



Water and Waste Department • Service des eaux et des déchets

May 6, 2016

Melanie Betsill
Office of Drinking Water
Manitoba Conservation and Water Stewardship
1007 Century Street
Winnipeg, Manitoba R3H 0W4

Our File: 040-18-18-55-00

Dear Ms. Betsill:

**RE: APRIL 2016 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 April 2016. There are no corrective action reports to be submitted for April 2016.

The April 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 effluent from the filters met the licence requirements.

The April 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 April 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 may be reached by telephone at 204-986-8359 or by e-mail at rgrosselle@winnipeg.ca.

Yours sincerely,

Original signed by:

R. Grosselle
Manager of Environmental Standards
Attachments

c:(e-mail)

Dr. L. Richards, Winnipeg Regional Health Authority
Dr. H. Chang, Winnipeg Regional Health Authority
Dr. S. Roberecki, Manitoba Health, Healthy Living and Seniors
M. L. Geer, CPA, CA
G. Patton, P.Eng.
T. Shanks, P.Eng.
M. Szmon, P.Eng.
C. Diduck

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CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 WATER SERVICES

Water System Code: 252.00
 Licence Number: PWS-09-412-01

WATER TREATMENT PLANT TURBIDITY ON-LINE MONITORING REPORT

April 2016 Turbidity (NTU)

Date	Raw	Filter #1		Filter #2		Filter #3		Filter #4		Filter #5		Filter #6		Filter #7		Filter #8	
	Avg	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
1/04/2016	0.63	0.01	0.06	0.02	0.10	0.04	0.11	0.02	0.09	0.01	0.06	0.03	0.04	0.02	0.05	0.00	0.04
2/04/2016	0.63	0.02	0.09	0.04	0.11	0.04	0.16	0.05	0.07	0.02	0.08	0.05	0.12	0.03	0.05	0.01	0.04
3/04/2016	0.62	0.02	0.04	0.03	0.11	0.07	0.12	0.04	0.14	0.01	0.03	0.04	0.15	0.04	0.12	0.01	0.07
4/04/2016	0.61	0.02	0.08	0.04	0.06	0.05	0.15	0.04	0.15	0.03	0.08	0.04	0.07	0.03	0.12	0.00	0.07
5/04/2016	0.60	0.02	0.08	0.03	0.11	0.04	0.15	0.05	0.13	0.02	0.08	0.06	0.14	0.03	0.05	0.01	0.05
6/04/2016	0.60	0.02	0.04	0.02	0.10	0.07	0.11	0.04	0.14	0.01	0.03	0.04	0.13	0.05	0.12	0.01	0.06
7/04/2016	0.60	0.02	0.08	0.04	0.07	0.05	0.15	0.03	0.12	0.02	0.07	0.04	0.06	0.04	0.13	0.00	0.01
8/04/2016	0.60	0.02	0.08	0.03	0.10	0.03	0.15	0.05	0.06	0.01	0.06	0.04	0.12	0.04	0.07	0.01	0.07
9/04/2016	0.59	0.02	0.04	0.02	0.11	0.07	0.13	0.04	0.13	0.01	0.02	0.03	0.12	0.05	0.13	0.01	0.06
10/04/2016	0.58	0.02	0.09	0.05	0.10	0.05	0.16	0.03	0.05	0.02	0.08	0.04	0.06	0.04	0.13	0.01	0.01
11/04/2016	0.58	0.01	0.03	0.03	0.11	0.05	0.09	0.05	0.13	0.01	0.06	0.03	0.11	0.06	0.08	0.01	0.06
12/04/2016	0.60	0.03	0.08	0.03	0.05	0.06	0.15	0.03	0.12	0.01	0.04	0.03	0.05	0.04	0.13	0.01	0.06
13/04/2016	0.60	0.02	0.08	0.04	0.11	0.04	0.16	0.04	0.05	0.02	0.07	0.05	0.12	0.04	0.06	0.01	0.03
14/04/2016	0.60	0.02	0.04	0.03	0.11	0.07	0.10	0.04	0.13	0.01	0.02	0.03	0.15	0.06	0.28	0.01	0.06
15/04/2016	0.61	0.02	0.08	0.04	0.06	0.05	0.15	0.03	0.12	0.02	0.08	0.03	0.05	0.04	0.13	0.00	0.01
16/04/2016	0.61	0.01	0.07	0.03	0.10	0.04	0.07	0.04	0.06	0.01	0.05	0.04	0.12	0.05	0.07	0.01	0.07
17/04/2016	0.63	0.02	0.04	0.01	0.04	0.04	0.14	0.01	0.10	0.01	0.02	0.02	0.07	0.03	0.11	0.00	0.03
18/04/2016	0.62	0.01	0.04	0.02	0.05	0.02	0.10	0.01	0.08	0.00	0.02	0.02	0.04	0.05	0.21	0.01	0.01
19/04/2016	0.62	0.01	0.03	0.02	0.07	0.03	0.06	0.02	0.06	0.01	0.04	0.02	0.09	0.03	0.06	0.01	0.04
20/04/2016	0.65	0.01	0.03	0.01	0.02	0.03	0.13	0.02	0.07	0.00	0.01	0.02	0.09	0.05	0.11	0.00	0.02
21/04/2016	0.69	0.01	0.04	0.01	0.06	0.02	0.10	0.01	0.03	0.00	0.03	0.03	0.05	0.04	0.10	0.01	0.01
22/04/2016	0.69	0.01	0.01	0.01	0.03	0.02	0.04	0.02	0.05	0.00	0.03	0.02	0.07	0.03	0.05	0.00	0.01
23/04/2016	0.68	0.01	0.02	0.00	0.01	0.02	0.09	0.01	0.05	0.01	0.02	0.01	0.03	0.06	0.09	0.00	0.01
24/04/2016	0.70	0.01	0.02	0.01	0.04	0.01	0.03	0.01	0.02	0.00	0.04	0.03	0.08	0.04	0.10	0.01	0.01
25/04/2016	0.71	0.01	0.01	0.01	0.05	0.04	0.10	0.01	0.06	0.00	0.01	0.02	0.09	0.06	0.07	0.00	0.02
26/04/2016	0.73	0.01	0.03	0.01	0.02	0.03	0.11	0.01	0.07	0.01	0.04	0.03	0.05	0.05	0.12	0.00	0.01
27/04/2016	0.73	0.01	0.03	0.01	0.06	0.03	0.07	0.02	0.04	0.01	0.06	0.04	0.10	0.04	0.07	0.01	0.03
28/04/2016	0.74	0.01	0.04	0.01	0.06	0.03	0.11	0.02	0.07	0.01	0.02	0.03	0.11	0.01	0.02	0.01	0.06
29/04/2016	0.74	0.01	0.07	0.02	0.03	0.02	0.11	0.01	0.07	0.02	0.06	0.04	0.06	0.01	0.07	0.00	0.01
30/04/2016	0.73	0.01	0.01	0.01	0.06	0.03	0.04	0.02	0.04	0.01	0.05	0.04	0.11	0.01	0.07	0.01	0.07

Total Number of Measurements Taken, A:	13297	10315	13508	10234	14271	14080	12516	13916
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:	13297	10315	13508	10234	14271	14080	12516	13916
Compliance with Turbidity Standard, C = B/A X 100%:	100%	100%	100%	100%	100%	100%	100%	100%

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Turbidity\2016\04-April

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew



CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENVIRONMENTAL STANDARDS DIVISION

WATER TREATMENT PLANT TURBIDITY GRAB MONITORING REPORT

Water System Code: 252.00		Turbidity (NTU)																	
Licence No. PWS-09-412-01																			
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-Apr-2016	0.50	0.61	0.06	<0.02	0.05	<0.02	0.12	0.05	0.06	<0.02	0.06	<0.02	0.06	<0.02	OL	OL	<0.05	<0.02	
02-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
03-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
04-Apr-2016	0.54	0.60	0.13	0.03	0.11	0.05	0.17	0.09	0.11	0.03	0.12	0.02	0.13	0.04	0.15	0.08	0.12	<0.02	
05-Apr-2016	0.55	0.60	OL	OL	0.16	0.09	0.11	0.05	0.11	0.03	0.15	0.06	0.12	0.06	0.09	0.03	0.09	0.02	
06-Apr-2016	0.51	0.57	0.09	<0.02	0.08	0.03	0.14	0.07	0.16	0.07	0.09	<0.02	OL	OL	0.12	0.05	0.12	0.04	
07-Apr-2016	0.50	0.58	0.17	0.04	0.14	0.05	0.18	0.10	0.11	0.02	0.10	<0.02	0.11	0.04	OL	OL	0.09	<0.02	
08-Apr-2016	0.51	0.60	0.09	<0.02	0.12	0.06	0.12	0.05	0.12	0.03	0.11	0.03	0.13	0.06	0.10	0.04	0.09	0.02	
09-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
10-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
11-Apr-2016	0.50	0.58	0.10	<0.02	0.16	0.09	0.13	0.05	0.14	0.04	0.09	<0.02	0.12	0.05	0.12	0.05	0.11	0.03	
12-Apr-2016	0.63	0.58	0.10	0.02	0.11	0.04	0.16	0.09	OL	OL	0.09	<0.02	0.09	0.03	OL	OL	0.08	<0.02	
13-Apr-2016	0.48	0.58	OL	OL	0.14	0.07	0.13	0.05	0.12	0.03	0.13	0.03	0.12	0.04	0.09	0.05	0.09	0.02	
14-Apr-2016	0.48	0.58	0.10	<0.02	0.09	0.04	0.14	0.07	0.10	0.06	0.15	<0.02	OL	OL	0.10	0.07	0.12	0.03	
15-Apr-2016	0.53	0.60	0.14	0.04	0.10	0.04	0.17	0.10	0.11	0.02	0.11	0.02	0.11	0.03	OL	OL	0.08	<0.02	
16-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
17-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
18-Apr-2016	0.51	0.62	0.09	<0.02	0.09	0.02	0.08	0.02	0.08	<0.02	0.10	<0.02	0.07	<0.02	0.09	0.06	0.09	<0.02	
19-Apr-2016	0.44	0.63	0.07	<0.02	0.13	0.06	0.10	0.04	0.10	<0.02	0.08	<0.02	0.09	0.03	0.07	0.04	0.08	0.02	
20-Apr-2016	0.57	0.62	0.08	<0.02	0.08	0.02	0.16	0.09	0.13	0.04	0.08	<0.02	0.08	<0.02	0.09	0.06	OL	OL	
21-Apr-2016	0.55	0.69	OL	OL	0.08	0.02	0.06	0.02	0.06	<0.02	0.09	<0.02	0.08	0.02	0.09	0.06	0.06	<0.02	
22-Apr-2016	0.60	0.70	0.05	<0.02	OL	OL	0.08	0.02	0.08	<0.02	0.07	<0.02	0.08	0.03	0.06	0.04	0.07	<0.02	
23-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
24-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
25-Apr-2016	0.50	0.69	0.08	<0.02	0.06	<0.02	0.11	0.04	0.10	<0.02	0.07	<0.02	OL	OL	0.09	0.06	0.10	<0.02	
26-Apr-2016	0.56	0.70	0.11	<0.02	0.06	<0.02	OL	OL	0.07	<0.02	0.07	<0.02	0.07	0.02	0.08	0.07	0.09	<0.02	
27-Apr-2016	0.64	0.72	0.06	<0.02	0.07	0.02	0.08	0.03	0.07	<0.02	0.11	0.04	0.13	0.05	0.09	0.06	0.09	<0.02	
28-Apr-2016	0.56	0.74	0.09	<0.02	0.06	0.02	0.13	0.05	OL	OL	0.09	<0.02	0.09	0.03	0.09	<0.02	OL	OL	
29-Apr-2016	0.63	0.74	0.08	<0.02	0.07	0.02	0.07	0.02	0.07	<0.02	0.10	0.02	0.09	0.04	0.13	0.03	0.08	<0.02	
30-Apr-2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Total number of measurements taken, A:			18		20		20		19		21		18		17		18		
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:			18		20		20		19		21		18		17		18		
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

Comments:

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 6-May-16



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

Water System Code: **252.00**
Licence Number: **PWS-09-412-01**
Report Created: 01 May 2016

Report Period: April 2016

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
1/04/2016	0.95	0.80	1.07	0.91
2/04/2016	0.88	0.78	0.95	0.88
3/04/2016	0.95	0.93	0.95	0.94
4/04/2016	1.00	0.93	0.98	0.94
5/04/2016	1.14	0.96	1.03	0.98
6/04/2016	1.25	1.03	1.05	1.00
7/04/2016	1.04	0.99	1.03	0.94
8/04/2016	1.11	1.00	1.03	1.00
9/04/2016	1.15	1.03	0.99	0.89
10/04/2016	1.14	1.09	1.02	0.99
11/04/2016	1.16	1.11	1.03	0.99
12/04/2016	1.13	1.10	1.00	0.98
13/04/2016	1.16	1.11	1.01	0.99
14/04/2016	1.16	1.08	1.02	0.92
15/04/2016	1.11	1.05	1.02	0.97
16/04/2016	1.16	1.12	1.00	0.99
17/04/2016	1.18	1.12	1.13	0.99
18/04/2016	1.09	1.05	1.16	1.10
19/04/2016	1.08	1.03	1.08	1.03
20/04/2016	1.07	1.00	1.08	1.05
21/04/2016	1.06	1.03	1.12	1.09
22/04/2016	1.07	1.01	1.10	1.07
23/04/2016	1.09	1.05	1.11	1.08
24/04/2016	1.08	1.03	1.11	1.07
25/04/2016	1.03	0.96	1.05	0.98
26/04/2016	1.04	0.94	0.99	0.94
27/04/2016	0.99	0.89	1.06	0.83
28/04/2016	0.90	0.79	0.95	0.86
29/04/2016	0.93	0.80	1.01	0.92
30/04/2016	0.98	0.86	1.03	0.93

Total Number of Measurements, A:	20853	20873
Minimum Free Chlorine Standard:	0.50	0.50
Number of Measurements Meeting Standard, B:	20853	20873
COMPLIANCE, C = B/A X 100%:	100	100

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2016\04-April

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew



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		
Licence No. PWS-09-412-01		Free Chlorine (mg/L)		Total Chlorine (mg/L)	Free Chlorine (mg/L)		Total Chlorine (mg/L)
Date	Analyser	Grab	Grab	Analyser	Grab	Grab	
01-Apr-2016	1.05	0.95	1.14	1.22	0.99	1.14	
02-Apr-2016	NS	NS	NS	NS	NS	NS	
03-Apr-2016	NS	NS	NS	NS	NS	NS	
04-Apr-2016	0.99	1.04	1.15	0.99	1.04	1.20	
05-Apr-2016	1.00	1.03	1.17	1.02	1.02	1.19	
06-Apr-2016	1.24	1.15	1.44	1.05	1.05	1.26	
07-Apr-2016	1.08	1.04	1.24	1.08	1.01	1.17	
08-Apr-2016	1.09	1.15	1.30	1.09	1.14	1.29	
09-Apr-2016	NS	NS	NS	NS	NS	NS	
10-Apr-2016	NS	NS	NS	NS	NS	NS	
11-Apr-2016	1.13	1.20	1.39	1.02	1.06	1.22	
12-Apr-2016	1.13	1.21	1.35	1.00	1.00	1.19	
13-Apr-2016	1.14	1.24	1.37	1.01	1.07	1.21	
14-Apr-2016	1.14	1.25	1.37	0.93	1.03	1.19	
15-Apr-2016	1.09	1.17	1.33	1.06	1.03	1.24	
16-Apr-2016	NS	NS	NS	NS	NS	NS	
17-Apr-2016	NS	NS	NS	NS	NS	NS	
18-Apr-2016	1.13	1.17	1.36	1.25	1.21	1.34	
19-Apr-2016	1.11	1.19	1.29	1.09	1.19	1.30	
20-Apr-2016	1.11	1.16	1.28	1.07	1.15	1.30	
21-Apr-2016	1.08	1.18	1.32	1.12	1.19	1.31	
22-Apr-2016	1.02	1.05	1.26	1.10	1.13	1.28	
23-Apr-2016	NS	NS	NS	NS	NS	NS	
24-Apr-2016	NS	NS	NS	NS	NS	NS	
25-Apr-2016	1.04	1.08	1.22	1.10	1.14	1.31	
26-Apr-2016	1.13	1.06	1.16	0.97	1.07	1.20	
27-Apr-2016	1.04	1.07	1.21	1.25	1.06	1.22	
28-Apr-2016	0.88	0.87	1.01	0.89	0.89	1.04	
29-Apr-2016	0.90	0.97	1.10	0.96	0.98	1.13	
30-Apr-2016	NS	NS	NS	NS	NS	NS	
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%		

NS: No Sample NA: Not Analyzed OL: Off-Line

Comments:

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 6-May-16



CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 WATER SERVICES

Water System Code: **252.00**
 Licence Number: **PWS-09-412-01**

WATER TREATMENT PLANT UV REPORT

Report Period: **April 2016**

Report Created: **Sunday, May 01, 2016**

Date	Transmittance %	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	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total		Untreated
01/04/2016	96.18	0.00	0.00	0.00	0.00	0.00	0.00	82.75	82.75	0.00	0.00	10.72	10.72	0.00	0.00	56.25	56.25	0.00	0.00	25.10	25.10	0.00	0.00	23.45	23.45	0.00	0.00	198.27	198.27	100.00	
02/04/2016	96.17	0.00	0.00	0.00	0.00	0.00	0.00	79.01	79.01	0.00	0.00	45.09	45.09	0.03	0.03	4.24	4.30	0.00	0.00	27.85	27.85	0.03	0.03	33.32	33.39	0.06	0.06	189.50	189.63	99.93	
03/04/2016	96.25	0.00	0.00	0.00	0.00	0.00	0.00	79.11	79.11	0.00	0.00	49.17	49.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.55	62.55	0.00	0.00	190.83	190.83	100.00	
04/04/2016	96.22	0.00	0.16	32.53	32.69	0.00	0.00	45.31	45.31	0.00	0.00	50.54	50.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.44	64.44	0.00	0.16	192.82	192.98	99.92	
05/04/2016	96.24	0.00	0.16	56.03	56.19	0.00	0.00	24.27	24.27	0.03	0.03	29.51	29.57	0.00	0.00	0.00	0.00	0.00	0.00	15.16	15.16	0.00	0.00	65.70	65.70	0.03	0.19	190.66	190.88	99.89	
06/04/2016	96.41	0.00	0.00	56.52	56.52	0.00	0.00	28.35	28.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.44	37.44	0.00	0.00	67.44	67.44	0.00	0.00	189.74	189.74	100.00	
07/04/2016	96.45	0.00	0.00	50.35	50.35	0.00	0.00	26.86	26.86	0.00	0.00	0.00	0.00	0.00	0.00	30.20	30.20	0.00	0.00	60.90	60.90	0.00	0.00	21.71	21.71	0.00	0.00	190.03	190.03	100.00	
08/04/2016	96.41	0.00	0.00	72.90	72.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.21	44.21	0.00	0.00	35.78	35.78	0.00	0.00	35.74	35.74	0.00	0.00	188.63	188.64	100.00	
09/04/2016	96.51	0.00	0.00	70.91	70.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.44	42.44	0.00	0.00	0.00	0.00	0.00	0.00	67.09	67.09	0.00	0.00	180.43	180.43	100.00	
10/04/2016	96.50	0.00	0.00	70.51	70.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.64	42.64	0.00	0.00	0.00	0.00	0.00	0.00	66.81	66.81	0.00	0.00	179.96	179.96	100.00	
11/04/2016	96.42	0.00	0.00	70.42	70.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.72	42.72	0.00	0.00	0.00	0.00	0.00	0.05	66.81	66.86	0.00	0.05	179.95	179.99	99.97	
12/04/2016	96.51	0.00	0.00	70.60	70.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.22	43.22	0.00	0.00	0.00	0.00	0.00	0.00	66.18	66.18	0.00	0.00	180.00	180.00	100.00	
13/04/2016	96.53	0.00	0.00	72.49	72.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.47	49.47	0.00	0.00	0.00	0.00	0.00	0.00	58.02	58.02	0.00	0.00	179.98	179.98	100.00	
14/04/2016	96.47	0.00	0.00	74.35	74.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.70	55.70	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	180.05	180.05	100.00	
15/04/2016	96.58	0.00	0.00	75.45	75.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.24	59.24	0.00	0.00	0.00	0.00	0.00	0.00	46.28	46.28	0.00	0.00	180.96	180.96	100.00	
16/04/2016	96.71	0.00	0.00	77.13	77.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.60	63.60	0.00	0.00	0.00	0.00	0.00	0.00	40.30	40.30	0.00	0.00	181.03	181.03	100.00	
17/04/2016	97.20	0.00	0.00	74.63	74.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.86	55.86	0.00	0.00	31.95	31.95	0.00	0.00	18.53	18.53	0.00	0.00	180.98	180.98	100.00	
18/04/2016	97.19	0.00	0.00	69.56	69.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.50	42.50	0.00	0.00	67.10	67.10	0.00	0.00	0.00	0.00	0.00	0.00	179.16	179.16	100.00	
19/04/2016	97.25	0.00	0.00	69.66	69.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.49	42.49	0.00	0.00	65.50	65.50	0.00	0.00	0.00	0.00	0.00	0.00	177.66	177.66	100.00	
20/04/2016	97.32	0.00	0.00	69.86	69.86	0.00	0.00	0.00	0.00	0.00	0.00	21.69	21.69	0.00	0.00	21.86	21.86	0.00	0.00	67.57	67.57	0.00	0.00	0.00	0.00	0.00	0.00	180.99	180.99	100.00	
21/04/2016	97.77	0.00	0.00	69.21	69.21	0.00	0.00	0.00	0.00	0.00	0.00	44.13	44.13	0.00	0.00	0.00	0.00	0.00	0.00	68.43	68.43	0.00	0.00	0.00	0.00	0.00	0.00	181.77	181.77	100.00	
22/04/2016	97.85	0.00	0.00	69.74	69.74	0.00	0.00	0.00	0.00	0.00	0.00	44.72	44.72	0.00	0.00	0.00	0.00	0.00	0.00	69.57	69.57	0.00	0.00	0.00	0.00	0.00	0.00	184.03	184.03	100.00	
23/04/2016	97.85	0.00	0.00	69.85	69.85	0.00	0.00	0.00	0.00	0.00	0.00	44.70	44.70	0.00	0.00	0.00	0.00	0.00	0.00	69.45	69.45	0.00	0.00	0.00	0.00	0.00	0.00	184.00	184.00	100.00	
24/04/2016	97.71	0.00	0.00	69.90	69.90	0.00	0.00	0.00	0.00	0.00	0.00	44.73	44.73	0.00	0.00	0.00	0.00	0.00	0.00	69.39	69.39	0.00	0.00	0.00	0.00	0.00	0.00	184.02	184.02	100.00	
25/04/2016	97.63	0.00	0.00	27.45	27.45	0.00	0.05	45.98	46.04	0.00	0.00	20.16	20.16	0.00	0.00	23.95	23.95	0.00	0.00	68.29	68.29	0.00	0.00	0.00	0.00	0.00	0.05	185.83	185.88	99.97	
26/04/2016	97.61	0.00	0.00	0.00	0.00	0.00	0.11	76.46	76.56	0.00	0.00	0.00	0.00	0.00	0.00	44.05	44.05	0.00	0.00	68.87	68.87	0.00	0.00	0.00	0.00	0.00	0.11	189.37	189.48	99.94	
27/04/2016	97.56	0.00	0.00	0.00	0.00	0.00	0.05	76.71	76.76	0.00	0.00	0.00	0.00	0.00	0.00	43.99	43.99	0.00	0.00	69.24	69.24	0.00	0.00	0.00	0.00	0.00	0.05	189.94	189.99	99.97	
28/04/2016	97.49	0.00	0.00	0.00	0.00	0.00	0.05	76.68	76.73	0.00	0.00	0.00	0.00	0.00	0.00	43.96	43.96	0.00	0.00	69.32	69.32	0.00	0.00	0.00	0.00	0.00	0.05	189.95	190.00	99.97	
29/04/2016	97.55	0.00	0.00	0.00	0.00	0.00	0.16	76.52	76.68	0.00	0.00	0.00	0.00	0.00	0.00	43.92	43.92	0.00	0.00	69.39	69.39	0.00	0.00	0.00	0.00	0.00	0.16	189.84	189.99	99.92	
30/04/2016	97.53	0.00	0.00	0.00	0.00	0.00	0.05	76.68	76.74	0.00	0.00	0.00	0.00	0.00	0.00	43.93	43.93	0.00	0.00	69.32	69.32	0.00	0.00	0.00	0.00	0.00	0.05	189.94	189.99	99.97	
		0.00	0.32	1440.04	1440.36	0.00	0.48	794.69	795.17	0.03	0.03	405.16	405.22	0.03	0.03	940.42	940.48	0.00	0.00	1125.62	1125.62	0.04	0.08	854.38	854.49	0.09	0.94	5560.31	5561.34		

Water Volume [%]:
 Untreated: 0.00 %
 Below Dose: 0.02 %
 To Dose: 99.98 %

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew