



## Water and Waste Department • Service des eaux et des déchets

---

February 6, 2014

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

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

Dear Ms. Betsill:

**RE: JANUARY 2014 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 January 2014. There are no corrective action reports to be submitted for January 2014.

The January 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 January 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 have met the licence requirements.

The UV submission includes the summary report for January 2014 in accordance with Section 4.13, Table 2 of the Operating Licence. The UV licence requirement has been met for January.

Please let me know of any concerns or questions respecting this submission. I may be reached by telephone at 204-986-4807 or by e-mail at [kkjartanson@winnipeg.ca](mailto:kkjartanson@winnipeg.ca).

Thanks for your ongoing cooperation and understanding in this matter.

Yours sincerely,

*Original signed by:*

K.J.T. Kjartanson, P.Eng.  
Manager of Environmental Standards  
KJTK:rg  
Attachments

c:(e-mail)

Dr. L. Richards, Winnipeg Regional Health Authority  
D.P. Sacher, P.Eng. G. Patton, P.Eng.  
A. J. Weremy, P.Eng.

Dr. S. Roberecki, Manitoba Health  
T. Josephson, P.Eng.

N:\Compliance Reporting\Submittal Letters\2013\ODW- Letters\Betsill Water January 2013.doc



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 A	Date	Raw Water	Filter 1	Filter 2	Filter 3	Filter 4	Filter 5	Filter 6	Filter 7	Filter 8
	01-Jan-2014	0.52	0.17	0.17	0.14	0.23	0.12	0.11	0.10	0.11
	02-Jan-2014	0.45	0.14	0.12	0.17	0.14	0.15	0.09	0.12	0.14
	03-Jan-2014	0.51	0.10	0.16	0.09	0.13	0.12	0.10	0.09	0.14
	04-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06-Jan-2014	0.74	0.15	0.18	0.11	0.11	0.10	0.12	0.10	0.11
	07-Jan-2014	0.45	0.15	0.13	0.18	0.11	0.17	0.07	0.14	0.14
	08-Jan-2014	0.45	0.13	0.15	0.11	0.17	0.20	0.20	0.11	0.12
	09-Jan-2014	1.01	0.10	0.10	0.15	0.10	0.10	0.12	0.14	0.12
	10-Jan-2014	0.54	0.07	0.08	0.17	0.15	0.08	0.09	0.09	0.19
	11-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	13-Jan-2014	0.48	0.10	0.12	0.10	0.15	0.07	0.09	0.08	0.08
	14-Jan-2014	0.50	0.15	0.14	0.13	0.10	0.11	0.17	0.15	0.12
	15-Jan-2014	0.48	0.12	0.12	0.17	0.14	0.09	0.09	0.13	0.20
	16-Jan-2014	0.44	0.18	0.19	0.11	0.10	0.14	0.13	0.12	0.11
	17-Jan-2014	0.41	0.13	0.15	0.18	0.12	0.18	0.14	0.18	0.15
	18-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	19-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20-Jan-2014	0.55	0.10	0.14	0.14	0.17	0.12	0.09	0.10	0.19
	21-Jan-2014	1.63	0.18	0.20	0.15	0.11	0.11	0.20	0.16	0.18
	22-Jan-2014	1.25	0.14	0.12	0.20	0.15	0.15	0.12	0.14	0.18
	23-Jan-2014	0.90	0.17	0.19	0.13	0.16	0.13	0.15	0.11	0.13
	24-Jan-2014	0.84	0.19	0.12	0.15	0.13	0.17	0.18	0.19	0.15
	25-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	26-Jan-2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
	27-Jan-2014	0.77	0.10	0.10	0.13	0.12	0.13	0.11	0.11	0.15
	28-Jan-2014	0.71	0.17	0.12	OL	0.14	0.10	0.11	0.10	OL
	29-Jan-2014	0.77	0.14	0.12	0.14	0.13	0.19	0.13	0.13	0.15
	30-Jan-2014	0.78	0.28	0.09	0.28	0.22	0.29	0.12	0.20	0.17
	31-Jan-2014	0.67	0.16	0.11	0.12	0.19	0.10	0.11	0.12	0.20
<b>Total number of measurements taken, A:</b>		23	23	22	23	23	23	23	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>		23	23	22	23	23	23	23	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: K. Wazny

Approved in LIMS By: S. Fletcher/A. Vanderstel



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

Water System Code: 252.00

Licence Number: PWS-09-412 A

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

**January 2014 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
1/01/2014	0.50	0.08	0.20	0.07	0.20	0.06	0.09	0.06	0.22	0.08	0.11	0.06	0.13	0.06	0.11	0.01	0.02	
2/01/2014	0.50	0.07	0.11	0.09	0.11	0.09	0.19	0.07	0.22	0.06	0.16	0.04	0.15	0.03	0.14	0.03	0.18	
3/01/2014	0.49	0.10	0.21	0.12	0.23	0.03	0.16	0.05	0.17	0.06	0.10	0.05	0.09	0.04	0.07	0.02	0.13	
4/01/2014	0.48	0.06	0.18	0.06	0.11	0.06	0.10	0.05	0.07	0.08	0.16	0.04	0.12	0.04	0.13	0.01	0.03	
5/01/2014	0.45	0.09	0.11	0.11	0.18	0.04	0.15	0.08	0.15	0.04	0.15	0.04	0.06	0.03	0.05	0.02	0.20	
6/01/2014	0.43	0.06	0.16	0.07	0.19	0.05	0.06	0.04	0.16	0.07	0.09	0.06	0.12	0.05	0.12	0.01	0.02	
7/01/2014	0.44	0.06	0.09	0.11	0.13	0.07	0.16	0.06	0.09	0.05	0.15	0.03	0.12	0.03	0.11	0.02	0.13	
8/01/2014	0.45	0.10	0.17	0.13	0.20	0.04	0.16	0.05	0.16	0.05	0.08	0.05	0.08	0.04	0.05	0.02	0.21	
9/01/2014	0.45	0.06	0.19	0.09	0.24	0.07	0.10	0.05	0.07	0.09	0.16	0.04	0.13	0.05	0.12	0.02	0.04	
10/01/2014	0.44	0.07	0.09	0.07	0.17	0.03	0.12	0.05	0.17	0.04	0.12	0.03	0.19	0.02	0.08	0.01	0.18	
11/01/2014	0.44	0.05	0.14	0.03	0.10	0.03	0.04	0.03	0.12	0.07	0.09	0.05	0.09	0.04	0.07	0.00	0.01	
12/01/2014	0.45	0.05	0.08	0.04	0.05	0.05	0.12	0.05	0.07	0.05	0.13	0.03	0.10	0.02	0.09	0.01	0.12	
13/01/2014	0.44	0.08	0.14	0.05	0.10	0.03	0.12	0.04	0.12	0.05	0.08	0.04	0.06	0.03	0.04	0.01	0.17	
14/01/2014	0.45	0.05	0.16	0.03	0.12	0.06	0.10	0.04	0.06	0.09	0.14	0.04	0.12	0.05	0.10	0.01	0.02	
15/01/2014	0.46	0.09	0.10	0.06	0.10	0.05	0.19	0.07	0.16	0.05	0.17	0.05	0.06	0.03	0.05	0.02	0.18	
16/01/2014	0.46	0.06	0.17	0.04	0.14	0.05	0.09	0.04	0.14	0.08	0.11	0.07	0.14	0.06	0.12	0.01	0.02	
17/01/2014	0.45	0.06	0.10	0.05	0.07	0.07	0.17	0.06	0.09	0.06	0.17	0.04	0.15	0.04	0.13	0.03	0.20	
18/01/2014	0.44	0.10	0.18	0.09	0.13	0.04	0.17	0.05	0.14	0.06	0.10	0.06	0.08	0.05	0.06	0.02	0.21	
19/01/2014	0.43	0.05	0.17	0.04	0.11	0.03	0.07	0.04	0.07	0.09	0.20	0.03	0.15	0.05	0.13	0.02	0.04	
20/01/2014	0.37	0.07	0.08	0.05	0.08	0.01	0.10	0.05	0.11	0.04	0.14	0.03	0.05	0.02	0.12	0.03	0.17	
21/01/2014	1.17	0.08	0.18	0.06	0.16	0.03	0.08	0.05	0.23	0.08	0.11	0.11	0.14	0.08	0.10	0.02	0.06	
22/01/2014	1.05	0.08	0.17	0.08	0.16	0.06	0.26	0.10	0.19	0.06	0.20	0.06	0.16	0.04	0.14	0.07	0.23	
23/01/2014	0.83	0.09	0.16	0.08	0.13	0.02	0.12	0.06	0.15	0.04	0.07	0.09	0.13	0.05	0.07	0.03	0.27	
24/01/2014	0.77	0.06	0.14	0.05	0.15	0.04	0.07	0.05	0.08	0.08	0.15	0.06	0.16	0.04	0.12	0.03	0.05	
25/01/2014	0.76	0.07	0.09	0.09	0.10	0.03	0.10	0.09	0.14	0.05	0.14	0.06	0.09	0.04	0.13	0.06	0.25	
26/01/2014	0.72	0.09	0.17	0.05	0.17	0.02	0.05	0.05	0.16	0.05	0.08	0.09	0.17	0.05	0.08	0.03	0.23	
27/01/2014	0.72	0.04	0.14	0.05	0.08	0.03	0.11	0.06	0.08	0.06	0.12	0.05	0.14	0.03	0.10	0.03	0.06	
28/01/2014	0.72	0.07	0.10	0.08	0.14	0.02	0.10	0.08	0.14	0.03	0.12	0.06	0.08	0.03	0.05	0.03	0.21	
29/01/2014	0.72	0.05	0.14	0.05	0.14	0.01	0.03	0.04	0.13	0.05	0.08	0.08	0.14	0.05	0.11	0.01	0.15	
30/01/2014	0.72	0.04	0.15	0.05	0.08	0.03	0.09	0.06	0.08	0.04	0.11	0.05	0.14	0.03	0.10	0.03	0.09	
31/01/2014	0.71	0.07	0.11	0.08	0.14	0.02	0.11	0.08	0.14	0.03	0.12	0.06	0.09	0.03	0.05	0.02	0.21	

Total Number of Measurements Taken, A: 14208      13949      14145      10762      14680      14746      12999      14505  
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: 14208      13949      14145      10762      14680      14746      12999      14505  
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\2014\01-January

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 A	Date	Free Chlorine (mg/L)	Total Chlorine (mg/L)	Free Chlorine (mg/L)
	01-Jan-2014	1.04	1.24	1.07
	02-Jan-2014	0.99	1.22	1.05
	03-Jan-2014	0.96	1.15	0.99
	04-Jan-2014	NS	NS	NS
	05-Jan-2014	NS	NS	NS
	06-Jan-2014	1.10	1.35	1.21
	07-Jan-2014	1.06	1.21	1.02
	08-Jan-2014	0.99	1.19	1.09
	09-Jan-2014	1.03	1.20	0.98
	10-Jan-2014	1.02	1.22	1.05
	11-Jan-2014	NS	NS	NS
	12-Jan-2014	NS	NS	NS
	13-Jan-2014	0.98	1.20	0.95
	14-Jan-2014	0.93	1.13	0.95
	15-Jan-2014	1.12	1.21	1.04
	16-Jan-2014	1.06	1.24	1.09
	17-Jan-2014	1.15	1.30	1.15
	18-Jan-2014	NS	NS	NS
	19-Jan-2014	NS	NS	NS
	20-Jan-2014	1.07	1.29	1.06
	21-Jan-2014	0.98	1.16	0.88
	22-Jan-2014	1.30	1.44	1.30
	23-Jan-2014	1.32	1.63	1.47
	24-Jan-2014	1.14	1.34	1.13
	25-Jan-2014	NS	NS	NS
	26-Jan-2014	NS	NS	NS
	27-Jan-2014	1.31	1.55	1.27
	28-Jan-2014	1.29	1.57	1.31
	29-Jan-2014	1.31	1.48	1.37
	30-Jan-2014	1.41	1.56	1.26
	31-Jan-2014	1.42	1.69	1.46
<b>Total number of measurements taken, A:</b>	23		23	
<b>Chlorine Standard for Monitoring Location (mg/L):</b>	0.50		0.50	
<b>Number of measurements meeting standard, B:</b>	23		23	
<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: K. Wazny

Approved in LIMS By: S. Fletcher/A. Vanderstel



## City of Winnipeg

Water and Waste Department  
Water Services Division

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

Water System Code: **252.00**

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

Report Created: **01 February 2014**

Report Period: **January 2014**

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
01/01/2014	0.95	0.89	0.95	0.85
02/01/2014	0.96	0.91	0.92	0.86
03/01/2014	0.93	0.76	0.91	0.74
04/01/2014	1.00	0.93	0.97	0.92
05/01/2014	0.98	0.88	0.98	0.83
06/01/2014	1.12	1.05	1.19	1.09
07/01/2014	1.04	0.72	1.02	0.93
08/01/2014	1.13	1.01	1.00	0.92
09/01/2014	1.17	0.99	0.94	0.88
10/01/2014	1.06	0.96	1.00	0.87
11/01/2014	0.98	0.82	1.03	0.97
12/01/2014	0.99	0.83	1.02	0.92
13/01/2014	0.95	0.85	0.93	0.86
14/01/2014	0.90	0.86	0.92	0.85
15/01/2014	0.96	0.79	0.92	0.86
16/01/2014	1.09	0.92	0.96	0.89
17/01/2014	1.19	1.06	1.00	0.92
18/01/2014	1.20	1.04	0.99	0.85
19/01/2014	1.15	1.09	1.04	0.94
20/01/2014	1.05	0.91	1.00	0.88
21/01/2014	0.91	0.58	0.91	0.55
22/01/2014	1.38	1.19	1.30	1.18
23/01/2014	1.34	1.14	1.28	1.10
24/01/2014	1.12	0.98	1.02	0.88
25/01/2014	1.09	1.03	1.00	0.95
26/01/2014	1.01	0.91	1.00	0.89
27/01/2014	1.10	0.95	1.12	0.99
28/01/2014	1.13	1.05	1.15	1.05
29/01/2014	1.20	1.06	1.16	1.08
30/01/2014	1.25	1.18	1.14	1.08
31/01/2014	1.31	1.16	1.27	1.09

Total Number of Measurements, A:	21599	25199
Minimum Free Chlorine Standard:	0.50	0.50
Number of Measurements Meeting Standard, B:	21599	21599
COMPLIANCE, C = B/A X 100%:	100	100

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2014\01-January

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew



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

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

WATER TREATMENT PLANT UV REPORT

Report Period: January 2014

Report Created: Saturday, February 01, 2014

Date	Transmittance %	UVR-D100A				UVR-D200A				UVR-D300A				UVR-D400A				UVR-D500A				UVR-D600A				Total Water Volume [ML]				% 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																							
1/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	74.32	74.32	0.00	0.00	49.28	49.28	0.00	0.00	74.59	74.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	198.19	198.19	100.00			
2/01/2014	96.05	0.00	0.05	0.15	0.20	0.00	0.03	74.58	74.61	0.00	0.00	49.94	49.94	0.00	0.00	75.43	75.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	200.10	200.18	99.96		
3/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	72.69	72.69	0.00	0.00	44.11	44.11	0.00	0.00	78.05	78.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	194.85	194.85	100.00		
4/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	70.00	70.00	0.00	0.00	42.63	42.63	0.00	0.00	76.58	76.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.22	189.22	100.00		
5/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	68.65	68.65	0.00	0.00	42.72	42.72	0.00	0.00	75.25	75.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	186.62	186.62	100.00		
6/01/2014	96.05	0.00	0.28	32.02	32.30	0.00	0.00	21.22	21.22	0.00	0.00	57.87	57.87	0.00	0.00	33.32	33.32	0.00	0.00	45.51	45.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.95	190.23	99.85
7/01/2014	96.05	0.13	0.78	21.21	22.13	0.00	0.00	2.06	2.06	0.00	0.00	59.06	59.06	0.00	0.00	41.25	41.25	0.00	0.00	70.14	70.14	0.00	0.00	0.00	0.00	0.13	0.78	193.71	194.63	99.53		
8/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	3.34	3.34	0.00	0.00	52.98	52.98	0.00	0.00	67.81	67.81	0.00	0.00	72.88	72.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.01	197.01	100.00
9/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	58.27	58.27	0.00	0.00	46.60	46.60	0.00	0.00	32.33	32.33	0.00	0.00	59.80	59.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.01	197.01	100.00
10/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	63.89	63.89	0.00	0.00	67.41	67.41	0.00	0.00	0.00	0.00	65.72	65.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.03	197.03	100.00		
11/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	63.94	63.94	0.00	0.00	67.29	67.29	0.00	0.00	0.00	0.00	65.66	65.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196.90	196.90	100.00		
12/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	65.50	65.50	0.00	0.00	65.13	65.13	0.00	0.00	0.00	0.00	66.39	66.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.02	197.02	100.00		
13/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	65.23	65.23	0.00	0.00	65.27	65.27	0.00	0.00	0.00	0.00	52.47	52.47	0.00	0.00	14.05	14.05	0.00	0.00	197.02	197.02	100.00				
14/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	67.86	67.86	0.00	0.00	63.65	63.65	0.00	0.00	0.00	0.00	68.05	68.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	199.56	199.56	100.00		
15/01/2014	96.05	0.00	0.00	0.00	0.00	0.05	73.63	73.68	0.00	0.00	57.91	57.91	0.00	0.00	0.00	0.00	70.32	70.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	201.87	201.92	99.98			
16/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	66.72	66.72	0.00	0.00	66.50	66.50	0.00	0.00	0.00	0.00	67.95	67.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	201.17	201.17	100.00		
17/01/2014	96.05	0.00	0.00	0.00	0.00	0.00	0.00	67.13	67.13	0.17	0.17	53.87	54.20	0.00	0.00	11.33	11.33	0.00	0.00	67.40	67.40	0.00	0.00	0.00	0.00	0.17	0.17	199.73	200.06	99.83		
18/01/2014	95.07	0.00	0.00	0.00	0.00	0.00	0.00	70.53	70.53	0.00	0.00	60.00	60.99	0.00	0.00	65.67	65.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	197.19	197.19	100.00				
19/01/2014	95.53	0.00	0.00	0.00	0.00	0.00	0.00	69.47	69.47	0.00	0.00	0.00	0.00	0.00	0.00	59.63	59.63	0.00	0.00	64.90	64.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	193.99	193.99	100.00
20/01/2014	95.99	0.00	0.00	0.00	0.00	0.00	0.00	68.25	68.25	0.00	0.00	0.00	0.00	0.00	0.00	58.39	58.39	0.18	0.18	3.17	3.53	0.00	0.00	61.93	61.93	0.18	0.18	191.74	192.10	99.81		
21/01/2014	95.32	0.00	0.00	0.00	0.00	0.00	0.00	68.96	68.96	0.00	0.00	0.00	0.00	0.00	0.00	60.70	60.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	194.35	194.35	100.00				
22/01/2014	94.63	0.00	0.00	0.00	0.00	0.00	0.00	69.00	69.00	0.00	0.00	0.00	0.00	0.00	0.00	64.02	64.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196.01	196.01	100.00				
23/01/2014	95.09	0.00	0.00	0.00	0.00	0.00	0.00	68.36	68.36	0.00	0.00	0.00	0.00	0.00	0.00	63.09	63.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196.02	196.02	100.00				
24/01/2014	95.07	0.00	0.00	0.00	0.00	0.00	0.00	68.92	68.92	0.00	0.00	0.00	0.00	0.00	0.00	64.12	64.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	196.01	196.01	100.00				
25/01/2014	95.04	0.00	0.00	0.00	0.00	0.00	0.00	68.66	68.66	0.00	0.00	0.00	0.00	0.00	0.00	63.81	63.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.97	195.97	100.00				
26/01/2014	95.18	0.00	0.00	0.00	0.00	0.00	0.00	68.48	68.48	0.00	0.00	0.00	0.00	0.00	0.00	63.53	63.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.99	195.99	100.00				
27/01/2014	95.53	0.00	0.00	0.00	0.00	0.00	0.00	68.58	68.58	0.00	0.00	0.00	0.00	0.00	0.00	63.63	63.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.99	195.99	100.00				
28/01/2014	95.58	0.00	0.00	3.41	3.41	0.00	0.00	69.93	69.93	0.00	0.00	0.00	0.00	0.00	0.00	0.25	60.82	61.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.36	66.36	99.88			
29/01/2014	95.74	0.00	0.00	25.31	25.31	0.00	0.00	70.72	70.72	0.00	0.00	38.15	38.15	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	209.98	209.98	100.00			
30/01/2014	95.80	0.00	0.00	0.00	0.00	0.00	0.00	68.55	68.55	0.00	0.00	69.03	69.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	206.56	206.56	100.00				
31/01/2014	95.78	0.00	0.00	0.00	0.00	0.00	0.00	67.15	67.15	0.00	0.00	68.21	68.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	205.03	205.03	100.00				

Water Volume [%]:

Untreated: 0.01 %  
Below Dose: 0.04 %  
To Dose: 99.95 %

Submitted By (Print): D.Merredew

Signature: Original signed by D.Merredew