



Water and Waste Department • Service des eaux et des déchets

February 6, 2015

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 2015 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 2015. We have also included one corrective action report for positive total coliform and E. coli results for the distribution system.

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. We continue to have filter 8 out of service for maintenance issues and will likely remain out of service until we have determined the cause for the issues experienced during backwashing. Filter 1, 2 and 3 were also taken out of service for short durations for inspections. There is currently no impact on any of the treatment process at this time.

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.

On January 26, positive total coliform results were reported for six samples collected in the distribution system. In addition to the positive total coliforms, five of those samples collected were reported positive for E. coli. As a result, the Winnipeg Regional Health Authority issued a precautionary Boil Water Advisory on January 27, for the east area of the City. The Advisory was later expanded to all areas of the City. On January 27 and 28, all positive locations were resampled and samples were collected from upstream and downstream locations. All results were reported to be negative for bacteria. Our sampling also indicated that the turbidity results reported were low, all HPC results were reported low or below the detection limit, and the chlorine levels at the locations were normal and provided adequate disinfection. The Advisory was subsequently rescinded on January 29, when two consecutive sets of resamples were reported negative for bacteria. On January 31, additional samples were also collected throughout the distribution system and all samples collected were reported negative for bacteria. Please see attached corrective action report for additional details.

The UV submission includes the summary report for January 2015 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 204-986-8359 or by e-mail at rgrosselle@winnipeg.ca.

Thanks for your ongoing cooperation and understanding in this matter.

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

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CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
WATER SERVICES

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

WATER TREATMENT PLANT TURBIDITY ON-LINE MONITORING REPORT

January 2015 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
1/01/2015	0.79	0.11	0.16	0.11	0.20	0.08	0.23	0.12	0.27	0.09	0.19	0.11	0.19	0.09	0.23	OL	OL
2/01/2015	0.79	0.08	0.19	0.10	0.16	0.03	0.09	0.09	0.21	0.07	0.18	0.08	0.20	0.07	0.19	OL	OL
3/01/2015	0.78	0.07	0.13	0.08	0.18	0.04	0.20	0.09	0.21	0.09	0.16	0.08	0.19	0.08	0.11	OL	OL
4/01/2015	0.78	0.06	0.18	0.08	0.18	0.04	0.18	0.12	0.14	0.08	0.18	0.08	0.11	0.09	0.19	OL	OL
5/01/2015	0.77	0.07	0.11	0.07	0.10	0.03	0.18	0.10	0.22	0.08	0.19	0.10	0.20	0.08	0.19	OL	OL
6/01/2015	0.75	0.07	0.17	0.09	0.16	0.03	0.07	0.09	0.21	0.08	0.12	0.09	0.21	0.08	0.20	OL	OL
7/01/2015	0.76	0.06	0.16	0.08	0.16	0.03	0.18	0.09	0.21	0.10	0.19	0.09	0.20	0.10	0.13	OL	OL
8/01/2015	0.75	0.05	0.17	0.07	0.18	0.03	0.11	0.11	0.21	0.08	0.15	0.09	0.13	0.08	0.15	OL	OL
9/01/2015	0.74	0.09	0.14	0.07	0.11	0.02	0.09	0.09	0.21	0.06	0.18	0.09	0.19	0.07	0.21	OL	OL
10/01/2015	0.74	0.08	0.19	0.07	0.15	OL	OL	0.10	0.22	0.08	0.17	0.08	0.20	0.09	0.17	OL	OL
11/01/2015	0.75	0.08	0.18	0.06	0.14	OL	OL	0.09	0.19	0.08	0.16	0.08	0.18	0.08	0.16	OL	OL
12/01/2015	0.75	0.08	0.18	0.06	0.16	OL	OL	0.09	0.20	0.08	0.18	0.08	0.19	0.09	0.20	OL	OL
13/01/2015	0.75	0.08	0.19	0.07	0.11	0.01	0.02	0.10	0.21	0.07	0.18	0.09	0.20	0.08	0.20	OL	OL
14/01/2015	0.76	0.08	0.20	0.07	0.17	0.07	0.19	0.09	0.20	0.09	0.13	0.07	0.16	0.09	0.11	OL	OL
15/01/2015	0.78	0.08	0.17	0.06	0.14	0.15	0.24	0.10	0.13	0.08	0.17	0.08	0.18	0.08	0.17	OL	OL
16/01/2015	0.80	0.07	0.11	0.05	0.14	0.14	0.25	0.09	0.20	0.08	0.17	0.09	0.15	0.08	0.18	OL	OL
17/01/2015	0.83	OL	OL	0.06	0.15	0.15	0.32	0.08	0.18	0.08	0.17	0.08	0.17	0.08	0.17	OL	OL
18/01/2015	0.83	OL	OL	0.06	0.15	0.15	0.25	0.08	0.17	0.08	0.17	0.08	0.19	0.08	0.16	OL	OL
19/01/2015	0.71	OL	OL	0.06	0.16	0.14	0.26	0.09	0.18	0.08	0.16	0.09	0.18	0.08	0.16	OL	OL
20/01/2015	0.64	OL	OL	0.07	0.15	0.14	0.26	0.09	0.19	0.07	0.17	0.08	0.18	0.07	0.17	OL	OL
21/01/2015	0.64	0.03	0.18	0.07	0.16	0.10	0.25	0.08	0.20	0.08	0.13	0.07	0.19	0.06	0.11	OL	OL
22/01/2015	0.64	0.07	0.18	0.05	0.14	0.14	0.20	0.06	0.15	0.06	0.14	0.06	0.14	0.08	0.14	OL	OL
23/01/2015	0.63	0.08	0.15	0.05	0.13	0.14	0.28	0.06	0.18	0.06	0.15	0.06	0.15	0.06	0.15	OL	OL
24/01/2015	0.62	0.07	0.17	0.04	0.10	0.10	0.26	0.06	0.14	0.05	0.12	0.05	0.13	0.05	0.14	OL	OL
25/01/2015	0.63	0.06	0.14	0.03	0.06	0.10	0.21	0.06	0.15	0.04	0.12	0.06	0.11	0.05	0.12	OL	OL
26/01/2015	0.63	0.06	0.14	0.05	0.11	0.09	0.22	0.05	0.12	0.05	0.08	0.05	0.11	0.04	0.11	OL	OL
27/01/2015	0.62	0.05	0.14	0.04	0.10	0.09	0.16	0.04	0.11	0.06	0.11	0.04	0.12	0.06	0.09	OL	OL
28/01/2015	0.63	0.07	0.15	0.01	0.05	0.12	0.22	0.06	0.14	0.05	0.12	0.06	0.14	0.05	0.12	OL	OL
29/01/2015	0.61	0.07	0.16	OL	OL	0.14	0.22	0.06	0.13	0.04	0.06	0.06	0.13	0.06	0.13	OL	OL
30/01/2015	0.62	0.07	0.16	OL	OL	0.12	0.22	0.07	0.15	0.05	0.12	0.06	0.13	0.06	0.13	OL	OL
31/01/2015	0.62	0.07	0.16	OL	OL	0.12	0.22	0.06	0.12	0.05	0.12	0.05	0.10	0.06	0.13	OL	OL

Total Number of Measurements Taken, A:	12938	13419	11123	12137	15945	15877	14380	OL
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:	12938	13419	11122	12137	15945	15877	14380	OL
Compliance with Turbidity Standard, C = B/A X 100%:	100.00%	100.00%	99.99%	100.00%	100.00%	100.00%	100.00%	OL

OL = Offline

Note: Filter 8 is offline for maintenance

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Submitted By (Print) D.Minor

Signature Original signed by D.Minor



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	Turbidity (NTU)								
Date	Raw Water	Filter 1	Filter 2	Filter 3	Filter 4	Filter 5	Filter 6	Filter 7	Filter 8
01-Jan-2015	0.71	0.24	0.26	0.24	0.24	0.16	0.18	0.25	OL
02-Jan-2015	0.63	0.17	0.15	0.17	0.20	0.15	0.17	0.14	OL
03-Jan-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
04-Jan-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
05-Jan-2015	0.62	0.17	0.13	0.15	0.19	0.13	0.14	0.18	OL
06-Jan-2015	0.54	0.20	0.16	0.17	0.13	0.13	0.17	0.13	OL
07-Jan-2015	0.56	0.14	0.16	0.20	0.16	0.15	0.12	0.14	OL
08-Jan-2015	0.62	0.11	0.10	0.13	0.12	0.16	0.12	0.13	OL
09-Jan-2015	0.64	0.17	0.16	0.15	0.22	0.11	0.15	0.19	OL
10-Jan-2015	NS	NS	NS	OL	NS	NS	NS	NS	OL
11-Jan-2015	NS	NS	NS	OL	NS	NS	NS	NS	OL
12-Jan-2015	0.59	0.14	0.14	OL	0.18	0.12	0.16	0.12	OL
13-Jan-2015	0.59	0.15	0.13	0.27	0.18	0.13	0.19	0.12	OL
14-Jan-2015	0.59	0.21	0.15	0.18	0.20	0.13	0.20	0.15	OL
15-Jan-2015	0.56	0.12	0.18	0.16	0.14	0.15	0.17	0.18	OL
16-Jan-2015	0.68	0.15	0.13	0.22	0.18	0.12	0.16	0.17	OL
17-Jan-2015	NS	OL	NS	NS	NS	NS	NS	NS	OL
18-Jan-2015	NS	OL	NS	NS	NS	NS	NS	NS	OL
19-Jan-2015	0.68	OL	0.12	0.28	0.17	0.12	0.14	0.14	OL
20-Jan-2015	0.59	OL	0.14	0.21	0.23	0.13	0.16	0.11	OL
21-Jan-2015	0.71	0.27	0.15	0.17	0.20	0.14	0.18	0.13	OL
22-Jan-2015	0.63	0.17	0.15	0.17	0.15	0.16	0.17	0.12	OL
23-Jan-2015	0.67	0.14	0.19	0.16	0.17	0.19	OL	0.13	OL
24-Jan-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
25-Jan-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
26-Jan-2015	0.63	0.14	0.12	0.15	0.16	0.11	0.13	0.18	OL
27-Jan-2015	0.65	0.13	0.16	0.16	0.15	0.11	0.17	0.11	OL
28-Jan-2015	0.66	0.15	OL	0.14	0.12	0.14	0.16	0.12	OL
29-Jan-2015	0.67	0.24	OL	0.27	0.12	0.12	0.09	0.11	OL
30-Jan-2015	0.82	0.17	OL	0.18	0.15	0.14	0.19	0.13	OL
31-Jan-2015	NS	NS	OL	NS	NS	NS	NS	NS	OL
Total number of measurements taken, A:	20	19	21	22	22	21	22	0	
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:	20	19	21	22	22	21	22	0	
Compliance with Turbidity Standard, C= B/A X 100%:	100%	100%	100%	100%	100%	100%	100%	NA	

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

Comments:

Filters 1,2, and 3 were offline for inspection. Effective, December 22, 2014, filter 8 has been put offline for maintenance issues.

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 4-Feb-15



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 2015**

Report Period: January 2015

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
1/01/2015	1.18	1.12	1.26	1.23
2/01/2015	1.15	1.11	1.20	1.12
3/01/2015	1.14	1.06	1.17	1.12
4/01/2015	1.09	1.03	1.12	1.07
5/01/2015	1.08	0.99	1.08	1.04
6/01/2015	1.09	1.03	1.05	1.01
7/01/2015	1.07	1.03	1.13	1.08
8/01/2015	1.07	0.95	1.16	1.04
9/01/2015	1.12	1.05	1.23	1.17
10/01/2015	1.12	1.08	1.22	1.18
11/01/2015	1.12	0.96	1.24	0.95
12/01/2015	1.08	1.03	1.07	0.99
13/01/2015	1.02	0.96	0.99	0.95
14/01/2015	1.13	1.02	1.08	1.01
15/01/2015	1.26	1.20	1.17	1.10
16/01/2015	1.28	1.17	1.20	1.09
17/01/2015	1.23	1.16	1.14	1.06
18/01/2015	1.15	1.11	1.08	1.04
19/01/2015	1.11	1.03	1.12	1.06
20/01/2015	1.15	1.08	1.16	1.09
21/01/2015	1.09	0.86	1.65	0.89
22/01/2015	1.02	0.97	0.99	0.95
23/01/2015	0.98	0.92	0.96	0.91
24/01/2015	0.98	0.96	0.97	0.94
25/01/2015	1.00	0.91	0.96	0.93
26/01/2015	0.97	0.89	1.00	0.92
27/01/2015	1.01	0.95	0.97	0.90
28/01/2015	1.10	1.01	1.09	0.92
29/01/2015	1.09	1.03	1.18	1.12
30/01/2015	1.07	1.03	1.12	1.07
31/01/2015	1.06	1.01	1.09	1.05

Total Number of Measurements, A:	21488	21469
Minimum Free Chlorine Standard:	0.50	0.50
Number of Measurements Meeting Standard, B:	21488	21469
COMPLIANCE, C = B/A X 100%:	100	100

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Submitted By (Print): D.Minor

Signature: Original signed by D.Minor



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 A	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				
01-Jan-2015	1.24	1.44	1.31	1.45
02-Jan-2015	1.23	1.44	1.17	1.36
03-Jan-2015	NS	NS	NS	NS
04-Jan-2015	NS	NS	NS	NS
05-Jan-2015	1.12	1.33	1.06	1.29
06-Jan-2015	1.18	1.35	1.15	1.30
07-Jan-2015	1.14	1.35	1.16	1.34
08-Jan-2015	1.07	1.25	1.14	1.33
09-Jan-2015	1.19	1.37	1.28	1.52
10-Jan-2015	NS	NS	NS	NS
11-Jan-2015	NS	NS	NS	NS
12-Jan-2015	1.11	1.27	1.13	1.36
13-Jan-2015	1.05	1.23	1.08	1.29
14-Jan-2015	1.11	1.29	1.21	1.34
15-Jan-2015	1.23	1.44	1.08	1.40
16-Jan-2015	1.35	1.48	1.25	1.46
17-Jan-2015	NS	NS	NS	NS
18-Jan-2015	NS	NS	NS	NS
19-Jan-2015	1.11	1.25	1.12	1.32
20-Jan-2015	1.18	1.40	1.18	1.38
21-Jan-2015	1.23	1.31	1.19	1.31
22-Jan-2015	1.15	1.27	1.11	1.21
23-Jan-2015	1.11	1.28	1.00	1.25
24-Jan-2015	NS	NS	NS	NS
25-Jan-2015	NS	NS	NS	NS
26-Jan-2015	1.03	1.20	1.04	1.26
27-Jan-2015	1.15	1.24	0.92	1.12
28-Jan-2015	1.19	1.40	1.07	1.28
29-Jan-2015	1.06	1.29	1.10	1.29
30-Jan-2015	1.13	1.34	1.16	1.34
31-Jan-2015	NS	NS	NS	NS
Total number of measurements taken, A:	22		22	
Chlorine Standard for Monitoring Location (mg/L):	0.50		0.50	
Number of measurements meeting standard, B:	22		22	
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: 4-Feb-15



Water and Waste Department • Service des eaux et des déchets

Wednesday, February 4, 2015

Our Incident/Report No: 01-2015
LIMS Reference No: **41553/41613**

Ms. Melanie Betsill
Drinking Water Officer
Manitoba Water Stewardship, Office of Drinking Water
1007 Century Street
Winnipeg MB R3H 0W4

RE: CORRECTIVE ACTION REPORT

WATER SYSTEM	Winnipeg Public Water System
WATER SYSTEM CODE	252.00
LOCATION OF NON-COMPLIANT INCIDENT	Winnipeg 3-Dist NE01; NE06; NE07; SE03; SE04; SW07
OPERATOR IN CHARGE	NA
INCIDENT REPORTED BY	Courtney Diduck, Analytical Services Branch Head
TYPE OF NON-COMPLIANT INCIDENT	1. Treated (or distribution system) water sample contains E. coliform >0 per100mL, 3 MR 41/2007 2. High positive Total Coliform (>10 per100mL), 3 MR 41/2007 3. Low positive Total Coliform (<10 per100mL), 3 MR 41/2007
INCIDENT DATE	January 26, 2015
DESCRIPTION OF CORRECTIVE ACTIONS	IMMEDIATELY: Re-sampled original locations tested and additional samples upstream/downstream of original locations for; turbidity, free/total chlorine, temperature and contacted the ODW. The Winnipeg Regional Health Authority issued a precautionary Boil Water Advisory on January 27, 2015, for the entire City of Winnipeg. The Advisory was subsequently rescinded on January 29, 2015, when the two consecutive sets of re-samples tested negative for bacteria 24 hours apart. Sampled additional locations on January 31, 2015 as requested by ODW for free/total chlorine, temperature, turbidity and bacteria.
TEST RESULTS	See Attached

NOTES/COMMENTS:

1. All microbiological tests performed by contract laboratory.
2. UP/DOWN STREAM testing performed when EC is >0 /100mL, TC is >10 /100mL or when resample/consecutive sample is positive for EC or TC or as directed by the Manager of Environmental Standards Division and/or the Office of Drinking Water
3. INITIAL chlorine, turbidity and temperature only tested at the required 39 sample locations.
4. NR-No Result due to laboratory/analyst error.
5. NA-Not Analyzed.

EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER ON SITUATIONS REQUIRING IMMEDIATE REPORTING

DISTRIBUTION

FORWARD THE ORIGINAL TO THE DRINKING WATER OFFICER WITH THE MONTHLY COMPLIANCE SUBMISSIONS.

Contact the Drinking Water Officer for any comments, questions or concerns

REFERENCE: ODW-RF-016

SampleName	Sample Number	Date Sampled	bacColiEsch-QT (MPNU/100mL)	bacColiTotal-QT (MPNU/100mL)	bacHPC (cfu/mL)	Chlorine, Free (mg/L)	Chlorine, Total (mg/L)	Temperature (°C)	Turbidity (ntu)	Time Spled (hrs)
NE01	421674	26-Jan-15	1	5	<10	0.49	0.63	8.5	0.26	8:42
NE01	422205	27-Jan-15	<1	<1	<10	0.64	0.90	8.5	0.18	15:16
NE01	422206	27-Jan-15	<1	<1	<10	0.76	0.93	11.4	0.22	15:05
NE01	422204	27-Jan-15	<1	<1	<10	0.96	1.20	7.1	0.17	14:55
NE01	422223	28-Jan-15	<1	<1	<10	0.85	0.99	7.6	0.19	15:18
NE01	422224	28-Jan-15	<1	<1	<10	0.68	0.82	10.2	0.21	15:25
NE01	422222	28-Jan-15	<1	<1	<10	0.95	1.11	6.4	0.22	15:32
NE06	421679	26-Jan-15	<1	1	<10	0.95	1.18	6.0	0.31	9:20
NE06	422221	27-Jan-15	<1	<1	<10	0.96	1.14	7.1	0.30	16:42
NE06	422207	27-Jan-15	<1	<1	<10	1.05	1.15	6.9	0.19	15:43
NE06	422220	27-Jan-15	<1	<1	<10	0.90	1.06	7.0	0.19	17:00
NE06	422226	28-Jan-15	<1	<1	<10	1.02	1.16	7.0	0.19	16:52
NE06	422227	28-Jan-15	<1	<1	<10	1.01	1.16	5.9	0.18	15:52
NE06	422225	28-Jan-15	<1	<1	<10	0.98	1.12	5.9	0.20	17:17
NE07	421680	26-Jan-15	9	53	<10	0.96	1.18	5.0	0.19	9:38
NE07	422209	27-Jan-15	<1	<1	<10	0.94	1.07	5.4	0.19	16:27
NE07	422210	27-Jan-15	<1	<1	<10	0.84	1.16	5.7	0.18	16:12
NE07	422208	27-Jan-15	<1	<1	<10	0.48	0.67	10.3	0.27	16:02
NE07	422229	28-Jan-15	<1	<1	<10	0.81	1.03	6.0	0.20	16:41
NE07	422230	28-Jan-15	<1	<1	<10	0.83	1.16	4.5	0.19	16:16
NE07	422228	28-Jan-15	<1	<1	<10	0.53	0.67	8.6	0.68	16:29
SE03	421695	26-Jan-15	1	4	<10	0.76	0.91	8.3	0.25	15:04
SE03	422212	27-Jan-15	<1	<1	<10	0.21	0.48	7.7	0.25	15:59
SE03	422213	27-Jan-15	<1	<1	<10	0.74	1.07	10.4	0.20	15:38
SE03	422211	27-Jan-15	<1	<1	<10	0.40	0.57	22.0	0.20	15:24
SE03	422232	28-Jan-15	<1	<1	<10	0.12	0.33	6.2	0.23	16:27
SE03	422233	28-Jan-15	<1	<1	<10	0.83	1.05	11.4	0.14	16:13
SE03	422231	28-Jan-15	<1	<1	<10	0.46	0.73	18.2	0.20	15:50
SE04	421696	26-Jan-15	1	3	<10	0.78	1.05	8.7	0.31	14:45
SE04	422215	27-Jan-15	<1	<1	<10	0.93	1.11	7.7	0.18	16:35
SE04	422216	27-Jan-15	<1	<1	<10	0.86	1.09	9.1	0.21	16:21
SE04	422214	27-Jan-15	<1	<1	240	0.70	0.95	9.4	0.17	17:00
SE04	422235	28-Jan-15	<1	<1	<10	0.94	1.20	5.4	0.22	17:02
SE04	422236	28-Jan-15	<1	<1	<10	0.87	1.20	7.9	0.17	16:50
SE04	422234	28-Jan-15	<1	<1	10	0.33	0.53	7.0	0.32	17:21
SW07	421713	26-Jan-15	1	1	<10	0.74	0.99	5.7	0.17	12:44
SW07	422218	27-Jan-15	<1	<1	<10	0.86	1.01	12.7	0.17	17:30
SW07	422219	27-Jan-15	<1	<1	<10	0.87	1.12	6.8	0.20	18:03
SW07	422217	27-Jan-15	<1	<1	<10	0.43	0.59	24.2	0.17	15:47
SW07	422238	28-Jan-15	<1	<1	<10	0.81	1.14	6.8	0.17	18:13
SW07	422239	28-Jan-15	<1	<1	<10	0.64	0.89	14.6	0.17	17:46
SW07	422237	28-Jan-15	<1	<1	<10	0.80	1.01	8.0	0.17	18:00

SampleName	Sample Number	Date Sampled	bacColiEsch-QT (MPNU/100mL)	bacColiTotal-QT (MPNU/100mL)	bacHPC (cfu/mL)	Chlorine, Free (mg/L)	Chlorine, Total (mg/L)	Temperature (°C)	Turbidity (ntu)	Time Spled (hrs)
NE03	422503	31-Jan-15	<1	<1	10	0.76	0.90	5.9	0.24	9:35
NE04	422504	31-Jan-15	<1	<1	<10	0.94	1.12	7.0	0.20	9:50
NE07	422507	31-Jan-15	<1	<1	<10	0.62	0.76	6.4	0.22	10:23
NE08	422508	31-Jan-15	<1	<1	10	0.75	1.00	7.8	0.18	10:10
NE10	422510	31-Jan-15	<1	<1	<10	0.44	0.65	6.6	0.23	10:38
NW02	422512	31-Jan-15	<1	<1	<10	0.86	1.03	6.3	0.26	15:55
NW04	422514	31-Jan-15	<1	<1	<10	0.86	1.08	6.1	0.16	16:42
NW07	422517	31-Jan-15	<1	<1	<10	0.70	0.87	5.9	0.21	15:30
NW08	422518	31-Jan-15	<1	<1	<10	1.00	1.15	2.8	0.21	16:20
SE03	422522	31-Jan-15	<1	<1	<10	0.69	0.87	10.1	0.21	18:01
SE06	422525	31-Jan-15	<1	<1	<10	0.43	0.60	8.6	0.29	12:25
SE09	422528	31-Jan-15	<1	<1	<10	0.81	1.04	10.1	0.30	11:21
SE10	422529	31-Jan-15	<1	<1	<10	0.50	0.70	7.2	0.21	11:35
SE12	422531	31-Jan-15	<1	<1	<10	1.01	1.24	6.9	0.23	10:55
SE14	422533	31-Jan-15	<1	<1	<10	0.71	0.97	10.3	0.26	17:30
SW02	422535	31-Jan-15	<1	<1	<10	0.28	0.45	6.8	0.22	14:04
SW07	422540	31-Jan-15	<1	<1	<10	0.91	1.12	5.7	0.21	13:44
SW09	422542	31-Jan-15	<1	<1	<10	0.75	0.93	8.8	0.21	12:51
SW12	422545	31-Jan-15	<1	<1	<10	0.99	1.16	5.9	0.23	13:05
SW15	422547	31-Jan-15	<1	<1	10	0.62	0.84	9.8	0.35	13:20
WC03	422552	31-Jan-15	<1	<1	<10	0.69	0.85	7.4	0.20	15:10
WC07	422556	31-Jan-15	<1	<1	<10	0.93	1.07	6.1	0.14	14:23