OL	OL	OL	0.0	48.4	21.3
25/08/2021	94.5	93.8	95.2	94.6	15.9	29.2	21.2	OL	OL	OL	17.3	22.1	21.2	OL	OL	OL	OL	OL	OL	15.8	22.7	21.3
26/08/2021	94.1	89.9	94.6	93.3	0.0	68.3	21.3	OL	OL	OL	0.0	71.5	21.2	OL	OL	OL	OL	OL	OL	0.0	41.9	20.7
27/08/2021	94.3	92.8	95.4	93.6	15.8	21.9	21.2	OL	OL	OL	17.2	21.8	21.1	OL	OL	OL	OL	OL	OL	15.5	22.7	21.3
28/08/2021	94.6	89.4	95.6	95.0	16.0	22.0	21.2	OL	OL	OL	17.1	21.7	21.1	OL	OL	OL	OL	OL	OL	15.2	22.3	20.5
29/08/2021	94.5	90.7	95.9	95.1	16.2	23.0	21.2	OL	OL	OL	16.7	29.0	21.2	OL	OL	OL	OL	OL	OL	14.7	22.6	20.4
30/08/2021	94.5	89.4	95.6	95.1	15.9	29.5	21.2	OL	OL	OL	16.3	29.0	21.4	OL	OL	OL	16.4	66.0	21.2	0.0	96.1	20.7
31/08/2021	94.4	89.2	96.0	95.1	15.1	28.0	21.1	OL	OL	OL	0.0	33.3	21.5	OL	OL	OL	18.4	33.8	23.7	17.3	97.8	21.4

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

2. OL - Off Line

Submitted By (Print): M.Szmon

Signature: Original signed by M.Szmon

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