

Water Treatment Plants Water Quality Report - 1 July 2014 - 30 June 2015

Overview

This report shows compliance only for the parameters that have Maximum Acceptable Values (MAV) set out in the Drinking-water Standards for New Zealand 2005 (Revised 2008).

The MAV is the concentration of a microbial or chemical constituent in drinking-water below which the presence of the determinand does not result in any significant risk to the health of the consumer over a lifetime consumption of that water.

The MAVs have been based on the latest WHO guideline values.

The guideline value (GV) is the value of an aesthetic constituent in drinking-water that, if exceeded, may render the water unattractive to consumers due to colour or odour.

All test results shown in the report as ND (not detected) are lower than the laboratory's detection limits for the tested parameters.

Cryptosporidium and Giardia tests are conducted only at Ardmore and Waikato WTPs as part of the Bulk Water Agreement with Veolia Water. Cryptosporidium and Giardia test results are only reported when they met the analysis criteria.

Ardmore WTP A Block Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	13	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
Bentazone	mg/L	13	ND	ND	ND	0.0001			
Dichlorprop	mg/L	13	ND	ND	ND	0.0001	0.1		✓
MCPA	mg/L	13	ND	ND	ND	0.0001	0.002		✓
Mecoprop	mg/L	13	ND	ND	ND	0.0001	0.01		✓
Picloram	mg/L	13	ND	ND	ND	0.0001	0.2		✓
Triclopyr	mg/L	13	ND	ND	ND	0.0001	0.1		✓

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	13	0.020	0.010	0.010	0.002			
Alkalinity (Total)	mg/L CaCO ₃	53	19	7	17	1			
Aluminium	mg/L	52	0.03	0.01	0.02	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		✓
Bromide	mg/L	13	0.03	ND	0.02	0.01			
Calcium	mg/L	52	9.4	4.4	8.0	0.01			
Calcium Hardness	mg/L	52	24	11	20	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		✓
Chloride	mg/L	13	14.00	12.00	13.15	0.02		250	
Chlorine Residual	mg/L	365	1.42	0.67	1.19	0.02	5	0.6-1.0	✓
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		✓
Colour	Hazen Units	53	5	ND	ND	5		10	
Conductivity	mS/cm	13	12.0	10.0	11.0	0.5			
Cyanide	mg/L	5	ND	ND	ND	0.005	0.6		✓
Fluoride	mg/L	52	1.00	0.57	0.87	0.02	1.5		✓
Iodide	mg/L	13	0.006	ND	0.003	0.002			
Iron (Total)	mg/L	52	0.026	0.004	0.012	0.002		0.2	
Magnesium	mg/L	52	1.7	1.2	1.5	0.001			
Magnesium Hardness	mg/L	52	7	5	6	0.0041			
Manganese	mg/L	52	0.0120	0.0015	0.0037	0.0005	0.4	0.04	✓
pH	pH Units	365	8.5	6.7	7.9	0.1		7.0-8.5	
Potassium	mg/L	13	1.2	1.0	1.0	0.1			
Silicon	mg/L	13	15.0	13.0	13.8	0.1			
Sodium	mg/L	13	10.0	7.7	8.7	0.1		200	
Sulphate	mg/L	13	13.00	8.40	9.84	0.02		250	
Suspended Solids	mg/L	51	0.40	ND	0.07	0.2			
Total Hardness	mg/L	52	30.0	17.0	26.1	0.029		200	
Total Organic Carbon (TOC)	mg/L	13	1.1	0.8	0.9	0.1			
Turbidity	NTU	365	0.5	ND	0.2	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limits	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Cryptosporidium cysts/oocysts (Treated Water)	cysts/100 L	4	ND	ND	ND	1	<1		✓
Giardia cysts/oocysts (Treated Water)	cysts/100mL	5	ND	ND	ND	1	<1		✓
<i>E. coli</i>	MPN/100mL	365	ND	ND	ND	1	<1		✓

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	13	0.012	ND	0.001	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.009	ND	0.005	0.005			
Nitrate	mg/L as NO ₃	13	0.088	0.025	0.052	0.002	50		J
Nitrite Nitrogen	mg/L	13	0.004	ND	0.001	0.002	0.2		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.1	ND	0.01	0.1			
Total Phosphorus	mg/L	13	0.025	ND	0.010	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	13	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	13	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	13	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	13	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	13	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	13	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	13	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	13	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	13	ND	ND	ND	0.1			
Methoxychlor	µg/L	13	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	13	ND	ND	ND	0.2			
DDT + isomers	µg/L	13	ND	ND	ND	0.2	1		J
Procymidone	µg/L	13	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	13	ND	ND	ND	0.2	20		J
Atrazine	µg/L	13	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	13	ND	ND	ND	0.1	10		J
Molinate	µg/L	13	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	13	ND	ND	ND	0.2	20		J
Propanil	µg/L	13	ND	ND	ND	0.1			
Simazine	µg/L	13	ND	ND	ND	0.1	2		J
Terbutylazine	µg/L	13	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	13	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	13	ND	ND	ND	0.2	40		J
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pirimiphos methyl	µg/L	13	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	ND	ND	ND	0.001	0.02		J
Arsenic	mg/L	13	0.0003	0.0001	0.0002	0.0001	0.01		J
Barium	mg/L	13	0.0110	0.0048	0.0068	0.0002	0.7		J
Boron	mg/L	13	0.013	ND	0.008	0.005	1.4		J
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	13	0.0006	ND	0.0004	0.0001	0.05		J
Copper	mg/L	13	0.0007	0.0003	0.0004	0.0002	2		J
Lead	mg/L	13	0.0002	ND	ND	0.0001	0.01		J
Lithium	mg/L	13	0.0006	ND	0.0005	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		J
Nickel	mg/L	13	0.0011	ND	0.0002	0.0001	0.08		J
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		J
Zinc	mg/L	13	0.004	ND	0.001	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	52	0.0270	0.0015	0.0052	0.0001	0.06		J
Bromoform	mg/L	52	0.0190	ND	0.0011	0.0001	0.1		J
Chloroform	mg/L	52	0.0240	0.0016	0.0053	0.0001	0.4		J
Dibromochloromethane	mg/L	52	0.0260	0.0004	0.0048	0.0001	0.15		J
THMs Ratio		52	0.87	0.04	0.12		1		J

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	13	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	13	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	13	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	1.5	0.001	J
1,2-dichloroethane	mg/L	13	ND	ND	ND	0.0001	0.03		J
1,4-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	0.4	0.0003	J
Benzene	mg/L	13	ND	ND	ND	0.0001	0.01		J
Carbon tetrachloride	mg/L	13	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	13	ND	ND	ND	0.0001	0.3	0.002	J
Xylenes (total)	mg/L	13	ND	ND	ND	0.0001	0.6	0.02	J
Styrene	mg/L	13	ND	ND	ND	0.0001	0.03	0.004	J
Tetrachloroethene	mg/L	13	ND	ND	ND	0.0001	0.05		J
Toluene	mg/L	13	ND	ND	ND	0.0001	0.8	0.03	J
1,2-dichloroethene (cis + trans)	mg/L	13	ND	ND	ND	0.0001	0.06		J
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		J

Ardmore WTP B1 Block Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	13	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
Bentazone	mg/L	13	ND	ND	ND	0.0001			
Dichlorprop	mg/L	13	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	13	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	13	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	13	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	13	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	13	0.020	0.010	0.010	0.002			
Alkalinity (Total)	mg/L CaCO ₃	52	19	14	17	1			
Aluminium	mg/L	52	0.04	0.02	0.02	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	13	0.02	ND	0.02	0.01			
Calcium	mg/L	52	9.2	7.1	8.0	0.01			
Calcium Hardness	mg/L	52	23	18	20	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	13	14.00	12.00	13.15	0.02		250	
Chlorine Residual	mg/L	365	1.36	0.73	1.10	0.02	5	0.6-1.00	J
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	53	ND	ND	ND	5		10	
Conductivity	mS/cm	13	12.0	10.0	11.0	0.5			
Cyanide	mg/L	5	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	52	0.97	0.73	0.85	0.02	1.5		J
Iodide	mg/L	13	0.01	ND	ND	0.002			
Iron (Total)	mg/L	52	0.015	0.007	0.010	0.002		0.2	
Magnesium	mg/L	52	1.7	1.3	1.5	0.001			
Magnesium Hardness	mg/L	52	7	5	6	0.0041			
Manganese	mg/L	52	0.0090	0.0013	0.0032	0.0005	0.4	0.04	J
pH	pH Units	365	8.5	7.6	8.0	0.1		7.0-8.5	
Potassium	mg/L	13	1.1	0.9	1.0	0.1			
Silicon	mg/L	13	15.0	13.0	13.7	0.1			
Sodium	mg/L	13	9.6	7.6	8.6	0.1		200	
Sulphate	mg/L	13	12.00	8.40	9.74	0.02		250	
Suspended Solids	mg/L	52	0.5	ND	ND	0.20			
Total Hardness	mg/L	52	29	23	26	0.029		200	
Total Organic Carbon TOC	mg/L	13	1.1	0.8	0.9	0.1			
Turbidity	NTU	365	0.4	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Cryptosporidium (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		J
Giardia (Treated Water)	cysts/100mL	5	ND	ND	ND	1	<1		J
<i>E. coli</i>	MPN/100mL	365	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	13	0.007	ND	0.001	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.009	ND	0.006	0.005			
Nitrate	mg/L	13	0.090	0.027	0.054	0.002	50		J
Nitrite Nitrogen	mg/L	13	0.005	ND	0.001	0.002	0.2		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.12	ND	0.02	0.1			
Total Phosphorus	mg/L	13	0.029	ND	0.011	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	13	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	13	ND	ND	ND	2	9		✓

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	13	ND	ND	ND	0.1	0.7		✓

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	13	ND	ND	ND	0.01	0.04		✓
Chlordane	µg/L	13	ND	ND	ND	0.01	0.2		✓
Lindane	µg/L	13	ND	ND	ND	0.01	2		✓
Heptachlor	µg/L	13	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	13	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	13	ND	ND	ND	0.1			
Methoxychlor	µg/L	13	ND	ND	ND	0.2	20		✓
Permethrin (cis + trans)	µg/L	13	ND	ND	ND	0.2			
DDT + isomers	µg/L	13	ND	ND	ND	0.2	1		✓
Procymidone	µg/L	13	ND	ND	ND	0.2	700		✓
Organonitrogen Herbicides									
Alachlor	µg/L	13	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	13	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	13	ND	ND	ND	0.1	10		✓
Molinate	µg/L	13	ND	ND	ND	0.1	7		✓
Pendimethalin	µg/L	13	ND	ND	ND	0.2	20		✓
Propanil	µg/L	13	ND	ND	ND	0.1			
Simazine	µg/L	13	ND	ND	ND	0.1	2		✓
Terbutylazine	µg/L	13	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	13	ND	ND	ND	0.2	30		✓
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	13	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	13	ND	ND	ND	0.2	100		✓

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	ND	ND	ND	0.001	0.02		✓
Arsenic	mg/L	13	0.0003	0.0001	0.0002	0.0001	0.01		✓
Barium	mg/L	13	0.0086	0.0048	0.0064	0.0002	0.7		✓
Boron	mg/L	13	0.012	ND	0.008	0.005	1.4		✓
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		✓
Chromium	mg/L	13	0.0005	0.0002	0.0003	0.0001	0.05		✓
Copper	mg/L	13	0.0004	ND	0.0002	0.0002	2		✓
Lead	mg/L	13	0.0002	ND	ND	0.0001	0.01		✓
Lithium	mg/L	13	0.0007	ND	0.0004	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		✓
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		✓
Nickel	mg/L	13	0.0002	ND	ND	0.0001	0.08		✓
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		✓
Zinc	mg/L	13	0.003	ND	0.001	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	52	0.0120	0.0020	0.0070	0.0001	0.06		✓
Bromoform	mg/L	52	0.0020	ND	0.0010	0.0001	0.1		✓
Chloroform	mg/L	52	0.0110	0.0040	0.0070	0.0001	0.4		✓
Dibromochloromethane	mg/L	52	0.0110	0.0010	0.0060	0.0001	0.15		✓
THMs Ratio		52	0.31	0.05	0.19		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	13	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	13	0.0003	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	13	0.0002	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	1.5	0.001	J
1,2-dichloroethane	mg/L	13	ND	ND	ND	0.0001	0.03		J
1,4-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	0.4	0.0003	J
Benzene	mg/L	13	ND	ND	ND	0.0001	0.01		J
Carbon tetrachloride	mg/L	13	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	13	ND	ND	ND	0.0001	0.3	0.002	J
Xylenes (total)	mg/L	13	ND	ND	ND	0.0001	0.6	0.02	J
Styrene	mg/L	13	ND	ND	ND	0.0001	0.03	0.004	J
Tetrachloroethene	mg/L	13	ND	ND	ND	0.0001	0.05		J
Toluene	mg/L	13	ND	ND	ND	0.0001	0.8	0.03	J
1,2-dichloroethene (cis + trans)	mg/L	13	ND	ND	ND	0.0001	0.06		J
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		J

Ardmore WTP B2 Block Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	13	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
Bentazone	mg/L	13	ND	ND	ND	0.0001			
Dichlorprop	mg/L	13	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	13	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	13	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	13	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	13	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	13	0.010	0.010	0.010	0.002			
Alkalinity (Total)	mg/L CaCO ₃	52	19	14	17	1			
Aluminium	mg/L	52	0.03	0.02	0.02	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	13	0.02	ND	0.02	0.01			
Calcium	mg/L	52	9.1	7.2	8.1	0.01			
Calcium Hardness	mg/L	52	23	18	20	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	13	14.00	12.00	13.15	0.02		250	
Chlorine Residual	mg/L	365	1.28	0.75	1.09	0.02	5	0.6-1.00	J
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	53	5	ND	0	5		10	
Conductivity	mS/cm	13	12.0	10.0	11.0	0.5			
Cyanide	mg/L	5	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	52	0.97	0.74	0.85	0.02	1.5		J
Iodide	mg/L	13	0.02	ND	ND	0.002			
Iron (Total)	mg/L	52	0.051	0.007	0.013	0.002		0.2	
Magnesium	mg/L	52	1.7	1.3	1.5	0.001			
Magnesium Hardness	mg/L	52	7	5	6	0.0041			
Manganese	mg/L	52	0.0080	0.0013	0.0033	0.0005	0.4	0.04	J
pH	pH Units	365	9.0	7.4	8.0	0.1		7.0-8.5	
Potassium	mg/L	13	1.1	0.9	1.0	0.1			
Silicon	mg/L	13	15.0	12.0	13.6	0.1			
Sodium	mg/L	13	9.8	7.7	8.6	0.1		200	
Sulphate	mg/L	13	12.00	8.40	9.73	0.02		250	
Suspended Solids	mg/L	52	1.4	ND	0.1	0.2			
Total Hardness	mg/L	52	29	23	26	0.029		200	
Total Organic Carbon TOC	mg/L	13	1.1	0.7	0.9	0.1			
Turbidity	NTU	365	0.9	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Cryptosporidium (Treated Water)	cysts/100 L	4	ND	ND	ND	1	<1		J
Giardia (Treated Water)	cysts/100mL	6	ND	ND	ND	1	<1		J
<i>E.coli</i>	MPN/100mL	365	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	13	0.008	ND	0.001	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.009	ND	0.005	0.005			
Nitrate	mg/L	13	0.090	0.026	0.054	0.002	50		J
Nitrite Nitrogen	mg/L	13	0.003	ND	0.001	0.002	0.2		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	ND	ND	ND	0.1			
Total Phosphorus	mg/L	13	0.022	ND	0.009	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	13	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	13	ND	ND	ND	2	9		✓

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	13	ND	ND	ND	0.1	0.7		✓

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	13	ND	ND	ND	0.01	0.04		✓
Chlordane	µg/L	13	ND	ND	ND	0.01	0.2		✓
Lindane	µg/L	13	ND	ND	ND	0.01	2		✓
Heptachlor	µg/L	13	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	13	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	13	ND	ND	ND	0.1			
Methoxychlor	µg/L	13	ND	ND	ND	0.2	20		✓
Permethrin (cis + trans)	µg/L	13	ND	ND	ND	0.2			
DDT + isomers	µg/L	13	ND	ND	ND	0.2	1		✓
Procymidone	µg/L	13	ND	ND	ND	0.2	700		✓
Organonitrogen Herbicides									
Alachlor	µg/L	13	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	13	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	13	ND	ND	ND	0.1	10		✓
Molinate	µg/L	13	ND	ND	ND	0.1	7		✓
Pendimethalin	µg/L	13	ND	ND	ND	0.2	20		✓
Propanil	µg/L	13	ND	ND	ND	0.1			
Simazine	µg/L	13	ND	ND	ND	0.1	2		✓
Terbutylazine	µg/L	13	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	13	ND	ND	ND	0.2	30		✓
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	13	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	13	ND	ND	ND	0.2	100		✓

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	ND	ND	ND	0.001	0.02		✓
Arsenic	mg/L	13	0.0003	ND	0.0002	0.0001	0.01		✓
Barium	mg/L	13	0.0077	0.0049	0.0063	0.0002	0.7		✓
Boron	mg/L	13	0.012	ND	0.008	0.005	1.4		✓
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		✓
Chromium	mg/L	13	0.0009	ND	0.0004	0.0001	0.05		✓
Copper	mg/L	13	0.0005	ND	0.0002	0.0002	2		✓
Lead	mg/L	13	0.0002	ND	ND	0.0001	0.01		✓
Lithium	mg/L	13	0.0007	ND	0.0005	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		✓
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		✓
Nickel	mg/L	13	0.0004	ND	0.0001	0.0001	0.08		✓
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		✓
Zinc	mg/L	13	0.003	ND	ND	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	52	0.0120	0.0030	0.0080	0.0001	0.06		✓
Bromoform	mg/L	52	0.0020	ND	0.0010	0.0001	0.1		✓
Chloroform	mg/L	52	0.0120	0.0040	0.0080	0.0001	0.4		✓
Dibromochloromethane	mg/L	52	0.0120	0.0010	0.0070	0.0001	0.15		✓
THMs Ratio		52	0.32	0.08	0.20		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	13	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	13	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	13	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	1.5	0.001	J
1,2-dichloroethane	mg/L	13	ND	ND	ND	0.0001	0.03		J
1,4-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	0.4	0.0003	J
Benzene	mg/L	13	ND	ND	ND	0.0001	0.01		J
Carbon tetrachloride	mg/L	13	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	13	ND	ND	ND	0.0001	0.3	0.002	J
Xylenes (total)	mg/L	13	ND	ND	ND	0.0001	0.6	0.02	J
Styrene	mg/L	13	ND	ND	ND	0.0001	0.03	0.004	J
Tetrachloroethene	mg/L	13	ND	ND	ND	0.0001	0.05		J
Toluene	mg/L	13	ND	ND	ND	0.0001	0.8	0.03	J
1,2-dichloroethene (cis + trans)	mg/L	13	ND	ND	ND	0.0001	0.06		J
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		J

Bombay WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	43	43	43	1			
Aluminium	mg/L	1	0.01	0.01	0.01	0.005		0.1	
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	1	0.01	0.01	0.01	0.01			
Calcium	mg/L	1	13.00	13.00	13.00	0.01			
Calcium Hardness	mg/L	1	33	33	33	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	1	63.00	63.00	63.00	0.02		250	
Chlorine Residual	mg/L	127	1.07	0.38	0.75	0.02	5	0.2-1.0	J
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	28.0	28.0	28.0	0.5			
Cyanide	mg/L	1	ND	ND	ND	0.005	0.6		J
Iodide	mg/L	1	0.01	0.01	0.01	0.002			
Iron (Total)	mg/L	1	ND	ND	ND	0.002		0.2	
Magnesium	mg/L	1	13.0	13.0	13.0	0.001			
Magnesium Hardness	mg/L	1	51	51	51	0.0041			
Manganese	mg/L	1	ND	ND	ND	0.0005	0.4	0.04	J
pH	pH Units	127	9.0	7.0	7.6	0.1		7.0-8.5	
Potassium	mg/L	1	1.5	1.5	1.5	0.1			
Silicon	mg/L	1	44.0	44.0	44.0	0.1			
Sodium	mg/L	1	26.0	26.0	26.0	0.1		200	
Sulphate	mg/L	1	0.04	0.04	0.04	0.02		250	
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	280	280	280	15		1000	
Total Hardness	mg/L	1	85	85	85	0.029		200	
Total Organic Carbon TOC	mg/L	12	0.3	0.1	0.2	0.1			
Turbidity	NTU	127	0.5	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	127	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	1	ND	ND	ND	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	1	ND	ND	ND	0.005			
Nitrate	mg/L as NO ₃	53	3.900	0.007	2.332	0.002	50		J
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	ND	ND	ND	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		✓
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		✓
Lindane	µg/L	1	ND	ND	ND	0.01	2		✓
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		✓
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		✓
Procymidone	µg/L	1	ND	ND	ND	0.2	700		✓
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	1	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		✓
Molinate	µg/L	1	ND	ND	ND	0.1	7		✓
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		✓
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		✓
Terbutylazine	µg/L	1	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		✓
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	1	ND	ND	ND	0.2	100		✓

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	1	ND	ND	ND	0.001	0.02		✓
Arsenic	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Barium	mg/L	1	0.0036	0.0036	0.0036	0.0002	0.7		✓
Boron	mg/L	1	0.010	0.010	0.010	0.005	1.4		✓
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		✓
Chromium	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.05		✓
Copper	mg/L	1	0.0130	0.0130	0.0130	0.0002	2		✓
Lead	mg/L	1	0.0010	0.0010	0.0010	0.0001	0.01		✓
Lithium	mg/L	1	0.0006	0.0006	0.0006	0.0001			
Mercury	mg/L	1	ND	ND	ND	0.00005	0.007		✓
Molybdenum	mg/L	1	ND	ND	ND	0.0003	0.07		✓
Nickel	mg/L	1	ND	ND	ND	0.0001	0.08		✓
Selenium	mg/L	1	ND	ND	ND	0.0005	0.01		✓
Zinc	mg/L	1	0.013	0.013	0.013	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	12	0.0007	ND	0.0001	0.0001	0.06		✓
Bromoform	mg/L	12	0.0010	ND	0.0001	0.0001	0.1		✓
Chloroform	mg/L	12	0.0008	ND	0.0001	0.0001	0.4		✓
Dibromochloromethane	mg/L	12	0.0003	ND	0.0001	0.0001	0.15		✓
THMs Ratio		11	0.02	ND	ND		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Clarks Beach WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Chloride	mg/L	1	56.00	56.00	56.00	0.02		250	
Chlorine Residual	mg/L	39	1.21	0.84	1.04	0.02	5	0.6-1.0	J
Conductivity	mS/cm	1	56.0	56.0	56.0	0.5			
Fluoride	mg/L	4	0.58	0.28	0.41	0.02	1.5		J
Manganese	mg/L	1	0.0440	0.0440	0.0440	0.0005	0.4	0.04	J
pH	pH Units	38	8.8	7.6	8.2	0.1		7.0-8.5	
Sulphate	mg/L	1	4.20	4.20	4.20	0.02		250	
Turbidity	mg/L	38	2.4	0.1	1.0	0.10		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	39	ND	ND	ND	1	<1		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Boron	mg/L	7	1.20	0.63	0.84	0.005	1.4		J

Note: Clarks Beach WTP was decommissioned on 3/12/2014. The Clarks Beach community is now supplied by Waikato WTP.

Cornwall Road (Waiuku) WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	130	130	130	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	1	0.03	0.03	0.03	0.01			
Calcium	mg/L	1	36.0	36.0	36.0	0.01			
Calcium Hardness	mg/L	1	90	90	90	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	1	32.00	32.00	32.00	0.02		250	
Chlorine Residual	mg/L	122	0.95	0.30	0.71	0.02	5	0.6-1.0	J
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	36.0	36.0	36.0	0.5			
Cyanide	mg/L	1	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	1	0.05	0.05	0.05	0.02	1.5		J
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	12	ND	ND	ND	0.002		0.2	
Magnesium	mg/L	1	11.0	11.0	11.0	0.001			
Magnesium Hardness	mg/L	1	44	44	44	0.0041			
Manganese	mg/L	12	0.0005	ND	ND	0.0005	0.4	0.04	J
pH	pH Units	122	8.2	7.9	8.0	0.1		7.0-8.5	
Potassium	mg/L	1	3.3	3.3	3.3	0.1			
Silicon	mg/L	1	55.0	55.0	55.0	0.1			
Sodium	mg/L	1	23.0	23.0	23.0	0.1		200	
Sulphate	mg/L	1	5.20	5.20	5.20	0.02		250	
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	260	260	260	15		1000	
Total Hardness	mg/L	1	130.0	130.0	130.0	0.029		200	
Turbidity	NTU	122	1.0	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	122	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	1	ND	ND	ND	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	1	0.040	0.040	0.040	0.005			
Nitrate	mg/L as NO ₃	1	0.023	0.023	0.023	0.002	50		J
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.039	0.039	0.039	0.005			

Plasticizers									
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	1	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
pp-DDT	µg/L	1	ND	ND	ND	0.2	1		J
Procymidone	µg/L	1	ND	ND	ND	0.2	700		J

Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	1	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		✓
Molinate	µg/L	1	ND	ND	ND	0.1	7		✓
Pe0.00imethalin	µg/L	1	ND	ND	ND	0.2	20		✓
Propanil	µg/L	1	ND	ND	ND	0.1			✓
Simazine	µg/L	1	ND	ND	ND	0.1	2		✓
Terbuthilazine	µg/L	1	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		✓
Organophosphorus pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	1	ND	ND	ND	0.1			✓
Pyrimiphos methyl	µg/L	1	ND	ND	ND	0.2	100		✓

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	1	ND	ND	ND	0.001	0.02		✓
Arsenic	mg/L	1	0.0047	0.0047	0.0047	0.0001	0.01		✓
Barium	mg/L	1	0.0003	0.0003	0.0003	0.0002	0.7		✓
Boron	mg/L	1	0.022	0.022	0.022	0.005	1.4		✓
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		✓
Chromium	mg/L	1	0.0004	0.0004	0.0004	0.0001	0.05		✓
Copper	mg/L	1	0.0003	0.0003	0.0003	0.0002	2		✓
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Lithium	mg/L	1	0.0098	0.0098	0.0098	0.0001			✓
Mercury	mg/L	1	ND	ND	ND	0.00005	0.007		✓
Molybdenum	mg/L	1	ND	ND	ND	0.0003	0.07		✓
Nickel	mg/L	1	ND	ND	ND	0.0001	0.08		✓
Selenium	mg/L	1	ND	ND	ND	0.0005	0.01		✓
Zinc	mg/L	1	ND	ND	ND	0.001		1.5	✓

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	1	0.0001	0.0001	0.0001	0.0001	0.06		✓
Bromoform	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.1		✓
Chloroform	mg/L	1	0.0001	0.0001	0.0001	0.0001	0.4		✓
Dibromochloromethane	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.15		✓
THMs Ratio		1	0.01	0.01	0.01		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			✓
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			✓
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			✓
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			✓
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
m- & p-Xylene	mg/L	1	ND	ND	ND	0.0001	0.6		✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.004	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Glenbrook Beach WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Chlorine Residual	mg/L	55	1.34	0.83	1.13	0.02	5	0.6-1.0	J
pH	pH Units	54	8.1	8.0	8.0	0.1		7.0-8.5	
Turbidity	NTU	54	0.3	ND	0.1	0.10		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	55	ND	ND	ND	1	<1		J

Note: Glenbrook WTP was decommissioned on 9/12/2014. The Glenbrook community is now supplied by the Waikato WTP

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	4	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	4	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	4	ND	ND	ND	0.0001			
Bentazone	mg/L	4	ND	ND	ND	0.0001			
Dichlorprop	mg/L	4	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	4	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	4	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	4	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	4	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	14	130	27	67	1			
Aluminium	mg/L	11	0.03	0.01	0.02	0.005		0.1	
Calcium	mg/L	3	24.0	10.0	19.0	0.01			
Calcium Hardness	mg/L	3	60	26	47	0.025			
Chlorine Residual	mg/L	124	2.52	0.81	1.28	0.02	5	0.6-1.0	J
Colour	Hazen Units	12	ND	ND	ND	5		10	
Conductivity	mS/cm	12	57.5	28.0	40.0	0.5			
Fluoride	mg/L	12	0.09	0.00	0.04	0.02	1.5		J
Iron (Total)	mg/L	3	0.002	ND	0.001	0.002		0.2	
Magnesium	mg/L	3	22.0	7.2	16.1	0.001			
Magnesium Hardness	mg/L	3	86	30	65	0.0041			
Manganese	mg/L	3	0.0160	0.0005	0.0066	0.0005	0.4	0.04	J
pH	pH Units	123	7.7	6.9	7.4	0.1		7.0-8.5	
Potassium	mg/L	2	3.9	3.4	3.7	0.1			
Sodium	mg/L	2	58.0	55.0	56.5	0.1		200	
Sulphate	mg/L	12	47.00	4.90	35.49	0.02		250	
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	210	210	210	15		1000	
Total Hardness	mg/L	3	150	56	115	0.029		200	
Total Organic Carbon TOC	mg/L	12	3.9	1.6	2.6	0.1			
Turbidity	NTU	123	0.3	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	124	ND	ND	ND	1	<1		J

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	1	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		J
Procyimidone	µg/L	1	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		J
Atrazine	µg/L	1	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		J
Molinate	µg/L	1	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		J
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		J
Terbuthiazine	µg/L	1	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		J
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pirymiphos methyl	µg/L	1	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	2	ND	ND	ND	0.001	0.02		J
Arsenic	mg/L	2	0.0005	0.0004	0.0005	0.0001	0.01		J
Barium	mg/L	2	0.0250	0.0140	0.0195	0.0002	0.7		J
Boron	mg/L	2	0.036	0.031	0.034	0.005	1.4		J
Cadmium	mg/L	2	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	2	0.0005	0.0005	0.0005	0.0001	0.05		J
Copper	mg/L	2	0.0009	0.0006	0.0008	0.0002	2		J
Lead	mg/L	2	0.0002	ND	0.0001	0.0001	0.01		J
Lithium	mg/L	2	0.0027	0.0027	0.0027	0.0001			
Mercury	mg/L	2	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	2	ND	ND	ND	0.0003	0.07		J
Nickel	mg/L	2	0.0005	0.0003	0.0004	0.0001	0.08		J
Selenium	mg/L	2	ND	ND	ND	0.0005	0.01		J
Zinc	mg/L	2	0.004	0.002	0.003	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	12	0.0240	0.0061	0.0133	0.0001	0.06		J
Bromoform	mg/L	12	0.0120	0.0014	0.0053	0.0001	0.1		J
Chloroform	mg/L	12	0.0180	0.0013	0.0085	0.0001	0.4		J
Dibromochloromethane	mg/L	12	0.0310	0.0069	0.0164	0.0001	0.15		J
THMs Ratio		12	0.69	0.18	0.41		1		J

Volatile Organic Compounds

Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Huia WTP Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	13	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
Bentazone	mg/L	13	ND	ND	ND	0.0001			
Dichlorprop	mg/L	13	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	13	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	13	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	13	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	13	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	52	0.028	0.008	0.015	0.002			
Alkalinity (Total)	mg/L CaCO ₃	52	18	10	15	1			
Aluminium	mg/L	52	0.07	0.02	0.02	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	13	0.04	0.01	0.03	0.01			
Calcium	mg/L	52	11.0	7.8	9.8	0.01			
Calcium Hardness	mg/L	52	28	19	24	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	13	23.00	19.00	20.92	0.02		250	
Chlorine Residual	mg/L	366	1.21	0.68	0.93	0.02	5	0.6-1.0	J
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	52	5	ND	ND	5		10	
Conductivity	mS/cm	51	16.5	13.5	15.0	0.5			
Cyanide	mg/L	5	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	52	1.10	0.81	0.98	0.02	1.5		J
Iodide	mg/L	4	ND	ND	ND	0.002			
Iron (Total)	mg/L	52	0.130	0.008	0.015	0.002		0.2	
Magnesium	mg/L	52	3.0	2.0	2.5	0.001			
Magnesium Hardness	mg/L	52	12	8	10	0.0041			
Manganese	mg/L	52	0.0110	0.0016	0.0030	0.0005	0.4	0.04	J
pH	pH Units	365	8.6	7.4	7.8	0.1		7.0-8.5	
Potassium	mg/L	13	0.8	0.7	0.8	0.1			
Silicon	mg/L	13	15.0	11.0	13.3	0.1			
Sodium	mg/L	13	14.0	11.0	12.2	0.1		200	
Sulphate	mg/L	13	19.00	15.00	16.15	0.02		250	
Suspended Solids	mg/L	52	0.5	ND	0.1	0.2			
Total Hardness	mg/L	52	40	28	35	0.029		200	
Total Organic Carbon TOC	mg/L	52	2.7	0.7	1.2	0.1			
Turbidity	NTU	366	0.8	ND	0.2	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	365	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	13	0.010	ND	0.001	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.010	ND	0.006	0.005			
Nitrate	mg/L as NO ₃	13	0.038	0.02	0.028	0.002	50		J
Nitrite	mg/L	13	0.006	ND	0.001	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.2	ND	0.02	0.1			
Total Phosphorus	mg/L	13	0.023	ND	0.009	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	1	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		J
Procymidone	µg/L	1	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		J
Atrazine	µg/L	1	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		J
Molinate	µg/L	1	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		J
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		J
Terbutylazine	µg/L	1	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		J
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pirimiphos methyl	µg/L	1	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	ND	ND	ND	0.001	0.02		J
Arsenic	mg/L	13	0.0002	ND	0.0001	0.0001	0.01		J
Barium	mg/L	13	0.0052	0.0039	0.0047	0.0002	0.7		J
Boron	mg/L	13	0.013	ND	0.009	0.005	1.4		J
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	13	0.0006	ND	0.0003	0.0001	0.05		J
Copper	mg/L	13	0.0024	0.0011	0.0016	0.0002	2		J
Lead	mg/L	13	0.0001	ND	ND	0.0001	0.01		J
Lithium	mg/L	13	0.0008	0.0002	0.0004	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		J
Nickel	mg/L	13	0.0002	ND	ND	0.0001	0.08		J
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		J
Zinc	mg/L	13	0.004	ND	0.001	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	52	0.0092	0.0014	0.0047	0.0001	0.06		J
Bromoform	mg/L	52	0.0041	ND	0.0016	0.0001	0.1		J
Chloroform	mg/L	52	0.0089	0.0011	0.0035	0.0001	0.4		J
Dibromochloromethane	mg/L	52	0.0120	0.0011	0.0060	0.0001	0.15		J
THMs Ratio		52	0.27	0.04	0.14		1		J

Volatile Organic Compounds

Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Huia Village WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Calcium	mg/L	13	6.1	4.1	5.1	0.01			
Calcium Hardness	mg/L	13	15	10	13	0.025			
Chlorine Residual	mg/L	122	1.22	0.26	0.85	0.02	5	0.6-1.0	J
Iron (Total)	mg/L	1	ND	ND	ND	0.002		0.2	
Magnesium	mg/L	13	3.4	2.5	2.9	0.001			
Magnesium Hardness	mg/L	13	14	10	12	0.0041			
Manganese	mg/L	1	ND	ND	ND	0.0005	0.4	0.04	J
pH	pH Units	122	8.6	7.6	7.9	0.1		7.0-8.5	
Total Hardness	mg/L	13	28	21	25	0.1		200	
Total Organic Carbon TOC	mg/L	13	2.4	1.1	1.4	0.1			
Turbidity	NTU	122	0.6	ND	0.1			2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	122	ND	ND	ND	1	<1		J

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	13	0.0140	0.0039	0.0066	0.0001	0.06		J
Bromoform	mg/L	13	0.0034	0.0005	0.0019	0.0001	0.1		J
Chloroform	mg/L	13	0.0110	0.0024	0.0042	0.0001	0.4		J
Dibromochloromethane	mg/L	13	0.0170	0.0043	0.0087	0.0001	0.15		J
THMs Ratio		13	0.41	0.10	0.20		1		J

Muriwai WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Calcium	mg/L	1	7.5	7.5	7.5	0.01			
Calcium Hardness	mg/L	1	19	19	19	0.025			
Chlorine Residual	mg/L	124	1.36	0.48	0.83	0.02	5	0.6-1.0	J
Iron (Total)	mg/L	1	0.003	0.003	0.003	0.002		0.2	
Magnesium	mg/L	1	5.9	5.9	5.9	0.001			
Magnesium Hardness	mg/L	1	24	24	24	0.0041			
Manganese	mg/L	1	ND	ND	ND	0.0005	0.4	0.04	J
pH	pH Units	124	7.8	7.3	7.6	0.1		7.0-8.5	
Total Hardness	mg/L	1	43	43	43	0.029		200	
Total Organic Carbon TOC	mg/L	12	0.7	0.2	0.4	0.1			
Turbidity	NTU	124	0.6	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	124	ND	ND	ND	1	<1		J

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	12	0.0007	ND	0.0002	0.0001	0.06		J
Bromoform	mg/L	12	0.0031	0.0006	0.0017	0.0001	0.1		J
Chloroform	mg/L	12	0.0009	ND	0.0001	0.0001	0.4		J
Dibromochloromethane	mg/L	12	0.0014	0.0003	0.0009	0.0001	0.15		J
THMs Ratio		12	0.05	0.01	0.03		1		J

Onehunga WTP Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	13	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
Bentazone	mg/L	13	ND	ND	ND	0.0001			
Dichlorprop	mg/L	13	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	13	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	13	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	13	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	13	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	52	0.092	ND	0.011	0.002			
Alkalinity (Total)	mg/L CaCO ₃	52	69	44	60	1			
Aluminium	mg/L	52	0.04	0.02	0.03	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	13	0.08	0.02	0.06	0.01			
Calcium	mg/L	52	12.0	7.4	9.6	0.01			
Calcium Hardness	mg/L	52	29	18	24	0.025			
Chlorate	mg/L	13	0.06	0.03	0.04	0.01	0.8		J
Chloride	mg/L	13	26.00	18.00	21.15	0.02		250	
Chlorine Residual	mg/L	361	1.30	0.44	0.92	0.02	5	0.6-1.0	J
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	52	ND	ND	ND	5		10	
Conductivity	mS/cm	51	28.0	21.0	24.5	0.5			
Cyanide	mg/L	5	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	52	0.22	0.12	0.16	0.02	1.5		J
Iodide	mg/L	4	0.01	0.01	0.01	0.002			
Iron (Total)	mg/L	52	1.200	ND	0.024	0.002		0.2	
Magnesium	mg/L	52	9.6	6.8	8.3	0.001			
Magnesium Hardness	mg/L	52	39.0	28.0	34.0	0.0041			
Manganese	mg/L	52	0.0026	ND	0.0001	0.0005	0.4	0.04	J
pH	pH Units	361	8.4	7.6	8.0	0.1		7.0-8.5	
Potassium	mg/L	13	3.6	2.4	3.0	0.1			
Silicon	mg/L	13	40.0	29.0	34.5	0.1			
Sodium	mg/L	13	27.0	19.0	22.7	0.1		200	
Sulphate	mg/L	13	15.00	12.00	13.54	0.02		250	
Suspended Solids	mg/L	52	0.3	ND	ND	0.2			
Total Hardness	mg/L	52	68	47	58	0.029		200	
Total Organic Carbon TOC	mg/L	52	1.5	0.4	0.6	0.1			
Turbidity	NTU	361	0.5	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	361*	ND	ND		1	<1		J

*In 2014/15 four *E. coli* samplings were not collected from the Onehunga WTP due to the treatment plant being shut down for maintenance purposes.

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	13	0.033	ND	0.003	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.100	0.028	0.061	0.005			
Nitrate	mg/L as NO ₃	13	3.200	2.900	3.054	0.002	50		J
Nitrite	mg/L	13	0.004	ND	0.001	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.1	ND	0.02	0.1			
Total Phosphorus	mg/L	13	0.100	0.026	0.065	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	1	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		J
Procyimidone	µg/L	1	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		J
Atrazine	µg/L	1	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		J
Molinate	µg/L	1	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		J
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		J
Terbutylazine	µg/L	1	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		J
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pirymiphos methyl	µg/L	1	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	ND	ND	ND	0.001	0.02		J
Arsenic	mg/L	13	0.0003	0.0002	0.0003	0.0001	0.01		J
Barium	mg/L	13	0.0021	0.0013	0.0015	0.0002	1.4		J
Boron	mg/L	13	0.066	0.049	0.054	0.005	0.7		J
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	13	0.0013	0.0006	0.0009	0.0001	0.05		J
Copper	mg/L	13	0.0028	0.0012	0.0019	0.0002	2		J
Lead	mg/L	13	0.0001	ND	ND	0.0001	0.01		J
Lithium	mg/L	13	0.0006	0.0002	0.0004	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	13	0.0012	0.0007	0.0009	0.0003	0.07		J
Nickel	mg/L	13	0.0003	ND	0.0001	0.0001	0.08		J
Selenium	mg/L	13	0.0005	ND	0.0001	0.0005	0.01		J
Zinc	mg/L	13	0.003	ND	0.001	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	52	0.0029	ND	0.0003	0.0001	0.06		J
Bromoform	mg/L	52	0.0060	ND	0.0013	0.0001	0.1		J
Chloroform	mg/L	52	0.0023	ND	0.0004	0.0001	0.4		J
Dibromochloromethane	mg/L	52	0.0073	ND	0.0010	0.0001	0.15		J
THMs Ratio		52	0.16	ND	0.02		1		J

Volatile Organic Compounds

Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Patumahoe WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Chlorine Residual	mg/L	44	1.24	0.49	0.72	0.02	5	0.6-1.0	J
Conductivity	mS/cm	1	29.5	29.5	29.5	0.5			
Iron (Total)	mg/L	4	0.098	0.092	0.095	0.002		0.2	
Manganese	mg/L	4	0.0300	0.0290	0.0298	0.0005	0.4	0.04	J
pH	pH Units	43	7.9	7.8	7.9	0.1		7.0-8.5	
Turbidity		43	1.0	0.2	0.2	0.10		2.5	
Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	44	ND	ND	ND	1	<1		J

Note: Patumahoe WTP was decommissioned on 6/12/2014. The Patumahoe community is now supplied by the Waikato WTP.

Snells/Algies WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	200	200	200	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	1	0.04	0.04	0.04	0.01			
Calcium	mg/L	1	3.7	3.7	3.7	0.01			
Calcium Hardness	mg/L	1	9	9	9	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	1	36.00	36.00	36.00	0.02		250	
Chlorine Residual	mg/L	126	1.66	0.78	1.15	0.02	5	0.6-1.0	J
Chlorine	mg/L	1	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	49.0	49.0	49.0	0.5			
Cyanide	mg/L	1	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	1	0.13	0.13	0.13	0.02	1.5		J
Iodide	mg/L	1	0.02	0.02	0.02	0.002			
Iron (Total)	mg/L	15	0.007	ND	0.003	0.002		0.2	
Magnesium	mg/L	1	0.3	0.3	0.3	0.001			
Magnesium Hardness	mg/L	1	1	1	1	0.0041			
Manganese	mg/L	15	0.0015	0.0010	0.0012	0.0005	0.4	0.04	J
pH	pH Units	125	8.4	8.3	8.4	0.1		7.0-8.5	
Potassium	mg/L	1	0.3	0.3	0.3	0.1			
Silicon	mg/L	1	48.0	48.0	48.0	0.1			
Sodium	mg/L	1	120.0	120.0	120.0	0.1		200	
Sulphate	mg/L	1	3.90	3.90	3.90	0.02		250	
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	360	360	360	15		1000	
Total Hardness	mg/L	1	11	11	11	0.029		200	
Total Organic Carbon TOC	mg/L	12	2.4	0.6	0.9	0.1			
Turbidity	NTU	125	0.3	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	126	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	1	ND	ND	ND	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	1	0.089	0.089	0.089	0.005			
Nitrate	mg/L as NO ₃	1	0.008	0.008	0.008	0.002	50		J
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.085	0.085	0.085	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		J
gamma-Chlordan	µg/L	1	ND	ND	ND	0.01			
Lindane	µg/L	1	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		J
Procymidone	µg/L	1	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		J
Atrazine	µg/L	1	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		J
Molinate	µg/L	1	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		J
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		J
Terbuthilazine	µg/L	1	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		J
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pirymiphos methyl	µg/L	1	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	1	ND	ND	ND	0.001	0.02		J
Arsenic	mg/L	1	ND	ND	ND	0.0001	0.01		J
Barium	mg/L	1	ND	ND	ND	0.0002	0.7		J
Boron	mg/L	1	0.160	0.160	0.160	0.005	1.4		J
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.05		J
Copper	mg/L	1	0.0006	0.0006	0.0006	0.0002	2		J
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		J
Lithium	mg/L	1	0.0240	0.0240	0.0240	0.0001			
Mercury	mg/L	1	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	1	ND	ND	ND	0.0003	0.07		J
Nickel	mg/L	1	ND	ND	ND	0.0001	0.08		J
Selenium	mg/L	1	ND	ND	ND	0.0005	0.01		J
Zinc	mg/L	1	ND	ND	ND	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.06		J
Bromoform	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.1		J
Chloroform	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.4		J
Dibromochloromethane	mg/L	1	0.0006	0.0006	0.0006	0.0001	0.15		J
THMs Ratio	0	1	0.10	0.10	0.10		1		J

Volatile Organic Compounds

Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylene	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Victoria Avenue (Waiuku) WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	130	130	130	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	33.0	33.0	33.0	0.01			
Calcium Hardness	mg/L	1	81	81	81	0.025			
Chlorate	mg/L	1	0.01	0.01	0.01	0.01	0.8		J
Chloride	mg/L	1	32.00	32.00	32.00	0.02		250	
Chlorine Residual	mg/L	123	1.23	0.42	0.82	0.02	5	0.6-1.0	J
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	35.0	35.0	35.0	0.5			
Cyanide	mg/L	1	ND	ND	ND	0.005	0.6		J
Iodide	mg/L	1	0.01	0.01	0.01	0.002			
Iron (Total)	mg/L	12	0.004	ND	0.002	0.002		0.2	
Magnesium	mg/L	1	9.8	9.8	9.8	0.001			
Magnesium Hardness	mg/L	1	40	40	40	0.0041			
Manganese	mg/L	12	0.0039	0.0015	0.0028	0.0005	0.4	0.04	J
pH	pH Units	124	8.1	7.8	8.0	0.1		7.0-8.5	
Potassium	mg/L	1	4.0	4.0	4.0	0.1			
Silicon	mg/L	1	55.0	55.0	55.0	0.1			
Sodium	mg/L	1	26.0	26.0	26.0	0.1		200	
Sulphate	mg/L	1	4.90	4.90	4.90	0.02		250	
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	270	270	270	15		1000	
Total Hardness	mg/L	1	120	120	120	0.029		200	
Turbidity	NTU	124	0.5	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	123	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	1	0.007	0.007	0.007	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	1	0.057	0.057	0.057	0.005			
Nitrate	mg/L as NO ₃	1	0.014	0.014	0.014	0.002	50		J
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.057	0.057	0.057	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		✓
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		✓
Lindane	µg/L	1	ND	ND	ND	0.01	2		✓
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		✓
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		✓
Procyimidone	µg/L	1	ND	ND	ND	0.2	700		✓
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	1	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		✓
Molinate	µg/L	1	ND	ND	ND	0.1	7		✓
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		✓
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		✓
Terbuthilazine	µg/L	1	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		✓
Organophosphorus pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pirymiphos methyl	µg/L	1	ND	ND	ND	0.2	100		✓

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	1	ND	ND	ND	0.001	0.02		✓
Arsenic	mg/L	1	0.0053	0.0053	0.0053	0.0001	0.01		✓
Barium	mg/L	1	0.0005	0.0005	0.0005	0.0002	0.7		✓
Boron	mg/L	1	0.028	0.028	0.028	0.005	1.4		✓
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		✓
Chromium	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.05		✓
Copper	mg/L	1	ND	ND	ND	0.0002	2		✓
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Lithium	mg/L	1	0.0100	0.0100	0.0100	0.0001			
Mercury	mg/L	1	ND	ND	ND	0.00005	0.007		✓
Molybdenum	mg/L	1	0.0003	0.0003	0.0003	0.0003	0.07		✓
Nickel	mg/L	1	0.0004	0.0004	0.0004	0.0001	0.08		✓
Selenium	mg/L	1	ND	ND	ND	0.0005	0.01		✓
Zinc	mg/L	1	0.009	0.009	0.009	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.06		✓
Bromoform	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.1		✓
Chloroform	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.4		✓
Dibromochloromethane	mg/L	1	0.0006	0.0006	0.0006	0.0001	0.15		✓
THMs Ratio			0.01	0.01	0.01		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓

Waiau Beach WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Chloride	mg/L	1	43.00	43.00	43.00	0.02		250	
Chlorine Residual	mg/L	55	1.58	0.47	1.07	0.02	5	0.6-1.0	J
Conductivity	mS/cm	1	50.5	50.5	50.5	0.5			
Manganese	mg/L	1	0.0480	0.0480	0.0480	0.0005	0.4	0.04	J
pH	pH Units	54	8.8	7.7	8.7	0.1		7.0-8.5	
Sulphate	mg/L	1	5.40	5.40	5.40	0.02		250	
Turbidity		54	1.4	0.7	1.0	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	55	ND	ND	ND	1	<1		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Boron	mg/L	5	1.30	0.62	0.80	0.005	1.4		J

Note: The Waiau Beach WTP was decommissioned on 4/12/2014. The Waiau Beach community is now supplied from Waikato WTP.

Waitakere WTP Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	13	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	13	ND	ND	ND	0.0001			
Bentazone	mg/L	13	ND	ND	ND	0.0001			
Dichlorprop	mg/L	13	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	13	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	13	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	13	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	13	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	52	0.170	0.011	0.023	0.002			
Alkalinity (Total)	mg/L CaCO ₃	52	34	9	16	1			
Aluminium	mg/L	52	0.03	0.02	0.02	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	13	0.04	ND	0.02	0.01			
Calcium	mg/L	52	13.0	8.7	10.5	0.01			
Calcium Hardness	mg/L	52	33	22	26	0.025			
Chlorate	mg/L	13	0.07	ND	0.01	0.01	0.8		J
Chloride	mg/L	13	25.00	16.00	22.31	0.02		250	
Chlorine Residual	mg/L	345	1.11	0.55	0.85	0.02	5	0.6-1.0	J
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	52	ND	ND	ND	5		10	
Conductivity	mS/cm	51	18.0	15.0	16.0	0.5			
Cyanide	mg/L	5	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	52	1.10	0.84	0.97	0.02	1.5		J
Iodide	mg/L	5	ND	ND	ND	0.002			
Iron (Total)	mg/L	52	0.021	0.01	0.012	0.002		0.2	
Magnesium	mg/L	52	3.100	2.100	2.523	0.001			
Magnesium Hardness	mg/L	52	13	9	10	0.0041			
Manganese	mg/L	52	0.0082	0.0011	0.0032	0.0005	0.4	0.04	J
pH	pH Units	345	8.4	6.9	7.9	0.1		7.0-8.5	
Potassium	mg/L	13	2.0	0.7	1.0	0.1			
Silicon	mg/L	13	27.0	9.8	14.4	0.1			
Sodium	mg/L	13	16.0	12.0	13.2	0.1		200	
Sulphate	mg/L	13	19.00	15.00	17.08	0.02		250	
Suspended Solids	mg/L	52	0.5	ND	0.1	0.2			
Total Hardness	mg/L	52	45	31	37	0.029		200	
Total Organic Carbon TOC	mg/L	52	2.2	0.9	1.4	0.1			
Turbidity	NTU	345	0.5	ND	0.2	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	345*	ND	ND	ND	1	<1		J

* In 2014/15 twenty *E. coli* samples were not collected due to the Waitakere WTP being shutdown for maintenance purposes.

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005
Ammonia	mg/L N	13	0.018	ND	0.002	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.016	0.000	0.007	0.005			
Nitrate	mg/L as NO ₃	13	0.560	ND	0.071	0.002	50		J
Nitrite	mg/L	13	0.01	ND	ND	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.2	ND	0.02	0.1			
Total Phosphorus	mg/L	13	0.020	ND	0.009	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	1	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		J
Procyimidone	µg/L	1	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		J
Atrazine	µg/L	1	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		J
Molinate	µg/L	1	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		J
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		J
Terbuthilazine	µg/L	1	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		J
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pirymiphos methyl	µg/L	1	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	ND	ND	ND	0.001	0.02		J
Arsenic	mg/L	13	0.0013	ND	0.0002	0.0001	0.01		J
Barium	mg/L	13	0.0099	0.0055	0.0066	0.0002	0.7		J
Boron	mg/L	13	0.110	ND	0.022	0.005	1.4		J
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	13	0.0006	0.0000	0.0003	0.0001	0.05		J
Copper	mg/L	13	0.0039	0.0010	0.0019	0.0002	2		J
Lead	mg/L	13	ND	ND	ND	0.0001	0.01		J
Lithium	mg/L	13	0.0330	0.0002	0.0043	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		J
Nickel	mg/L	13	0.0001	ND	ND	0.0001	0.08		J
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		J
Zinc	mg/L	13	0.004	0.001	0.002	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	53	0.0210	0.0023	0.0108	0.0001	0.06		J
Bromoform	mg/L	53	0.0041	0.0000	0.0018	0.0001	0.1		J
Chloroform	mg/L	53	0.0230	0.0043	0.0095	0.0001	0.4		J
Dibromochloromethane	mg/L	53	0.0180	0.0013	0.0101	0.0001	0.15		J
THMs Ratio		52	0.49	0.06	0.29		1		J

Volatile Organic Compounds

Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.03	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Waikato WTP Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	4	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	4	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	4	ND	ND	ND	0.0001			
Bentazone	mg/L	4	ND	ND	ND	0.0001			
Dichlorprop	mg/L	4	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	4	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	4	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	4	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	4	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
UV absorbance	Abs units	54	0.090	0.010	0.030	0.002			
Alkalinity (Total)	mg/L CaCO ₃	67	57	31	44	1			
Aluminium	mg/L	52	0.051	ND	0.034	0.005		0.1	
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	13	0.03	ND	0.014	0.01			
Calcium	mg/L	52	25.0	13.0	17.3	0.01			
Calcium Hardness	mg/L	52	63	34	43	0.025			
Chlorate	mg/L	13	0.18	0.09	0.13	0.01	0.8		J
Chloride	mg/L	13	22.00	19.00	20.69	0.02		250	
Chlorine Residual	mg/L	363*	1.33	0.49	0.90	0.02	5	0.6-1.0	J
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	53	5.0	ND	0.09	5		10	
Conductivity	mS/cm	53	26.0	18.0	23.0	0.5			
Cyanide	mg/L	4	ND	ND	ND	0.005	0.6		J
Fluoride	mg/L	53	1.10	0.77	0.91	0.02	1.5		J
Iodide	mg/L	14	0.013	ND	0.003	0.002			
Iron (Total)	mg/L	52	0.04	0.01	0.02	0.002		0.2	
Magnesium	mg/L	52	3.70	2.40	2.88	0.001			
Magnesium Hardness	mg/L	52	15	10	12	0.0041			
Manganese	mg/L	52	0.017	ND	0.005	0.0005	0.4	0.04	J
pH	pH Units	363*	8.7	6.4	7.8	0.1		7.0-8.5	
Potassium	mg/L	52	4.2	2.6	3.1	0.1			
Silicon	mg/L	13	38.0	28.0	32.4	0.1			
Sodium	mg/L	13	24.0	16.0	19.9	0.1		200	
Sulphate	mg/L	13	38.00	21.00	26.08	0.02		250	
Suspended Solids	mg/L	52	0.9	ND	0.3	0.2			
Total Hardness	mg/L	52	77	44	55	0.029		200	
Total Organic Carbon TOC	mg/L	52	2.8	0.6	1.4	0.1			
Turbidity	NTU	363*	1.1	0.050	0.3	0.1		2.5	

Microbiology									
Component Name	Units	Samples	Max	Min	Average	Limit	DWSNZ	DWSNZ	DWSNZ 2005
Cryptosporidium (Treated Water)	cysts/100 L	43	ND	ND	ND	1	<1		J
Giardia (Treated Water)	cysts/100mL	45	ND	ND	ND	1	<1		J
<i>E. coli</i>	MPN/100mL	363*	ND	ND	ND	1	<1		J

* *E. coli* sampling was not carried out on 1st and 8th August 2014 due to the treatment plant being shutdown for maintenance purposes.

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005
Ammonia	mg/L N	13	0.021	ND	0.003	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	13	0.015	ND	0.009	0.002			
Nitrate	mg/L	13	1.600	0.031	0.479	0.002	50		J
Nitrite	mg/L	13	0.008	ND	0.001	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.3	ND	0.1	0.1			
Total Phosphorus	mg/L	13	0.039	ND	0.015	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	13	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	13	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	13	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	13	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	13	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	13	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	13	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	13	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	13	ND	ND	ND	0.1			
Methoxychlor	µg/L	13	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	13	ND	ND	ND	0.2			
DDT + isomers	µg/L	13	ND	ND	ND	0.2	1		J
Procymidone	µg/L	13	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	13	ND	ND	ND	0.2	20		J
Atrazine	µg/L	13	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	13	ND	ND	ND	0.1	10		J
Molinate	µg/L	13	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	13	ND	ND	ND	0.2	20		J
Propanil	µg/L	13	ND	ND	ND	0.1			
Simazine	µg/L	13	ND	ND	ND	0.1	2		J
Terbutylazine	µg/L	13	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	13	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	13	ND	ND	ND	0.2	40		J
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	13	ND	ND	ND	0.2	100		J

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	13	0.001	ND	ND	0.001	0.02		J
Arsenic	mg/L	13	0.0042	0.0005	0.0018	0.0001	0.01		J
Barium	mg/L	13	0.0300	0.0160	0.0195	0.0002	0.7		J
Boron	mg/L	13	0.260	0.100	0.188	0.005	1.4		J
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		J
Chromium	mg/L	13	0.0006	ND	0.0003	0.0001	0.05		J
Copper	mg/L	13	0.0013	ND	0.0003	0.0002	2		J
Lead	mg/L	13	0.0002	ND	ND	0.0001	0.01		J
Lithium	mg/L	13	0.0840	0.0280	0.0590	0.0001			
Mercury	mg/L	52	ND	ND	ND	0.00005	0.007		J
Molybdenum	mg/L	13	0.0004	ND	0.0002	0.0003	0.07		J
Nickel	mg/L	13	0.0003	ND	0.0001	0.0001	0.08		J
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		J
Zinc	mg/L	13	0.005	ND	0.002	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	66	0.013	ND	0.004	0.0001	0.06		J
Bromoform	mg/L	66	0.001	ND	0.001	0.0001	0.1		J
Chloroform	mg/L	66	ND	ND	0.005	0.0001	0.4		J
Dibromochloromethane	mg/L	66	0.008	ND	0.003	0.0001	0.15		J
THMs Ratio		66	0.34	ND	0.10		1		J

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	13	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	13	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	13	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	13	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	13	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	13	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	13	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	13	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	13	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	13	0.0002	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	13	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	13	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	13	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		✓

Waiuku Road (Waiuku) WTP Treated Water

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	120	120	120	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		J
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	30.0	30.0	30.0	0.01			
Calcium Hardness	mg/L	1	75	75	75	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		J
Chloride	mg/L	1	31.00	31.00	31.00	0.02		250	
Chlorine Residual	mg/L	126	1.09	0.48	0.71	0.02	5	0.6-1.0	J
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	33.5	33.5	33.5	0.5			
Cyanide	mg/L	1	ND	ND	ND	0.005	0.6		J
Iodide	mg/L	1	0.005	0.005	0.005	0.002			
Iron (Total)	mg/L	12	0.026	ND	0.003	0.002		0.2	
Magnesium	mg/L	1	7.3	7.3	7.3	0.001			
Magnesium Hardness	mg/L	1	30	30	30	0.0041			
Manganese	mg/L	12	0.0011	0.0000	0.0006	0.0005	0.4	0.04	J
pH	pH Units	126	8.0	7.7	8.0	0.1		7.0-8.5	
Potassium	mg/L	1	4.8	4.8	4.8	0.1			
Silicon	mg/L	1	37.0	37.0	37.0	0.1			
Sodium	mg/L	1	28.0	28.0	28.0	0.1		200	
Sulphate	mg/L	1	4.80	4.80	4.80	0.02		250	
Suspended Solids	mg/L	1	0.00	0.00	0.00	0.2			
Total Dissolved Solids	mg/L	1	240	240	240	15		1000	
Total Hardness	mg/L	1	110	110	110	0.03		200	
Turbidity		126	0.3	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E.coli</i>	MPN/100mL	126	ND	ND	ND	1	<1		J

Nutrients									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Ammonia	mg/L N	1	ND	ND	ND	0.005		1.5	
Dissolved Reactive Phosphorus	mg/L	1	0.052	0.052	0.052	0.005			
Nitrate	mg/L as NO ₃	1	0.015	0.015	0.015	0.002	50		J
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		J
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.056	0.056	0.056	0.005			

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	1	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	1	ND	ND	ND	0.01	0.04		✓
Chlordane	µg/L	1	ND	ND	ND	0.01	0.2		✓
Lindane	µg/L	1	ND	ND	ND	0.01	2		✓
Heptachlor	µg/L	1	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	1	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	1	ND	ND	ND	0.1			
Methoxychlor	µg/L	1	ND	ND	ND	0.2	20		✓
Permethrin (cis + trans)	µg/L	1	ND	ND	ND	0.2			
DDT + isomers	µg/L	1	ND	ND	ND	0.2	1		✓
Procymidone	µg/L	1	ND	ND	ND	0.2	700		✓
Organonitrogen Herbicides									
Alachlor	µg/L	1	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	1	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	1	ND	ND	ND	0.1	10		✓
Molinate	µg/L	1	ND	ND	ND	0.1	7		✓
Pendimethalin	µg/L	1	ND	ND	ND	0.2	20		✓
Propanil	µg/L	1	ND	ND	ND	0.1			
Simazine	µg/L	1	ND	ND	ND	0.1	2		✓
Terbutylazine	µg/L	1	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	1	ND	ND	ND	0.2	30		✓
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	1	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	1	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	1	ND	ND	ND	0.2	100		✓

Trace Elements									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Antimony	mg/L	1	ND	ND	ND	0.001	0.02		✓
Arsenic	mg/L	1	0.0035	0.0035	0.0035	0.0001	0.01		✓
Barium	mg/L	1	ND	ND	ND	0.0002	0.7		✓
Boron	mg/L	1	0.027	0.027	0.027	0.005	1.4		✓
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		✓
Chromium	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.05		✓
Copper	mg/L	1	0.0008	0.0008	0.0008	0.0002	2		✓
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Lithium	mg/L	1	0.0140	0.0140	0.0140	0.0001			
Molybdenum	mg/L	1	ND	ND	ND	0.00005	0.07		✓
Mercury	mg/L	1	ND	ND	ND	0.0003	0.007		✓
Nickel	mg/L	1	ND	ND	ND	0.0001	0.08		✓
Selenium	mg/L	1	ND	ND	ND	0.0005	0.01		✓
Zinc	mg/L	1	0.002	0.002	0.002	0.001		1.5	

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	1	0.0010	0.0010	0.0010	0.0001	0.06		✓
Bromoform	mg/L	1	0.0017	0.0017	0.0017	0.0001	0.1		✓
Chloroform	mg/L	1	0.0006	0.0005	0.0006	0.0001	0.4		✓
Dibromochloromethane	mg/L	1	0.0025	0.0025	0.0025	0.0001	0.15		✓
THMs Ratio			0.05	0.05	0.05		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
m- & p-Xylene	mg/L	1	ND	ND	ND	0.0001	0.6		✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓

Warkworth WTP Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	2	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	2	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	2	ND	ND	ND	0.0001			
Bentazone	mg/L	2	ND	ND	ND	0.0001			
Dichlorprop	mg/L	2	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	2	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	2	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	2	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	2	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	16	16	16	1			
Aluminium	mg/L	28	0.150	0.011	0.025	0.005		0.1	
Calcium	mg/L	1	9.9	9.9	9.9	0.01			
Calcium Hardness	mg/L	1	25	25	25	0.025			
Chlorine Residual	mg/L	124	1.78	0.61	1.01	0.02	5	0.6-1.0	J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	21.0	21.0	21.0	0.5			
Fluoride	mg/L	1	ND	ND	ND	0.02	1.5		J
Iron (Total)	mg/L	17	0.030	0.013	0.017	0.002		0.2	
Magnesium	mg/L	1	3.3	3.3	3.3	0.001			
Magnesium Hardness	mg/L	1	14	14	14	0.0041			
Manganese	mg/L	17	0.0490	0.0045	0.0106	0.0005	0.4	0.04	J
pH	pH Units	123	8.0	7.1	7.4	0.1		7.0-8.5	
Sulphate	mg/L	1	29.00	29.00	29.00	0.02		250	
Suspended Solids	mg/L	1	0.2	0.2	0.2	0.2			
Total Dissolved Solids	mg/L	1	120	120	120	15		1000	
Total Hardness	mg/L	1	38	38	38	0.029		200	
Total Organic Carbon TOC	mg/L	53	3.4	1.0	1.7	0.1			
Turbidity	NTU	123	0.4	ND	0.1	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	124	ND	ND	ND	1	<1		J

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	3	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	3	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	3	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin		3	ND	ND	ND	0.01	0.04		J
Chlordane	µg/L	3	ND	ND	ND	0.01	0.2		J
Lindane	µg/L	3	ND	ND	ND	0.01	2		J
Heptachlor	µg/L	3	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	3	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	3	ND	ND	ND	0.1			
Methoxychlor	µg/L	3	ND	ND	ND	0.2	20		J
Permethrin (cis + trans)	µg/L	3	ND	ND	ND	0.2			
DDT + isomers	µg/L	3	ND	ND	ND	0.2	1		J
Procymidone	µg/L	3	ND	ND	ND	0.2	700		J
Organonitrogen Herbicides									
Alachlor	µg/L	3	ND	ND	ND	0.2	20		J
Atrazine	µg/L	3	ND	ND	ND	0.1	2		J
Metolachlor	µg/L	3	ND	ND	ND	0.1	10		J
Molinate	µg/L	3	ND	ND	ND	0.1	7		J
Pendimethalin	µg/L	3	ND	ND	ND	0.2	20		J
Propanil	µg/L	3	ND	ND	ND	0.1			
Simazine	µg/L	3	ND	ND	ND	0.1	2		J
Terbutylazine	µg/L	3	ND	ND	ND	0.2	8		J
Trifluralin	µg/L	3	ND	ND	ND	0.2	30		J
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	3	ND	ND	ND	0.2	40		J
Diazinon	µg/L	3	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	3	ND	ND	ND	0.2	100		J

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	12	0.0130	0.0030	0.0066	0.0001	0.06		J
Bromoform	mg/L	12	0.0026	0.0003	0.0016	0.0001	0.1		J
Chloroform	mg/L	12	0.0150	0.0029	0.0061	0.0001	0.4		J
Dibromochloromethane	mg/L	12	0.0120	0.0031	0.0074	0.0001	0.15		J
THMs Ratio		12	0.35	0.09	0.19		1		J

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	J
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		J
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	J
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		J
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	J
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	J
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	J
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		J
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	J
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		J
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		J

Wellsford WTP Treated Water

Acidic Herbicides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
2,4,5- trichlorophenoxyacetic acid (2,4,5-T)	mg/L	4	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-DB)	mg/L	4	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxy) butanoic acid (2,4-DB)	mg/L	4	ND	ND	ND	0.0001			
Bentazone	mg/L	4	ND	ND	ND	0.0001			
Dichlorprop	mg/L	4	ND	ND	ND	0.0001	0.1		J
MCPA	mg/L	4	ND	ND	ND	0.0001	0.002		J
Mecoprop	mg/L	4	ND	ND	ND	0.0001	0.01		J
Picloram	mg/L	4	ND	ND	ND	0.0001	0.2		J
Triclopyr	mg/L	4	ND	ND	ND	0.0001	0.1		J

Chemical and Physical									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Alkalinity (Total)	mg/L CaCO ₃	1	39	39	39	1			
Aluminium	mg/L	12	0.072	0.007	0.020	0.005		0.1	
Calcium	mg/L	1	11.0	11.0	11.0	0.01			
Calcium Hardness	mg/L	1	27	27	27	0.025			
Chlorine Residual	mg/L	125	1.75	0.42	1.08	0.02	5	0.6-1.0	J
Colour	Hazen Units	1	ND	ND	ND	5		10	
Conductivity	mS/cm	1	25.4	25.4	25.4	0.5			
Fluoride	mg/L	1	0.03	0.03	0.03	0.02	1.5		J
Iron (Total)	mg/L	1	0.007	0.007	0.007	0.002		0.2	
Magnesium	mg/L	1	3.4	3.4	3.4	0.001			
Magnesium Hardness	mg/L	1	14	14	14	0.0041			
Manganese	mg/L	1	0.0068	0.0068	0.0068	0.0005	0.4	0.04	J
pH	pH Units	124	8.4	7.2	7.3	0.1		7.0-8.5	
Sulphate	mg/L	1	31.00	31.00	31.00	0.02		250	
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	130	130	130	15		1000	
Total Hardness	mg/L	1	41	41	41	0.029		200	
Total Organic Carbon TOC	mg/L	51	3.7	1.3	2.1	0.1			
Turbidity	NTU	124	1.6	ND	0.2	0.1		2.5	

Microbiology									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
<i>E. coli</i>	MPN/100mL	123	ND	ND	ND	1	<1		J

Plasticizers									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
bis (2-ethylhexyl) adipate	µg/L	3	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	3	ND	ND	ND	2	9		J

Polycyclic Aromatic Hydrocarbons									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Benzo(a)pyrene	µg/L	3	ND	ND	ND	0.1	0.7		J

Semi Volatile Organic Compounds									
Organochlorine Pesticides									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Aldrin + Dieldrin	µg/L	3	ND	ND	ND	0.01	0.04		✓
Chlordane	µg/L	3	ND	ND	ND	0.01	0.2		✓
Lindane	µg/L	3	ND	ND	ND	0.01	2		✓
Heptachlor	µg/L	3	ND	ND	ND	0.01			
Heptachlor epoxide	µg/L	3	ND	ND	ND	0.01			
Hexachlorobenzene	µg/L	3	ND	ND	ND	0.1			
Methoxychlor	µg/L	3	ND	ND	ND	0.2	20		✓
Permethrin (cis + trans)	µg/L	3	ND	ND	ND	0.2			
DDT + isomers	µg/L	3	ND	ND	ND	0.2	1		✓
Procymidone	µg/L	3	ND	ND	ND	0.2	700		✓
Organonitrogen Herbicides									
Alachlor	µg/L	3	ND	ND	ND	0.2	20		✓
Atrazine	µg/L	3	ND	ND	ND	0.1	2		✓
Metolachlor	µg/L	3	ND	ND	ND	0.1	10		✓
Molinate	µg/L	3	ND	ND	ND	0.1	7		✓
Pendimethalin	µg/L	3	ND	ND	ND	0.2	20		✓
Propanil	µg/L	3	ND	ND	ND	0.1			
Simazine	µg/L	3	ND	ND	ND	0.1	2		✓
Terbutylazine	µg/L	3	ND	ND	ND	0.2	8		✓
Trifluralin	µg/L	3	ND	ND	ND	0.2	30		✓
Organophosphorus Pesticides									
Chlorpyrifos	µg/L	3	ND	ND	ND	0.2	40		✓
Diazinon	µg/L	3	ND	ND	ND	0.1			
Pyrimiphos methyl	µg/L	3	ND	ND	ND	0.2	100		✓

Trihalomethanes									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
Bromodichloromethane	mg/L	12	0.0210	0.0041	0.0114	0.0001	0.06		✓
Bromoform	mg/L	12	0.0021	ND	0.0010	0.0001	0.1		✓
Chloroform	mg/L	12	0.0260	0.0050	0.0129	0.0001	0.4		✓
Dibromochloromethane	mg/L	12	0.0180	0.0024	0.0086	0.0001	0.15		✓
THMs Ratio		12	0.54	0.10	0.29		1		✓

Volatile Organic Compounds									
Component Name	Units	Number of Samples	Max	Min	Average	Detection Limit	MAV DWSNZ	GV DWSNZ	Compliance DWSNZ 2005 (Revised 2008)
1,1,1-trichloroethane	mg/L	1	ND	ND	ND	0.0001			
1,2,3-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2,4-trichlorobenzene	mg/L	1	ND	ND	ND	0.0001			
1,2-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	1.5	0.001	✓
1,2-dichloroethane	mg/L	1	ND	ND	ND	0.0001	0.03		✓
1,4-dichlorobenzene	mg/L	1	ND	ND	ND	0.0001	0.4	0.0003	✓
Benzene	mg/L	1	ND	ND	ND	0.0001	0.01		✓
Carbon tetrachloride	mg/L	1	ND	ND	ND	0.0001			
Ethylbenzene	mg/L	1	ND	ND	ND	0.0001	0.3	0.002	✓
Xylenes (total)	mg/L	1	ND	ND	ND	0.0001	0.6	0.02	✓
Styrene	mg/L	1	ND	ND	ND	0.0001	0.03	0.004	✓
Tetrachloroethene	mg/L	1	ND	ND	ND	0.0001	0.05		✓
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	✓
1,2-dichloroethene (cis + trans)	mg/L	1	ND	ND	ND	0.0001	0.06		✓
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		✓