



Water and Waste Department • Service des eaux et des déchets

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August 7, 2015

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: JULY 2015 WATER QUALITY COMPLIANCE  
SUBMISSION FOR THE CITY OF WINNIPEG WATER SUPPLY SYSTEM**

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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 July 2015. Please note that the grab turbidity and chlorine reports now include the analyzer readings at the time of grab sampling, as requested by The Office of Drinking Water following our Annual Compliance Inspection on June 2, 2015. There are no corrective action reports to be submitted for July.

The July 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 are in compliance with the licence requirements.

The July 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 UV submission includes the summary report for July 2015 in accordance with Section 4.13, Table 2 of the Operating Licence. The UV licence requirement has been met in July.

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](mailto: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  
D.P. Sacher, P.Eng.  
G. Patton, P.Eng.  
T. Shanks, P.Eng.  
A. J. Weremy, P.Eng.  
C. Diduck



**CITY OF WINNIPEG**  
**WATER AND WASTE DEPARTMENT**  
**WATER SERVICES**

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

**WATER TREATMENT PLANT TURBIDITY ON-LINE MONITORING REPORT**

July 2015 Turbidity (NTU)		Filter #1		Filter #2		Filter #3		Filter #4		Filter #5		Filter #6		Filter #7		Filter #8	
Date	Raw Avg	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
1/07/2015	0.97	0.07	0.09	0.06	0.08	0.09	0.12	0.02	0.05	0.03	0.07	0.05	0.06	0.03	0.04	0.01	0.01
2/07/2015	1.07	0.07	0.10	0.05	0.08	0.08	0.12	0.03	0.04	0.03	0.05	0.04	0.06	0.03	0.04	0.01	0.01
3/07/2015	0.87	0.07	0.10	0.06	0.10	0.07	0.10	0.02	0.04	0.04	0.05	0.04	0.07	0.03	0.06	0.01	0.01
4/07/2015	0.81	0.08	0.09	0.06	0.08	0.09	0.12	0.02	0.03	0.03	0.07	0.05	0.06	0.02	0.05	0.01	0.01
5/07/2015	0.86	0.05	0.11	0.05	0.08	0.08	0.13	0.03	0.07	0.03	0.07	0.04	0.07	0.03	0.04	0.01	0.01
6/07/2015	0.90	0.04	0.07	0.06	0.08	0.08	0.11	0.02	0.05	0.04	0.06	0.05	0.07	0.02	0.05	0.01	0.01
7/07/2015	1.12	0.04	0.06	0.06	0.09	0.10	0.13	0.02	0.05	0.04	0.07	0.06	0.09	0.03	0.05	0.01	0.01
8/07/2015	0.93	0.05	0.07	0.06	0.10	0.08	0.14	0.03	0.05	0.04	0.06	0.05	0.08	0.03	0.04	0.01	0.01
9/07/2015	0.99	0.05	0.08	0.06	0.10	0.09	0.14	0.03	0.06	0.04	0.06	0.05	0.08	0.03	0.05	0.01	0.01
10/07/2015	1.06	0.05	0.09	0.07	0.09	0.10	0.12	0.03	0.06	0.04	0.07	0.06	0.07	0.03	0.05	0.01	0.01
11/07/2015	1.01	0.07	0.08	0.06	0.11	0.09	0.15	0.03	0.05	0.04	0.07	0.06	0.08	0.03	0.04	0.01	0.01
12/07/2015	1.11	0.06	0.09	0.07	0.10	0.09	0.16	0.03	0.08	0.05	0.06	0.06	0.09	0.03	0.05	0.01	0.01
13/07/2015	1.08	0.07	0.08	0.08	0.11	0.12	0.13	0.02	0.05	0.03	0.09	0.07	0.08	0.03	0.04	0.01	0.01
14/07/2015	1.25	0.07	0.11	0.08	0.12	0.11	0.17	0.03	0.05	0.05	0.08	0.07	0.10	0.03	0.05	0.01	0.01
15/07/2015	1.21	0.08	0.11	0.08	0.11	0.11	0.18	0.03	0.22	0.05	0.07	0.07	0.10	0.03	0.05	0.01	0.01
16/07/2015	1.17	0.06	0.10	0.06	0.13	0.10	0.16	0.03	0.06	0.03	0.10	0.06	0.11	0.03	0.07	0.01	0.01
17/07/2015	1.15	0.04	0.06	0.01	0.04	0.06	0.11	0.02	0.05	0.02	0.05	0.04	0.06	0.03	0.05	0.01	0.01
18/07/2015	1.63	0.04	0.07	0.01	0.05	0.06	0.12	0.02	0.05	0.03	0.04	0.04	0.06	0.04	0.06	0.01	0.01
19/07/2015	1.50	0.04	0.05	0.02	0.06	0.07	0.09	0.02	0.05	0.02	0.06	0.04	0.06	0.03	0.06	0.01	0.01
20/07/2015	2.08	0.04	0.07	0.02	0.04	0.06	0.12	0.03	0.04	0.02	0.06	0.04	0.07	0.04	0.05	0.01	0.01
21/07/2015	1.63	0.05	0.10	0.03	0.05	0.07	0.16	0.04	0.13	0.04	0.07	0.04	0.07	0.04	0.07	0.01	0.01
22/07/2015	1.47	0.06	0.08	0.04	0.08	0.10	0.16	0.04	0.14	0.04	0.07	0.05	0.06	0.04	0.07	0.01	0.01
23/07/2015	1.81	0.07	0.12	0.05	0.11	0.10	0.19	0.06	0.10	0.04	0.08	0.05	0.08	0.04	0.06	0.01	0.01
24/07/2015	1.91	0.07	0.12	0.06	0.11	0.10	0.17	0.05	0.11	0.04	0.09	0.05	0.09	0.05	0.09	0.01	0.01
25/07/2015	1.77	0.04	0.08	0.05	0.10	0.07	0.13	0.03	0.08	0.05	0.08	0.03	0.07	0.03	0.06	0.01	0.01
26/07/2015	2.12	0.04	0.06	0.04	0.08	0.08	0.13	0.02	0.04	0.04	0.07	0.04	0.05	0.03	0.06	0.01	0.01
27/07/2015	2.40	0.04	0.08	0.04	0.08	0.07	0.13	0.04	0.06	0.03	0.06	0.04	0.07	0.04	0.05	0.01	0.01
28/07/2015	1.92	0.04	0.08	0.04	0.06	0.08	0.11	0.03	0.08	0.04	0.06	0.03	0.07	0.03	0.06	0.01	0.01
29/07/2015	1.92	0.03	0.05	0.03	0.06	0.06	0.14	0.02	0.04	0.04	0.08	0.05	0.07	0.04	0.08	0.01	0.01
30/07/2015	2.18	0.03	0.06	0.03	0.06	0.06	0.11	0.02	0.05	0.04	0.06	0.04	0.08	0.05	0.06	0.01	0.01
31/07/2015	2.04	0.03	0.07	0.03	0.05	0.06	0.12	0.02	0.08	0.04	0.07	0.04	0.08	0.04	0.07	0.01	0.01

Total Number of Measurements Taken, A:	16627	14477	15595	14200	17202	16998	15817	16532
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:	16627	14477	15595	14200	17202	16998	15817	16532
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\2015\07-July

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 Licence No. PWS-09-412 AA	Turbidity (NTU)																	
	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-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
02-Jul-2015	0.77	0.92	0.06	0.07	0.06	0.06	0.12	0.07	0.07	<0.02	0.06	0.03	0.07	0.05	0.07	0.02	0.08	<0.02
03-Jul-2015	0.78	0.84	0.07	0.06	0.07	0.06	0.08	0.07	0.10	0.02	0.10	0.03	0.07	0.04	0.08	0.03	0.07	<0.02
04-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
05-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
06-Jul-2015	0.75	0.77	0.06	0.03	0.06	0.06	0.08	0.07	0.06	<0.02	0.06	0.03	<0.05	0.03	0.05	0.03	0.06	<0.02
07-Jul-2015	0.88	0.81	<0.05	0.03	0.06	0.07	0.08	0.08	0.06	<0.02	0.08	0.04	0.07	0.05	0.06	0.02	0.06	<0.02
08-Jul-2015	0.83	0.88	0.07	0.04	0.05	0.07	0.10	0.11	0.06	<0.02	<0.05	0.04	0.07	0.05	0.05	0.02	0.06	<0.02
09-Jul-2015	0.88	1.06	0.07	0.05	0.08	0.07	0.06	0.07	0.06	0.02	0.07	0.04	0.05	0.05	<0.05	0.02	0.05	<0.02
10-Jul-2015	0.80	0.94	0.06	0.05	0.06	0.08	0.07	0.09	0.05	<0.02	0.08	0.04	<0.05	0.05	0.07	0.03	0.05	<0.02
11-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
12-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
13-Jul-2015	1.15	0.98	0.09	0.06	0.07	0.09	0.08	0.10	0.07	<0.02	<0.05	0.05	<0.05	0.06	<0.05	0.02	0.06	<0.02
14-Jul-2015	1.14	1.14	0.08	0.08	0.06	0.09	0.07	0.10	0.07	0.02	0.07	0.04	0.09	0.07	0.05	0.02	0.05	<0.02
15-Jul-2015	1.09	1.17	0.06	0.07	0.06	0.09	0.09	0.10	0.10	0.03	0.07	0.05	0.06	0.07	0.06	0.02	0.06	<0.02
16-Jul-2015	1.19	1.01	0.07	0.08	0.07	0.11	0.09	0.12	0.08	<0.02	0.08	0.05	0.07	0.08	0.06	0.02	0.10	<0.02
17-Jul-2015	1.13	1.09	0.10	0.04	0.09	0.03	0.12	0.07	0.09	<0.02	0.09	0.02	0.11	0.03	0.10	0.03	0.10	<0.02
18-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
19-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
20-Jul-2015	1.56	1.14	0.08	0.03	0.05	<0.02	0.09	0.06	0.07	<0.02	<0.05	0.02	0.07	0.04	<0.05	0.03	0.05	<0.02
21-Jul-2015	1.15	1.44	0.07	0.04	0.08	0.03	0.08	0.06	0.13	0.04	0.06	0.04	0.05	0.04	0.08	0.05	0.07	<0.02
22-Jul-2015	1.13	1.47	0.09	0.05	0.11	0.06	0.13	0.09	0.10	0.02	0.09	0.04	0.09	0.04	0.07	0.04	0.07	<0.02
23-Jul-2015	1.12	1.40	0.11	0.07	0.10	0.04	0.11	0.04	0.12	0.04	0.07	0.03	0.11	0.05	0.09	0.04	0.07	<0.02
24-Jul-2015	1.29	1.38	0.13	0.08	0.09	0.07	0.10	0.08	0.12	0.06	0.07	0.04	0.06	0.04	0.08	0.05	0.07	<0.02
25-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
26-Jul-2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
27-Jul-2015	1.54	1.75	0.08	0.04	0.06	0.04	0.14	0.09	0.08	<0.02	0.05	0.03	0.09	0.05	0.07	0.03	0.07	<0.02
28-Jul-2015	1.09	1.76	0.08	0.03	0.07	0.04	0.08	0.05	0.07	<0.02	0.06	0.04	0.06	0.03	0.08	0.04	0.07	<0.02
29-Jul-2015	1.57	1.87	0.07	0.02	0.09	0.04	0.09	0.03	0.08	<0.02	0.06	0.03	0.09	0.04	0.08	0.04	0.08	<0.02
30-Jul-2015	1.57	1.95	0.07	0.03	0.06	0.04	0.06	0.05	0.08	<0.02	0.06	0.04	0.07	0.04	0.07	0.04	0.07	<0.02
31-Jul-2015	1.56	1.90	0.06	0.02	0.05	0.03	0.07	0.05	0.08	<0.02	0.07	0.04	0.07	0.03	0.07	0.04	0.07	<0.02
<b>Total number of measurements taken, A:</b>			22		22		22		22		22		22		22		22	
<b>Turbidity Standard for Monitoring Location (NTU):</b>			0.30		0.30		0.30		0.30		0.30		0.30		0.30		0.30	
<b>Number of measurements meeting standard, B:</b>			22		22		22		22		22		22		22		22	
<b>Compliance with Turbidity Standard, C= B/A X 100%:</b>			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-Aug-15



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

Water System Code: **252.00**  
Licence Number: **PWS-09-412 AA**  
Report Created: **01 August 2015**

Report Period: July 2015

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
1/07/2015	1.12	1.02	1.13	1.02
2/07/2015	1.15	1.04	1.13	1.03
3/07/2015	1.12	1.01	1.05	0.98
4/07/2015	1.11	1.02	1.02	0.93
5/07/2015	1.14	1.03	1.12	0.94
6/07/2015	1.10	0.95	1.08	0.90
7/07/2015	1.04	0.90	0.99	0.85
8/07/2015	1.14	1.04	1.06	0.96
9/07/2015	1.07	0.94	1.06	0.91
10/07/2015	1.06	0.96	1.06	0.94
11/07/2015	1.05	0.94	1.00	0.95
12/07/2015	1.02	0.94	0.95	0.89
13/07/2015	1.02	0.89	0.91	0.86
14/07/2015	1.08	1.01	0.97	0.88
15/07/2015	1.08	0.97	1.02	0.93
16/07/2015	1.11	0.99	1.05	0.97
17/07/2015	1.05	0.93	1.08	0.99
18/07/2015	1.01	0.94	1.02	0.96
19/07/2015	1.05	0.92	1.04	0.97
20/07/2015	1.12	1.01	1.09	1.00
21/07/2015	1.15	0.99	1.13	1.03
22/07/2015	1.15	1.07	1.10	1.03
23/07/2015	1.12	1.05	1.11	1.04
24/07/2015	1.18	0.86	1.07	0.79
25/07/2015	1.19	1.02	1.14	1.03
26/07/2015	1.11	1.05	1.11	1.05
27/07/2015	1.12	1.02	1.13	1.05
28/07/2015	1.14	1.04	1.13	1.04
29/07/2015	1.12	0.98	1.11	1.01
30/07/2015	1.28	1.18	1.18	1.05
31/07/2015	1.25	1.15	1.11	1.00

Total Number of Measurements, A:	21600	21600
Minimum Free Chlorine Standard:	0.50	0.50
Number of Measurements Meeting Standard, B:	21600	21600
COMPLIANCE, C = B/A X 100%:	100	100

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2015\07-July

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 Licence No. PWS-09-412 AA	Deacon Booster Pumping Station Branch 1			Deacon Booster Pumping Station Branch 2		
	Free Chlorine (mg/L)		Total Chlorine (mg/L)	Free Chlorine (mg/L)		Total Chlorine (mg/L)
Date	Analyser	Grab	Grab	Analyser	Grab	Grab
01-Jul-2015	NS	NS	NS	NS	NS	NS
02-Jul-2015	1.20	1.24	1.36	1.15	1.25	1.40
03-Jul-2015	1.14	1.21	1.34	1.07	1.17	1.33
04-Jul-2015	NS	NS	NS	NS	NS	NS
05-Jul-2015	NS	NS	NS	NS	NS	NS
06-Jul-2015	1.16	1.28	1.45	1.15	1.26	1.41
07-Jul-2015	0.96	1.09	1.22	0.91	1.07	1.18
08-Jul-2015	1.19	1.21	1.36	1.10	1.16	1.33
09-Jul-2015	1.07	1.16	1.27	1.02	1.13	1.26
10-Jul-2015	1.19	1.17	1.32	1.14	1.17	1.34
11-Jul-2015	NS	NS	NS	NS	NS	NS
12-Jul-2015	NS	NS	NS	NS	NS	NS
13-Jul-2015	1.05	1.17	1.26	0.88	1.09	1.18
14-Jul-2015	1.05	1.16	1.37	0.90	1.10	1.26
15-Jul-2015	0.99	1.14	1.32	0.96	1.05	1.20
16-Jul-2015	1.00	1.08	1.27	1.00	1.07	1.24
17-Jul-2015	1.02	1.13	1.30	1.07	1.15	1.30
18-Jul-2015	NS	NS	NS	NS	NS	NS
19-Jul-2015	NS	NS	NS	NS	NS	NS
20-Jul-2015	1.15	1.13	1.32	1.12	1.17	1.32
21-Jul-2015	1.15	1.15	1.31	1.15	1.17	1.33
22-Jul-2015	1.21	1.16	1.31	1.09	1.15	1.33
23-Jul-2015	1.10	1.18	1.33	1.12	1.14	1.31
24-Jul-2015	1.09	1.12	1.29	0.98	1.03	1.19
25-Jul-2015	NS	NS	NS	NS	NS	NS
26-Jul-2015	NS	NS	NS	NS	NS	NS
27-Jul-2015	1.09	1.24	1.42	1.11	1.18	1.34
28-Jul-2015	1.11	1.27	1.42	1.13	1.26	1.42
29-Jul-2015	1.15	1.20	1.34	1.14	1.19	1.34
30-Jul-2015	1.36	1.36	1.53	1.19	1.22	1.38
31-Jul-2015	1.35	1.34	1.51	1.16	1.16	1.30
<b>Total number of measurements taken, A:</b>		22			22	
<b>Chlorine Standard for Monitoring Location (mg/L):</b>		0.50			0.50	
<b>Number of measurements meeting standard, B:</b>		22			22	
<b>Compliance with Chlorine Standard, C= B/A X 100%:</b>		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-Aug-15



**CITY OF WINNIPEG**  
 WATER AND WASTE DEPARTMENT  
 WATER SERVICES

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

**WATER TREATMENT PLANT UV REPORT**

Report Period: **July 2015**

Report Created: **Saturday, August 01, 2015**

Date	Transmittance %	UVR-D100A				UVR-D200A				UVR-D300A				UVR-D400A				UVR-D500A				UVR-D600A				Total				% Volume Treated To Dose	
		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		
01/07/2015	95.79	0.00	0.00	67.00	67.00	0.00	0.00	0.00	0.00	0.00	0.00	75.64	75.64	0.00	0.00	0.00	0.00	0.00	0.00	72.37	72.37	0.00	0.00	0.00	0.00	0.00	0.00	215.01	215.01	100.00	
02/07/2015	95.72	0.00	0.00	66.83	66.83	0.00	0.00	0.00	0.00	0.00	0.00	75.87	75.87	0.00	0.00	0.00	0.00	0.00	0.00	72.30	72.30	0.00	0.00	0.00	0.00	0.00	0.00	215.00	215.00	100.00	
03/07/2015	95.86	0.00	0.00	68.25	68.25	0.00	0.00	0.00	0.00	0.00	0.00	62.78	62.78	0.00	0.00	13.73	13.73	0.00	0.00	72.11	72.11	0.00	0.00	0.00	0.00	0.00	0.00	216.88	216.88	100.00	
04/07/2015	95.79	0.00	0.00	72.39	72.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.61	78.61	0.00	0.00	70.23	70.23	0.00	0.00	0.00	0.00	0.00	0.00	221.22	221.22	100.00	
05/07/2015	95.78	0.00	0.00	72.56	72.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.79	79.79	0.00	0.00	71.62	71.62	0.00	0.00	0.00	0.00	0.00	0.00	223.98	223.98	100.00	
06/07/2015	95.77	0.00	0.00	71.21	71.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.43	78.43	0.00	0.00	70.41	70.41	0.00	0.00	0.00	0.00	0.00	0.00	220.04	220.04	100.00	
07/07/2015	95.83	0.00	0.00	71.14	71.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.39	78.39	0.00	0.00	70.49	70.49	0.00	0.00	0.00	0.00	0.00	0.00	220.01	220.01	100.00	
08/07/2015	95.70	0.00	0.00	70.09	70.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.44	76.44	0.00	0.00	68.78	68.78	0.00	0.00	0.00	0.00	0.00	0.00	215.31	215.31	100.00	
09/07/2015	95.73	0.00	0.00	69.72	69.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.45	75.45	0.00	0.00	67.84	67.84	0.00	0.00	0.00	0.00	0.00	0.00	213.01	213.01	100.00	
10/07/2015	95.52	0.00	0.11	31.36	31.46	0.00	0.00	41.73	41.73	0.00	0.00	0.00	0.00	0.00	0.00	76.26	76.26	0.31	0.60	36.04	36.96	0.00	0.05	29.45	29.50	0.31	0.76	214.84	215.90	99.51	
11/07/2015	95.51	0.00	0.00	0.00	0.00	0.00	0.00	73.82	73.82	0.00	0.00	0.00	0.00	0.00	0.00	77.17	77.17	0.00	0.00	0.00	0.00	0.00	0.05	68.52	68.57	0.00	0.05	219.51	219.56	99.98	
12/07/2015	95.52	0.00	0.00	0.00	0.00	0.00	0.00	73.19	73.19	0.00	0.00	0.00	0.00	0.00	0.00	76.32	76.32	0.00	0.00	0.00	0.00	0.00	0.00	67.81	67.81	0.00	0.00	217.31	217.31	100.00	
13/07/2015	95.38	0.00	0.05	39.53	39.58	0.00	0.00	32.39	32.39	0.00	0.00	0.00	0.00	0.00	0.00	74.64	74.64	0.00	0.00	0.00	0.01	0.00	0.05	69.29	69.34	0.01	0.11	215.85	215.96	99.95	
14/07/2015	94.58	0.00	0.00	70.95	70.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.39	74.39	0.00	0.00	0.00	0.00	0.00	0.00	70.65	70.65	0.00	0.00	215.99	215.99	100.00	
15/07/2015	95.31	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	74.34	74.34	0.00	0.00	0.00	0.00	0.00	0.05	70.72	70.77	0.00	0.05	215.97	216.02	99.98	
16/07/2015	95.16	0.00	0.00	66.66	66.66	0.00	0.00	21.36	21.36	0.00	0.00	0.00	0.00	0.00	0.00	77.13	77.13	0.00	0.00	0.00	0.00	0.00	0.00	50.84	50.84	0.00	0.00	215.98	215.98	100.00	
17/07/2015	95.14	0.00	0.00	58.36	58.36	0.00	0.00	69.12	69.12	0.00	0.00	0.00	0.00	0.00	0.01	0.06	3.72	3.80	0.00	0.00	0.00	0.00	0.00	0.00	84.52	84.52	0.01	0.06	215.73	215.80	99.96
18/07/2015	95.19	0.00	0.00	57.77	57.77	0.00	0.00	73.22	73.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.95	84.95	0.00	0.00	215.94	215.94	100.00	
19/07/2015	95.28	0.00	0.00	55.58	55.58	0.00	0.00	70.52	70.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	82.71	82.77	0.00	0.06	208.81	208.86	99.97	
20/07/2015	95.44	0.00	0.00	53.07	53.07	0.00	0.00	67.80	67.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.15	79.15	0.00	0.00	200.02	200.02	100.00	
21/07/2015	95.22	0.00	0.00	56.40	56.40	0.00	0.00	71.71	71.71	0.00	0.00	35.12	35.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	46.57	46.63	0.00	0.06	209.81	209.87	99.97	
22/07/2015	95.09	0.00	0.00	57.74	57.74	0.00	0.00	73.11	73.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.87	84.87	0.00	0.00	215.72	215.72	100.00	
23/07/2015	94.97	0.00	0.00	63.17	63.17	0.00	0.00	77.41	77.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.94	84.94	0.00	0.00	225.52	225.52	100.00	
24/07/2015	95.05	0.00	0.00	58.93	58.93	0.00	0.00	77.08	77.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.44	79.44	0.00	0.00	250.06	250.06	100.00	
25/07/2015	95.36	0.00	0.00	63.86	63.86	0.00	0.00	80.45	80.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.02	85.02	0.00	0.00	229.33	229.33	100.00	
26/07/2015	95.56	0.00	0.00	59.61	59.61	0.00	0.00	75.41	75.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.01	85.01	0.00	0.00	220.03	220.03	100.00	
27/07/2015	95.51	0.00	0.00	59.80	59.80	0.00	0.00	75.65	75.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.98	84.98	0.00	0.00	220.42	220.42	100.00	
28/07/2015	95.55	0.00	0.00	61.27	61.27	0.00	0.00	77.49	77.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.97	84.97	0.00	0.00	223.73	223.73	100.00	
29/07/2015	95.70	0.00	0.00	61.85	61.85	0.00	0.00	78.16	78.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.01	85.01	0.00	0.00	225.03	225.03	100.00	
30/07/2015	95.89	0.00	0.00	77.45	77.45	0.19	0.19	25.12	25.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.95	84.95	0.19	0.19	224.63	225.01	99.83	
31/07/2015	96.07	0.00	0.00	77.58	77.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	76.81	76.86	0.00	0.05	217.64	217.69	99.98	
		0.00	0.16	1831.04	1831.20	0.19	0.19	1234.74	1235.13	0.00	0.00	249.41	249.41	0.01	0.06	1052.40	1052.48	0.32	0.61	769.56	770.48	0.00	0.36	1641.18	1641.53	0.53	1.38	6778.32	6780.23		

Water Volume [%]:  
 Untreated: 0.01 %  
 Below Dose 0.02 %  
 To Dose 99.97 %

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew