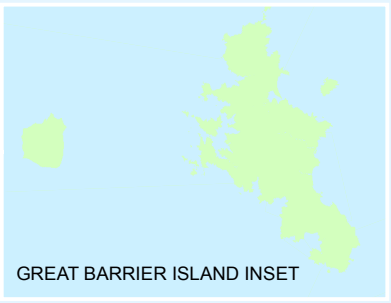
AUCKLAND SOURCE AND WATER TREATMENT PLANT LOCATIONS



Wellsford
Rodney
Warkworth
Snells/
Algies
Hibiscus and Bays
Helensville
Waiheke
Upper Harbour
Devonport - Takapuna
Kaipatiki
Muriwai
Henderson - Massey
Waitemata
Orakei
Albert - Eden
Waitakere
Whau
Maungakiekie - Tamaki
Howick
Puketapapa
Onehunga
Huia
Waitakere Ranges
Mangere - Otahuhu
Otara - Papatoetoe
Huia
Village
Manurewa
Papakura
Ardmore
Franklin
Hunua Ranges
Pukekohe
Bombay
Cornwall Rd
Waiuku Rd
Victoria
Ave
Waikato

WATER TREATMENT PLANT
SPRING
DAM
BULK WATER SUPPLY NETWORK

PR14057_01B

PERFORMANCE MEASURE	2013/14 TARGET	2013/14 RESULT	2014/15 TARGET
Percentage compliance with Ministry of Health drinking water standards for all water treatment plants	100%	100%	100%
Percentage of metropolitan water treatment plants achieving 'A' Grade	100%	100%	100%
Percentage of metropolitan water supply reticulation zones achieving 'a' Grade	100%	100%	100%
Percentage of non-metropolitan water treatment plants achieving 'A' Grade	45%	50% (100% of target achieved. 7 out of 14 non-metropolitan water treatment plants achieved an 'A' Grade)	50%
Percentage of non-metropolitan water supply reticulation zones achieving 'a' Grade	25%	64% (100% of target achieved. 7 out of 11 non-metropolitan water supply reticulation zones achieved an 'a' Grade)	50%

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-dichlorophenoxyl) butanoic (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 absorption	Abs units	1	0.010	0.010	0.010	0.002			
Alkalinity (Total)	mg/L CaCO3	53	20.00	15.00	17.53	1			
Aluminium	mg/L	53	0.03	0.02	0.03	0.005		0.1	√
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	13	0.03	ND	0.01	0.01			
Calcium	mg/L	53	8.9	6.6	7.7	0.01			
Calcium Hardness	mg/L	53	22	17	19	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	13	15.00	12.00	13.00	0.02		250	√
Chlorine Residual	mg/L	365	1.56	0.98	1.24	0.02	5	0.6-1.0	√
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	53	ND	ND	ND	5		10	√
Conductivity	mS/cm	14	11.2	10.4	10.8	0.5			
Fluoride	mg/L	53	1.10	0.74	0.91	0.02	1.5		√
Iodide	mg/L	13	0.01	ND	0.00	0.002			
Iron (Total)	mg/L	53	0.019	0.010	0.014	0.002		0.2	√
Magnesium	mg/L	53	1.8	1.3	1.5	0.001			
Magnesium Hardness	mg/L	53	8	6	6	0.0041			
Manganese	mg/L	53	0.0890	0.0016	0.0109	0.0005	0.4	0.04	√
pH	pH Units	365	8.8	6.8	7.9	0.1		7.0-8.5	
Potassium	mg/L	13	1.1	0.9	1.0	0.1			
Silicon	mg/L	13	16.0	12.0	14.2	0.1			
Sodium	mg/L	13	9.3	7.6	8.5	0.1		200	√
Sulphate	mg/L	13	12.00	7.40	8.76	0.02		250	√
Suspended Solids	mg/L	53	0.6	ND	0.1	0.2			
Total Hardness	mg/L	53	29	22	25	0.029		200	√
Total Organic Carbon TOC	mg/L	14	1.1	0.7	1.0	0.1			
Turbidity	NTU	365	0.9	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 (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		√
Giardia (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		√
E.coli	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	0.025	ND	0.004	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	13	0.008	ND	0.005	0.005			
Nitrate Nitrogen	mg/L	13	0.071	0.023	0.049	0.002	50		√
Nitrite Nitrogen	mg/L	13	0.003	ND	ND	0.002	0.2		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.1	ND	ND	0.1			
Total Phosphorus	mg/L	13	0.010	ND	0.006	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 Pesticides									
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		√
Terbuthilazine	µg/L	13	ND	ND	ND	0.2	8		√
Trifularin	µg/L	13	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	µg/L	13	ND	ND	ND	0.2	40		√
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pirymiphos 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	0.0002	0.0002	0.0001	0.01		√
Barium	mg/L	13	0.0089	0.0055	0.0068	0.0002	0.7		√
Boron	mg/L	13	0.017	0.006	0.012	0.005	1.4		√
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	13	0.0004	0.0002	0.0003	0.0001	0.05		√
Copper	mg/L	13	0.0012	0.0000	0.0007	0.0002	2		√
Lead	mg/L	13	0.0002	ND	ND	0.0001	0.01		√
Lithium	mg/L	13	0.0008	0.0002	0.0006	0.0001			
Mercury	mg/L	13	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	0.0001	0.0001	0.08		√
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		√
Zinc	mg/L	13	0.002	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	53	0.0210	0.0033	0.0062	0.0001	0.06		√
Bromoform	mg/L	53	0.0038	0.0004	0.0009	0.0001	0.1		√
Chloroform	mg/L	53	0.0280	0.0038	0.0067	0.0001	0.4		√
Dibromochlorometane	mg/L	53	0.0180	0.0022	0.0057	0.0001	0.15		√
THMs Ratio		53	0.56	0.09	0.17		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	√
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	ND	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			
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		√

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

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-dichlorophenoxyl) butanoic (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 absorption	Abs units	1	0.015	0.015	0.015	0.002			
Alkalinity (Total)	mg/L CaCO3	53	20.00	15.00	17.70	1			
Aluminium	mg/L	53	0.031	0.020	0.024	0.005		0.1	√
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	13	0.02	ND	0.01	0.01			
Calcium	mg/L	53	8.8	6.8	7.7	0.01			
Calcium Hardness	mg/L	53	22	17	19	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	13	15.00	12.00	12.92	0.02		250	√
Chlorine Residual	mg/L	365	1.34	0.29	1.14	0.02	5	0.6-1.00	√
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	53	ND	ND	ND	5		10	√
Conductivity	mS/cm	14	11.3	10.2	10.7	0.5			
Fluoride	mg/L	53	1.20	0.73	0.89	0.02	1.5		√
Iodide	mg/L	13	0.01	ND	ND	0.002			
Iron (Total)	mg/L	53	0.02	0.01	0.01	0.002		0.2	√
Magnesium	mg/L	53	1.8	1.3	1.5	0.001			
Magnesium Hardness	mg/L	53	7	6	6	0.0041			
Manganese	mg/L	53	0.01	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	365	8.7	7.1	7.9	0.1		7.0-8.5	
Potassium	mg/L	13	1.1	0.9	1.0	0.1			
Silicon	mg/L	13	17.0	12.0	14.1	0.1			
Sodium	mg/L	13	9.3	7.7	8.4	0.1		200	√
Sulphate	mg/L	13	12.00	7.00	8.64	0.02		250	√
Suspended Solids	mg/L	53	1.40	ND	0.06	0.20			
Total Hardness	mg/L	53	28	23	25	0.029		200	√
Total Organic Carbon TOC	mg/L	14	1.3	0.6	1.0	0.1			
Turbidity	NTU	365	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)**
Cryptosporidium (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		√
Giardia (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		√
E.coli	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	0.043	ND	0.009	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	13	0.008	ND	0.005	0.005			
Nitrate Nitrogen	mg/L	13	0.074	0.025	0.050	0.002	50		√
Nitrite Nitrogen	mg/L	13	ND	ND	ND	0.002	0.2		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	ND	ND	ND	0.1			
Total Phosphorus	mg/L	13	0.01	ND	0.01	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 Pesticides									
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		√
Terbuthilazine	µg/L	13	ND	ND	ND	0.2	8		√
Trifularin	µg/L	13	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	µg/L	13	ND	ND	ND	0.2	40		√
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pirymiphos 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	0.0004	0.0001	0.01		√
Barium	mg/L	13	0.0084	0.0051	0.0065	0.0002	0.7		√
Boron	mg/L	13	0.014	0.006	0.011	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	0.0024	ND	0.0004	0.0002	2		√
Lead	mg/L	13	0.0001	ND	ND	0.0001	0.01		√
Lithium	mg/L	13	0.0007	0.0002	0.0005	0.0001			
Mercury	mg/L	13	ND	ND	ND	0.00005	0.007		√
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		√
Nickel	mg/L	13	ND	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	53	0.0190	0.0056	0.0087	0.0001	0.06		√
Bromoform	mg/L	53	0.0039	0.0005	0.0010	0.0001	0.1		√
Chloroform	mg/L	53	0.0260	0.0049	0.0088	0.0001	0.4		√
Dibromochlorometane	mg/L	53	0.0190	0.0034	0.0074	0.0001	0.15		√
THMs Ratio		53	0.52	0.15	0.23		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	√
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	ND	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			
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		√

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

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-dichlorophenoxyl) butanoic (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 absorption	Abs units	1	0.015	0.015	0.015	0.002			
Alkalinity (Total)	mg/L CaCO3	53	20	15	18	1			
Aluminium	mg/L	53	0.074	0.020	0.028	0.005		0.1	√
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	13	0.02	ND	0.01	0.01			
Calcium	mg/L	53	9.8	6.7	7.7	0.01			
Calcium Hardness	mg/L	53	24	17	19	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	13	15.00	12.00	13.00	0.02		250	√
Chlorine Residual	mg/L	365	1.36	0.28	1.12	0.02	5	0.6-1.00	√
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	53	ND	ND	ND	5		10	√
Conductivity	mS/cm	14	11.3	10.2	10.8	0.5			
Fluoride	mg/L	53	1.20	0.74	0.90	0.02	1.5		√
Iodide	mg/L	13	0.013	ND	0.004	0.002			
Iron (Total)	mg/L	53	0.130	0.009	0.022	0.002		0.2	√
Magnesium	mg/L	53	1.9	1.3	1.5	0.001			
Magnesium Hardness	mg/L	53	8	6	6	0.0041			
Manganese	mg/L	53	0.0110	0.0014	0.0041	0.0005	0.4	0.04	√
pH	pH Units	365	8.6	7.2	7.9	0.1		7.0-8.5	
Potassium	mg/L	13	1.0	0.9	1.0	0.1			
Silicon	mg/L	13	16.0	12.0	14.0	0.1			
Sodium	mg/L	13	9.2	7.8	8.4	0.1		200	√
Sulphate	mg/L	13	12.00	6.90	8.62	0.02		250	√
Suspended Solids	mg/L	53	2.7	ND	0.3	0.2			
Total Hardness	mg/L	53	32	23	25	0.029		200	√
Total Organic Carbon TOC	mg/L	14	1.1	0.6	0.9	0.1			
Turbidity	NTU	365	1.2	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)**
Cryptosporidium (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		√
Giardia (Treated Water)	cysts/100 L	5	ND	ND	ND	1	<1		√
E.coli	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	0.057	ND	0.007	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	13	0.008	ND	0.006	0.005			
Nitrate Nitrogen	mg/L	13	0.074	0.024	0.049	0.002	50		√
Nitrite Nitrogen	mg/L	13	ND	ND	ND	0.002	0.2		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	ND	ND	ND	0.1			
Total Phosphorus	mg/L	13	0.014	ND	0.006	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		√
Llindane	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 Pesticides									
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		√
Terbuthilazine	µg/L	13	ND	ND	ND	0.2	8		√
Trifularin	µg/L	13	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	µg/L	13	ND	ND	ND	0.2	40		√
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pirymiphos 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	0.0086	0.0053	0.0064	0.0002	0.7		√
Boron	mg/L	13	0.013	0.006	0.010	0.005	1.4		√
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	13	0.0012	0.0002	0.0004	0.0001	0.05		√
Copper	mg/L	13	0.0005	ND	0.0002	0.0002	2		√
Lead	mg/L	13	0.0001	ND	ND	0.0001	0.01		√
Lithium	mg/L	13	0.0008	0.0002	0.0005	0.0001			
Mercury	mg/L	13	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	ND	0.0001	0.08		√
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		√
Zinc	mg/L	13	0.002	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	0.0290	0.0056	0.0093	0.0001	0.06		√
Bromoform	mg/L	52	0.0033	0.0006	0.0010	0.0001	0.1		√
Chloroform	mg/L	52	0.0280	0.0050	0.0091	0.0001	0.4		√
Dibromochlorometane	mg/L	52	0.0250	0.0041	0.0079	0.0001	0.15		√
THMs Ratio		52	0.75	0.15	0.24		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	√
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	ND	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			
Trichloroethene	mg/L	13	ND	ND	ND	0.0001	0.02		√

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

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 CaCO3	1	37	37	37	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	12.0	12.0	12.0	0.01			
Calcium Hardness	mg/L	1	30	30	30	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	64.00	64.00	64.00	0.02		250	√
Chlorine Residual	mg/L	121	1.18	0.41	0.91	0.02	5	0.2-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	3	43.1	34.2	37.3	0.5			
Fluoride	mg/L	1	0.05	0.05	0.05	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	1	0.004	0.004	0.004	0.002		0.2	√
Magnesium	mg/L	1	13.0	13.0	13.0	0.001			
Magnesium Hardness	mg/L	1	52	52	52	0.0041			
Manganese	mg/L	1	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	121	8.1	6.8	7.5	0.1		7.0-8.5	
Potassium	mg/L	1	1.5	1.5	1.5	0.1			
Silicon	mg/L	1	42.0	42.0	42.0	0.1			
Sodium	mg/L	7	35.0	26.0	32.6	0.1		200	√
Sulphate	mg/L	1	1.00	1.00	1.00	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	250	250	250	15		1000	√
Total Hardness	mg/L	1	82	82	82	0.029		200	√
Total Organic Carbon TOC	mg/L	12	0.8	ND	0.3	0.1			
Turbidity	NTU	121	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)**
E.coli	MPN/100mL	121	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	1	0.005	0.005	0.005	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.017	0.017	0.017	0.005			
Nitrate	mg/L	53	6.600	1.800	3.004	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.4	0.4	0.4	0.1			
Total Phosphorus	mg/L	1	0.017	0.017	0.017	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	ND	ND	ND	0.0001	0.01		√
Barium	mg/L	1	ND	ND	ND	0.0002	0.7		√
Boron	mg/L	1	ND	ND	ND	0.005	1.4		√
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	1	0.0006	0.0006	0.0006	0.0001	0.05		√
Copper	mg/L	1	0.0320	0.0320	0.0320	0.0002	2		√
Lead	mg/L	1	0.0025	0.0025	0.0025	0.0001	0.01		√
Lithium	mg/L	1	0.0003	ND	ND	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	0.031	0.031	0.031	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	0.0011	ND	0.0001	0.0001	0.06		√
Bromoform	mg/L	12	0.0002	ND	ND	0.0001	0.1		√
Chloroform	mg/L	12	0.0009	ND	0.0002	0.0001	0.4		√
Dibromochlorometane	mg/L	12	0.0012	ND	0.0002	0.0001	0.15		√
THMs Ratio		12	0.03	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	√
trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		√

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

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)**
Alkalinity (Total)	mg/L CaCO3	1	200	200	200	1			
Aluminium	mg/L	1	0.008	0.008	0.008	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.01	0.01	0.01	0.01			
Calcium	mg/L	1	6.0	6.0	6.0	0.01			
Calcium Hardness	mg/L	1	15	15	15	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	51.00	51.00	51.00	0.02		250	√
Chlorine Residual	mg/L	122	0.98	0.14	0.70	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	56.2	56.2	56.2	0.5			
Fluoride	mg/L	24	0.77	0.42	0.53	0.02	1.5		√
Iodide	mg/L	1	0.006	0.006	0.006	0.002			
Iron (Total)	mg/L	12	0.320	0.110	0.182	0.002		0.2	√
Magnesium	mg/L	1	2.5	2.5	2.5	0.001			
Magnesium Hardness	mg/L	1	10	10	10	0.0041			
Manganese	mg/L	12	0.0420	0.0170	0.0242	0.0005	0.4	0.04	√
pH	pH Units	122	8.6	7.5	7.9	0.1		7.0-8.5	
Potassium	mg/L	1	2.4	2.4	2.4	0.1			
Silicon	mg/L	1	23.0	23.0	23.0	0.1			
Sodium	mg/L	1	110.0	110.0	110.0	0.1		200	√
Sulphate	mg/L	1	4.90	4.90	4.90	0.02		250	√
Suspended Solids	mg/L	1	0.4	0.4	0.4	0.2			
Total Dissolved Solids	mg/L	1	350	350	350	15		1000	√
Total Hardness	mg/L	1	25	25	25	0.029		200	√
Turbidity	mg/L	122	3.00	0.10	0.80	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)**
E.coli	MPN/100mL	122	ND	ND	ND	1	<1/100mL		√

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	0.006	0.006	0.006	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.065	0.065	0.065	0.005			
Nitrate	mg/L	1	0.016	0.016	0.016	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.066	0.066	0.066	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	0.0002	ND	ND	0.0001	0.01		√
Barium	mg/L	1	0.0100	0.0100	0.0100	0.0002	0.7		√
Boron	mg/L	26	5.800	1.100	1.450	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	0.0033	0.0033	0.0033	0.0002	2		√
Lead	mg/L	1	0.0005	0.0005	0.0005	0.0001	0.01		√
Lithium	mg/L	1	0.0930	0.0930	0.0930	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	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	0.0072	0.0072	0.0072	0.0001	0.06		√
Bromoform	mg/L	1	0.0095	0.0095	0.0095	0.0001	0.1		√
Chloroform	mg/L	1	0.0033	0.0033	0.0033	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0160	0.0160	0.0160	0.0001	0.15		√
THMs Ratio		1	0.33	0.33	0.33		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	√
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	√
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		√

ND: All test reslts shown in this report as ND (not detected) are lower than the laboratory's detection limits for the tested parameters.
Note: Clarks Beach WTP was decommissioned 3/12/2014. The Clarks Beach community is now supplied by Waikato WTP.

Cornwall Road 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 CaCO3	1	130	130	130	1			
Aluminium	mg/L	5	ND	ND	ND	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	5	33.0	31.0	32.6	0.01			
Calcium Hardness	mg/L	1	81	81	81	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	33.00	33.00	33.00	0.02		250	√
Chlorine Residual	mg/L	128	1.30	0.60	0.80	0.02	5	0.6-1.0	
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	37.00	37.00	37.00	0.5			
Fluoride	mg/L	1	0.05	0.05	0.05	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	16	0.040	ND	ND	0.002		0.2	√
Magnesium	mg/L	5	11.0	9.5	10.3	0.001			√
Magnesium Hardness	mg/L	1	44	44	44	0.0041			
Manganese	mg/L	16	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	128	8.2	8.0	8.1	0.1		7.0-8.5	√
Potassium	mg/L	5	3.4	3.3	3.4	0.1			
Silicon	mg/L	1	52.0	52.0	52.0	0.1			
Sodium	mg/L	5	22.0	21.0	21.4	0.1		200	√
Sulphate	mg/L	1	5.50	5.50	5.50	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	250	250	250	15		1000	√
Total Hardness	mg/L	1	130	130	130	0.029		200	√
Turbidity	NTU	128	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)**
E.coli	MPN/100mL	129	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	1	0.005	0.005	0.005	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.041	0.041	0.041	0.005			
Nitrate	mg/L	1	0.024	0.024	0.024	0.002	50		√
Nitrite	mg/L	1	0.000	0.000	0.000	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.051	0.051	0.051	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		√

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		√

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			
pp-DDT	µg/L	1	ND	ND	ND	0.2	1		√
Procymidone	µg/L	1	ND	ND	ND	0.2	700		√
Organonitrogen Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	5	ND	ND	ND	0.001	0.02		√
Arsenic	mg/L	5	0.0043	0.0040	0.0042	0.0001	0.01		√
Barium	mg/L	5	0.0006	0.0004	0.0005	0.0002	0.7		√
Boron	mg/L	5	0.0260	0.0130	0.0210	0.005	1.4		√
Cadmium	mg/L	5	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	5	0.0007	0.0005	0.0006	0.0001	0.05		√
Copper	mg/L	5	0.0006	0.0003	0.0004	0.0002	2		√
Lead	mg/L	5	0.0002	0.0000	0.0000	0.0001	0.01		√
Lithium	mg/L	5	0.0110	0.0087	0.0097	0.0001			
Mercury	mg/L	5	ND	ND	ND	0.00005	0.007		√
Molybdenum	mg/L	5	ND	ND	ND	0.0003	0.07		√
Nickel	mg/L	5	ND	ND	ND	0.0001	0.08		√
Selenium	mg/L	5	ND	ND	ND	0.0005	0.01		√
Zinc	mg/L	5	1.200	ND	0.240	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	0.0002	0.0002	0.0002	0.0001	0.06		√
Bromoform	mg/L	1	0.0003	0.0003	0.0003	0.0001	0.1		√
Chloroform	mg/L	1	ND	ND	ND	0.0001	0.4		√
Dibromochlorometane	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	√
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	√
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	√
Trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		√

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

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)**
Alkalinity (Total)	mg/L CaCO3	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		√
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	19.0	19.0	19.0	0.01			
Calcium Hardness	mg/L	1	48	48	48	0.025			
Chlorate	mg/L	1	0.42	0.42	0.42	0.01	0.8		√
Chloride	mg/L	1	36.00	36.00	36.00	0.02		250	√
Chlorine Residual	mg/L	121	1.09	0.41	0.71	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	38.9	38.9	38.9	0.5			
Fluoride	mg/L	1	0.06	0.06	0.06	0.02	1.5		√
Iodide	mg/L	1	0.004	0.004	0.004	0.002			
Iron (Total)	mg/L	12	0.032	0.010	0.015	0.002		0.2	√
Magnesium	mg/L	1	7.7	7.7	7.7	0.001			
Magnesium Hardness	mg/L	1	32	32	32	0.0041			
Manganese	mg/L	12	0.0040	0.0020	0.0040	0.0005	0.4	0.04	√
pH	pH Units	121	8.1	7.1	8.1	0.1		7.0-8.5	√
Potassium	mg/L	1	5.5	5.5	5.5	0.1			
Silicon	mg/L	1	38.0	38.0	38.0	0.1			
Sodium	mg/L	1	42.0	42.0	42.0	0.1		200	√
Sulphate	mg/L	1	8.80	8.80	8.80	0.02		250	√
Suspended Solids	mg/L	1	0.2	0.2	0.2	0.2			
Total Dissolved Solids	mg/L	1	250	250	250	15		1000	√
Total Hardness	mg/L	1	80	80	80	0.03		200	√
Turbidity	NTU	121	0.50	ND	0.06	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)**
E.coli	MPN/100mL	121	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	1	0.006	0.006	0.006	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.066	0.066	0.066	0.005			
Nitrate	mg/L	1	0.006	0.006	0.006	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.066	0.066	0.066	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	ND	ND	ND	0.0001	0.01		√
Barium	mg/L	1	0.0280	0.0280	0.0280	0.0002	0.7		√
Boron	mg/L	1	0.026	0.026	0.026	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	0.0025	0.0025	0.0025	0.0002	2		√
Lead	mg/L	1	0.0005	0.0005	0.0005	0.0001	0.01		√
Lithium	mg/L	1	0.0180	0.0180	0.0180	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	0.012	0.012	0.012	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	0.0022	0.0022	0.0022	0.0001	0.06		√
Bromoform	mg/L	1	0.0067	0.0067	0.0067	0.0001	0.1		√
Chloroform	mg/L	1	0.0005	0.0005	0.0005	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0065	0.0065	0.0065	0.0001	0.15		√
THMs Ratio		1	0.15	0.15	0.15		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		√

ND: All test reslts shown in this report as ND (not detected) are lower than the laboratory's detection limits for the tested parameters.
Note: Glenbrook WTP was decommissioned 9/12/2014. The Glenbrook community is now supplied by Waikato WTP.

Helensville 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 CaCO3	12	94	45	67	1			
Aluminium	mg/L	12	0.020	0.012	0.015	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	11.0	11.0	11.0	0.01			
Calcium Hardness	mg/L	1	27	27	27	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	54.00	54.00	54.00	0.02		250	√
Chlorine Residual	mg/L	124	1.61	0.83	1.20	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	12	ND	ND	ND	5		10	√
Conductivity	mS/cm	12	47.0	33.0	41.8	0.5			
Fluoride	mg/L	12	0.06	0.02	0.04	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	1	ND	ND	ND	0.002		0.2	√
Magnesium	mg/L	1	9.0	9.0	9.0	0.001			
Magnesium Hardness	mg/L	1	37	37	37	0.0041			
Manganese	mg/L	1	0.0017	0.0017	0.0017	0.0005	0.4	0.04	√
pH	pH Units	124	8.5	7.1	7.4	0.1		7.0-8.5	√
Potassium	mg/L	1	3.1	3.1	3.1	0.1			
Silicon	mg/L	1	20.0	20.0	20.0	0.1			
Sodium	mg/L	1	37.0	37.0	37.0	0.1		200	√
Sulphate	mg/L	12	53.00	30.00	40.60	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	1	64	64	64	0.029		200	√
Total Organic Carbon TOC	mg/L	12	2.9	1.9	2.2	0.1			
Turbidity	NTU	124	3.3	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)**
E.coli	MPN/100mL	124	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	1	0.008	0.008	0.008	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.005	0.005	0.005	0.005			
Nitrate	mg/L	1	0.086	0.086	0.086	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.130	0.130	0.130	0.1			
Total Phosphorus	mg/L	1	0.005	0.005	0.005	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		√

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		√

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		√
Chlordan	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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	0.0002	0.0002	0.0002	0.0001	0.01		√
Barium	mg/L	1	0.0200	0.0200	0.0200	0.0002	0.7		√
Boron	mg/L	1	0.020	0.020	0.020	0.005	1.4		√
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	1	0.0006	0.0006	0.0006	0.0001	0.05		√
Copper	mg/L	1	0.0005	0.0005	0.0005	0.0002	2		√
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		√
Lithium	mg/L	1	0.0019	0.0020	0.0020	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	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	0.005	0.005	0.005	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	15	0.0300	0.0100	0.0100	0.0001	0.06		√
Bromoform	mg/L	15	0.0100	ND	0.0100	0.0001	0.1		√
Chloroform	mg/L	15	0.0200	ND	0.0100	0.0001	0.4		√
Dibromochlorometane	mg/L	15	0.0400	0.0100	0.0200	0.0001	0.15		√
THMs Ratio		15	0.81	0.23	0.43		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		√

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

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-dichlorophenoxyl) butanoic (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 absorption	Abs units	52	0.025	0.004	0.017	0.002			
Alkalinity (Total)	mg/L CaCO3	53	19	14	17	1			
Aluminium	mg/L	53	0.590	0.021	0.037	0.005		0.1	√
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	13	0.04	ND	0.01	0.01			
Calcium	mg/L	53	11.0	3.6	9.6	0.01			
Calcium Hardness	mg/L	53	28	9	24	0.025			
Chlorate	mg/L	13	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	13	22.00	19.00	20.92	0.02		250	√
Chlorine Residual	mg/L	366	1.44	0.63	0.89	0.02	5	0.6-1.0	√
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	53	ND	ND	ND	5		10	√
Conductivity	mS/cm	53	16.3	13.5	15.0	0.5			
Fluoride	mg/L	53	1.10	0.16	0.90	0.02	1.5		√
Iodide	mg/L	4	0.005	ND	0.003	0.002			
Iron (Total)	mg/L	53	0.480	0.007	0.023	0.002		0.2	√
Magnesium	mg/L	53	3.0	2.1	2.5	0.001			
Magnesium Hardness	mg/L	53	12	9	10	0.0041			
Manganese	mg/L	53	0.0200	0.0013	0.0034	0.0005	0.4	0.04	√
pH	pH Units	366	8.4	7.1	7.9	0.1		7.0-8.5	√
Potassium	mg/L	13	1.0	0.7	0.8	0.1			
Silicon	mg/L	13	17.0	12.0	14.2	0.1			
Sodium	mg/L	13	13.0	11.0	12.0	0.1		200	√
Sulphate	mg/L	13	18.00	13.00	15.85	0.02		250	√
Suspended Solids	mg/L	53	0.6	ND	0.1	0.2			
Total Hardness	mg/L	53	39	19	35	0.029		200	√
Total Organic Carbon TOC	mg/L	53	2.1	0.7	1.3	0.1			
Turbidity	NTU	366	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)**
E.coli	MPN/100mL	366	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	0.032	ND	0.005	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	13	0.008	ND	0.006	0.005			
Nitrate	mg/L	13	0.07	0.02	0.04	0.002	50		√
Nitrite	mg/L	13	0.002	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.1	ND	0.01	0.1			
Total Phosphorus	mg/L	13	0.044	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	1	ND	ND	ND	2			
bis (2-ethylhexyl) phthalate	µg/L	1	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	1	ND	ND	ND	0	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	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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	13	ND	ND	ND	0.001	0.02		√
Arsenic	mg/L	13	0.0002	ND	0.0001	0.0001	0.01		√
Barium	mg/L	13	0.0054	0.0036	0.0044	0.0002	0.7		√
Boron	mg/L	13	0.017	0.009	0.013	0.005	1.4		√
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	13	0.0009	0.0002	0.0004	0.0001	0.05		√
Copper	mg/L	13	0.0038	0.0009	0.0022	0.0002	2		√
Lead	mg/L	13	ND	ND	ND	0.0001	0.01		√
Lithium	mg/L	13	0.0006	0.0003	0.0004	0.0001			
Mercury	mg/L	13	ND	ND	ND	0.00005	0.007		√
Molybdenum	mg/L	13	ND	ND	ND	0.0003	0.07		√
Nickel	mg/L	13	ND	ND	ND	0.0001	0.08		√
Selenium	mg/L	13	0.0002	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	53	0.0140	0.0036	0.0069	0.0001	0.06		√
Bromoform	mg/L	53	0.0049	0.0004	0.0016	0.0001	0.1		√
Chloroform	mg/L	53	0.0110	0.0023	0.0054	0.0001	0.4		√
Dibromochlorometane	mg/L	53	0.0150	0.0034	0.0079	0.0001	0.15		√
THMs Ratio		53	0.38	0.11	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	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		√

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

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)**
UV absorption	Abs units	6	0.018	0.013	0.016	0.002			
Alkalinity (Total)	mg/L CaCO3	1	21	21	21	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	ND	ND	ND	0.01			
Calcium	mg/L	13	5.1	4.5	4.8	0.01			
Calcium Hardness	mg/L	13	13	11	12	0.025			
Chlorate	mg/L	1	0.22	0.22	0.22	0.01	0.8		√
Chloride	mg/L	1	28.00	28.00	28.00	0.02		250	√
Chlorine Residual	mg/L	122	1.30	0.40	0.84	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	15.1	15.1	15.1	0.5			
Fluoride	mg/L	1	ND	ND	ND	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	1	ND	ND	ND	0.002		0.2	√
Magnesium	mg/L	13	3.1	2.6	2.9	0.001			
Magnesium Hardness	mg/L	13	13	11	12	0.0041			
Manganese	mg/L	1	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	122	8.4	7.5	7.9	0.1		7.0-8.5	√
Potassium	mg/L	1	1.0	1.0	1.0	0.1			
Silicon	mg/L	1	14.0	14.0	14.0	0.1			
Sodium	mg/L	1	18.0	18.0	18.0	0.1		200	√
Sulphate	mg/L	1	4.60	4.60	4.60	0.02		250	√
Suspended Solids	mg/L	1	0.2	0.2	0.2	0.2			
Total Dissolved Solids	mg/L	1	90	90	90	0.029		1000	√
Total Hardness	mg/L	13	26	22	24	0.1		200	√
Total Organic Carbon TOC	mg/L	13	1.8	1.0	1.3	0.1			
Turbidity	NTU	122	0.45	ND	0.06			2.5	√

Microbiology									
Component Name	**Units**	**Number of Samples**	**Max**	**Min**	**Average**	**Detection Limit**	**MAV DWSNZ**	**GV DWSNZ**	**Compliance DWSNZ 2005 (Revised 2008)**
E.coli	MPN/100mL	122	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	1	0.005	0.005	0.005	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	ND	ND	ND	0.005			
Nitrate	mg/L	1	0.041	0.041	0.041	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.2	0.2	0.2	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	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	0.012	0.012	0.012	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	0.0029	0.0029	0.0029	0.0002	2		√
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		√
Lithium	mg/L	1	0.0003	ND	ND	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	0.002	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	13	0.0240	0.0044	0.0091	0.0001	0.06		√
Bromoform	mg/L	13	0.0140	0.0010	0.0029	0.0001	0.1		√
Chloroform	mg/L	13	0.0210	0.0023	0.0066	0.0001	0.4		√
Dibromochlorometane	mg/L	13	0.0300	0.0066	0.0114	0.0001	0.15		√
THMs Ratio		13	0.79	0.14	0.27		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		√

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

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)**
Alkalinity (Total)	mg/L CaCO3	1	82	82	82	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.07	0.07	0.07	0.01			
Calcium	mg/L	1	7.6	7.6	7.6	0.01			
Calcium Hardness	mg/L	1	19	19	19	0.025			
Chlorate	mg/L	1	0.12	0.12	0.12	0.01	0.8		√
Chloride	mg/L	1	73.00	73.00	73.00	0.02		250	√
Chlorine Residual	mg/L	125	0.99	0.61	0.79	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	44.2	44.2	44.2	0.5			
Fluoride	mg/L	1	0.06	0.06	0.06	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	1	0.003	0.003	0.003	0.002		0.2	√
Magnesium	mg/L	1	6.5	6.5	6.5	0.001			
Magnesium Hardness	mg/L	1	27	27	27	0.0041			
Manganese	mg/L	1	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	125	8.0	7.2	7.7	0.1		7.0-8.5	√
Potassium	mg/L	1	1.8	1.8	1.8	0.1			
Silicon	mg/L	1	61.0	61.0	61.0	0.1			
Sodium	mg/L	1	65.0	65.0	65.0	0.1		200	√
Sulphate	mg/L	1	16.00	16.00	16.00	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	290	290	290	15		1000	√
Total Hardness	mg/L	1	46	46	46	0.029		200	√
Total Organic Carbon TOC	mg/L	11	0.5	0.1	0.3	0.1			
Turbidity	NTU	124	0.8	0.0	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)**
E.coli	MPN/100mL	125	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	1	0.008	0.008	0.008	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.040	0.040	0.040	0.005			
Nitrate	mg/L	1	0.630	0.630	0.630	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.050	0.050	0.050	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	ND	ND	ND	0.0001	0.01		√
Barium	mg/L	1	0.0200	0.0200	0.0200	0.0002	0.7		√
Boron	mg/L	1	0.034	0.034	0.034	0.005	1.4		√
Cadmium	mg/L	1	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	1	0.0010	0.0010	0.0010	0.0001	0.05		√
Copper	mg/L	1	0.0009	0.0009	0.0009	0.0002	2		√
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		√
Lithium	mg/L	1	0.0043	0.0040	0.0040	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	0.004	0.004	0.004	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	0.0003	ND	0.0001	0.0001	0.06		√
Bromoform	mg/L	12	0.0044	0.0012	0.0024	0.0001	0.1		√
Chloroform	mg/L	12	0.0001	ND	ND	0.0001	0.4		√
Dibromochlorometane	mg/L	12	0.0016	0.0005	0.0010	0.0001	0.15		√
THMs Ratio		12	0.06	0.02	0.03		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		√

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

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-BD)	mg/L	13	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxyl) butanoic (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 absorption	Abs units	52	0.018	0.003	0.008	0.002			
Alkalinity (Total)	mg/L CaCO3	53	73	46	60	1			
Aluminium	mg/L	53	0.036	0.024	0.030	0.005		0.1	√
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	13	0.08	0.02	0.04	0.01			
Calcium	mg/L	53	11.0	7.1	9.1	0.01			
Calcium Hardness	mg/L	53	28	18	23	0.025			
Chlorate	mg/L	13	0.05	0.00	0.04	0.01	0.8		√
Chloride	mg/L	13	24.00	18.00	21.15	0.02		250	√
Chlorine Residual	mg/L	365	1.24	0.59	0.88	0.02	5	0.6-1.0	√
Chlorite	mg/L	13	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	53	ND	ND	ND	5		10	√
Conductivity	mS/cm	53	26.8	21.0	24.4	0.5			
Fluoride	mg/L	53	0.90	0.11	0.17	0.02	1.5		√
Iodide	mg/L	4	0.016	ND	0.009	0.002			
Iron (Total)	mg/L	53	0.036	ND	0.002	0.002		0.2	√
Magnesium	mg/L	53	10.0	6.9	8.4	0.001			
Magnesium Hardness	mg/L	53	41	28	35	0.0041			
Manganese	mg/L	53	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	365	8.4	7.2	8.0	0.1		7.0-8.5	√
Potassium	mg/L	13	3.4	2.6	3.0	0.1			
Silicon	mg/L	13	38.0	30.0	33.9	0.1			
Sodium	mg/L	13	25.0	19.0	22.1	0.1		200	√
Sulphate	mg/L	13	18.00	12.00	14.08	0.02		250	√
Suspended Solids	mg/L	53	0.3	ND	ND	0.2			
Total Hardness	mg/L	53	69	46	57	0.029		200	√
Total Organic Carbon TOC	mg/L	53	1.5	0.3	0.6	0.1			
Turbidity	NTU	365	0.4	0.0	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)**
E.coli	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	0.011	ND	0.002	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	13	0.070	0.040	0.050	0.005			
Nitrate	mg/L	13	3.400	2.900	3.150	0.002	50		√
Nitrite	mg/L	13	0.004	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.4	ND	ND	0.1			
Total Phosphorus	mg/L	13	0.070	0.040	0.060	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 Pesticides									
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		√
Terbuthilazine	µg/L	13	ND	ND	ND	0.2	8		√
Trifularin	µg/L	13	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	µg/L	13	ND	ND	ND	0.2	40		√
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pirymiphos 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	14	ND	ND	ND	0.001	0.02		√
Arsenic	mg/L	13	0.0003	ND	ND	0.0001	0.01		√
Barium	mg/L	13	0.0023	0.0016	0.0019	0.0002	0.7		√
Boron	mg/L	13	0.063	0.050	0.056	0.005	1.4		√
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	13	0.0011	0.0007	0.0009	0.0001	0.05		√
Copper	mg/L	13	0.0032	0.0013	0.0019	0.0002	2		√
Lead	mg/L	15	0.0001	ND	ND	0.0001	0.01		√
Lithium	mg/L	13	0.0005	0.0003	0.0004	0.0001			
Mercury	mg/L	14	ND	ND	ND	0.00005	0.007		√
Molybdenum	mg/L	52	0.0010	0.0006	0.0008	0.0003	0.07		√
Nickel	mg/L	14	0.0002	ND	0.0001	0.0001	0.08		√
Selenium	mg/L	13	0.0006	ND	0.0001	0.0005	0.01		√
Zinc	mg/L	13	0.003	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	53	0.0017	0.0002	0.0004	0.0001	0.06		√
Bromoform	mg/L	53	0.0066	0.0012	0.0021	0.0001	0.1		√
Chloroform	mg/L	53	0.0008	ND	0.0003	0.0001	0.4		√
Dibromochlorometane	mg/L	53	0.0054	0.0008	0.0016	0.0001	0.15		√
THMs Ratio		53	0.13	0.02	0.04		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	√
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	ND	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		√

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

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)**
Alkalinity (Total)	mg/L CaCO3	1	110	110	110	1			
Aluminium	mg/L	1	ND	ND	ND	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	ND	ND	ND	0.01			
Calcium	mg/L	1	21.0	21.0	21.0	0.01			
Calcium Hardness	mg/L	1	53	53	53	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	27.000	27.000	27.000	0.02		250	√
Chlorine Residual	mg/L	123	1.000	0.400	0.700	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	30.0	30.0	30.0	0.5			
Fluoride	mg/L	1	0.07	0.07	0.07	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	13	0.120	0.090	0.100	0.002		0.2	√
Magnesium	mg/L	1	8.5	8.5	8.5	0.001			
Magnesium Hardness	mg/L	1	35	35	35	0.0041			
Manganese	mg/L	13	0.0300	0.0300	0.0300	0.0005	0.4	0.04	√
pH	pH Units	123	8.0	7.8	7.8	0.1		7.0-8.5	√
Potassium	mg/L	1	3.1	3.1	3.1	0.1			
Silicon	mg/L	1	32.0	32.0	32.0	0.1			
Sodium	mg/L	1	21.0	21.0	21.0	0.1		200	√
Sulphate	mg/L	1	1.70	1.70	1.70	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	190	190	190	15		1000	√
Total Hardness	mg/L	1	88	88	88	0.03		200	√
Turbidity		123	1.30	0.20	0.20	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)**
E.coli	MPN/100mL	123	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	1	ND	ND	ND	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.08	0.08	0.08	0.005			
Nitrate	mg/L	1	0.02	0.02	0.02	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.09	0.09	0.09	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	0.0025	0.002	0.002	0.0001	0.01		√
Barium	mg/L	1	ND	ND	ND	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	0.0002	0.0002	0.0002	0.0001	0.05		√
Copper	mg/L	1	0.0023	0.0023	0.0023	0.0002	2		√
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		√
Lithium	mg/L	1	0.0088	0.0090	0.0090	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	0.006	0.006	0.006	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	0.0051	0.0051	0.0051	0.0001	0.06		√
Bromoform	mg/L	1	0.0019	0.0019	0.0019	0.0001	0.1		√
Chloroform	mg/L	1	0.0028	0.0028	0.0028	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0079	0.0079	0.0079	0.0001	0.15		√
THMs Ratio		1	0.16	0.16	0.16		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	√
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		√

ND: All test reslts shown in this report as ND (not detected) are lower than the laboratory's detection limits for the tested parameters.
Note: Patumahoe WTP was decommissioned 6/11/2014. 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 CaCO3	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		√
Bromide	mg/L	1	0.03	0.03	0.03	0.01			
Calcium	mg/L	1	3.5	3.5	3.5	0.01			
Calcium Hardness	mg/L	1	9	9	9	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	36.00	36.00	36.00	0.02		250	√
Chlorine Residual	mg/L	127	2.50	0.60	1.00	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	50.0	50.0	50.0	0.5			
Fluoride	mg/L	1	0.13	0.13	0.13	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	1	ND	ND	ND	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	1	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	127	8.5	7.2	8.4	0.1		7.0-8.5	√
Potassium	mg/L	1	0.3	0.3	0.3	0.1			
Silicon	mg/L	1	46.0	46.0	46.0	0.1			
Sodium	mg/L	1	110.0	110.0	110.0	0.1		200	√
Sulphate	mg/L	1	4.00	4.00	4.00	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	340	340	340	15		1000	√
Total Hardness	mg/L	1	10	10	10	0.029		200	√
Total Organic Carbon TOC	mg/L	11	10.0	0.3	1.9	0.1			
Turbidity	NTU	127	0.6	0.0	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)**
E.coli	MPN/100mL	127	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	1	0.016	0.016	0.016	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.090	0.090	0.090	0.005			
Nitrate	mg/L	1	0.010	0.010	0.010	0.002	50		√
Nitrite	mg/L	1	0.000	0.000	0.000	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.1	0.1	0.1	0.1			
Total Phosphorus	mg/L	1	0.090	0.090	0.090	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	ND	ND	ND	0.0001	0.01		√
Barium	mg/L	1	0.0005	0.0005	0.0005	0.0002	0.7		√
Boron	mg/L	1	0.160	0.160	0.160	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	0.0020	0.0020	0.0020	0.0002	2		√
Lead	mg/L	1	ND	ND	ND	0.0001	0.01		√
Lithium	mg/L	1	0.0250	0.0250	0.0250	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	0.004	0.004	0.004	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	0.0006	0.0006	0.0006	0.0001	0.06		√
Bromoform	mg/L	1	0.0011	0.0011	0.0011	0.0001	0.1		√
Chloroform	mg/L	1	0.0004	0.0004	0.0004	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0013	0.0013	0.0013	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	√
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		√

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

Victoria Avenue 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 CaCO3	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		√
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	74	74	74	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	35.00	35.00	35.00	0.02		250	√
Chlorine Residual	mg/L	124	1.20	0.30	0.80	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	36.0	36.0	36.0	0.5			
Fluoride	mg/L	1	0.06	0.06	0.06	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	12	0.010	ND	ND	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	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	124	8.1	7.9	8.0	0.1		7.0-8.5	√
Potassium	mg/L	1	3.9	3.9	3.9	0.1			
Silicon	mg/L	1	53.0	53.0	53.0	0.1			
Sodium	mg/L	1	24.0	24.0	24.0	0.1		200	√
Sulphate	mg/L	1	5.30	5.30	5.30	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	250	250	250	15		1000	√
Total Hardness	mg/L	1	110	110	110	0.029		200	√
Turbidity	NTU	124	0.70	ND	0.10	0.1			

Microbiology									
Component Name	**Units**	**Number of Samples**	**Max**	**Min**	**Average**	**Detection Limit**	**MAV DWSNZ**	**GV DWSNZ**	**Compliance DWSNZ 2005 (Revised 2008)**
E.coli	MPN/100mL	124	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	1	0.005	0.005	0.005	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.060	0.060	0.060	0.005			
Nitrate	mg/L	1	0.040	0.040	0.040	0.002	50		√
Nitrite	mg/L	1	0.000	0.000	0.000	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.3	0.3	0.3	0.1			
Total Phosphorus	mg/L	1	0.050	0.050	0.050	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus pesticides									
Chlorpyriphos	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	0.0048	0.0048	0.0048	0.0001	0.01		√
Barium	mg/L	1	0.0005	0.0005	0.0005	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	0.0002	0.0002	0.0002	0.0001	0.05		√
Copper	mg/L	1	0.0010	0.0010	0.0010	0.0002	2		√
Lead	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.01		√
Lithium	mg/L	1	0.0110	0.0110	0.0110	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	0.007	0.007	0.007	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	0.0042	0.0042	0.0042	0.0001	0.06		√
Bromoform	mg/L	1	0.0072	0.0072	0.0072	0.0001	0.1		√
Chloroform	mg/L	1	0.0014	0.0014	0.0014	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0085	0.0085	0.0085	0.0001	0.15		√
THMs Ratio		1	0.20	0.20	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	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	√

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

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)**
Alkalinity (Total)	mg/L CaCO3	1	190	190	190	1			
Aluminium	mg/L	1	0.007	0.007	0.007	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	8.6	8.6	8.6	0.01			
Calcium Hardness	mg/L	1	22	22	22	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	46.00	46.00	46.00	0.02		250	√
Chlorine Residual	mg/L	122	1.30	0.60	1.00	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	52.0	52.0	52.0	0.5			
Fluoride	mg/L	12	0.28	0.16	0.24	0.02	1.5		√
Iodide	mg/L	1	0.012	0.012	0.012	0.002			
Iron (Total)	mg/L	12	0.040	0.019	0.027	0.002		0.2	√
Magnesium	mg/L	1	3.5	3.5	3.5	0.001			√
Magnesium Hardness	mg/L	1	14	14	14	0.0041			
Manganese	mg/L	12	0.0550	0.0270	0.0373	0.0005	0.4	0.04	√
pH	pH Units	122	8.8	8.0	8.7	0.1		7.0-8.5	
Potassium	mg/L	1	3.00	3.00	3.00	0.1			
Silicon	mg/L	1	22.0	22.0	22.0	0.1			
Sodium	mg/L	1	98.0	98.0	98.0	0.1		200	√
Sulphate	mg/L	1	5.70	5.70	5.70	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	320	320	320	15		1000	√
Total Hardness	mg/L	1	36	36	36	0.03		200	√
Turbidity		122	1.4	ND	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)**
E.coli	MPN/100mL	122	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	1	0.006	0.006	0.006	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.055	0.055	0.055	0.005			
Nitrate	mg/L	1	0.017	0.017	0.017	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	ND	ND	ND	0.1			
Total Phosphorus	mg/L	1	0.055	0.055	0.055	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	ND	ND	ND	0.0001	0.01		√
Barium	mg/L	1	0.0080	0.0080	0.0080	0.0002	0.7		√
Boron	mg/L	12	0.750	0.540	0.678	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	0.0018	0.0018	0.0018	0.0002	2		√
Lead	mg/L	1	0.0005	0.0005	0.0005	0.0001	0.01		√
Lithium	mg/L	1	0.068	0.068	0.068	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	0.0002	0.0002	0.0002	0.0001	0.08		√
Selenium	mg/L	1	ND	ND	ND	0.0005	0.01		√
Zinc	mg/L	1	0.020	0.020	0.020	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	0.0022	0.0022	0.0022	0.0001	0.06		√
Bromoform	mg/L	1	0.0040	0.0040	0.0040	0.0001	0.1		√
Chloroform	mg/L	1	0.0011	0.0011	0.0011	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0049	0.0049	0.0049	0.0001	0.15		√
THMs Ratio		1	0.11	0.11	0.11		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		√

ND: All test reslts shown in this report as ND (not detected) are lower than the laboratory's detection limits for the tested parameters.
Note: The Waiau Beach WTP was decommissioned 4/12/2014. The Waiau Beach community is now supplied by 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	12	ND	ND	ND	0.0001			
2,4-Dichlorophenoxyacetic acid (2,4-BD)	mg/L	12	ND	ND	ND	0.0001			
4-(2,4-dichlorophenoxyl) butanoic (2,4-DB)	mg/L	12	ND	ND	ND	0.0001			
Bentazone	mg/L	12	ND	ND	ND	0.0001			
Dichlorprop	mg/L	12	ND	ND	ND	0.0001	0.1		√
MCPA	mg/L	12	ND	ND	ND	0.0001	0.002		√
Mecoprop	mg/L	12	ND	ND	ND	0.0001	0.01		√
Picloram	mg/L	12	ND	ND	ND	0.0001	0.2		√
Triclopyr	mg/L	12	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 absorption	Abs units	48	0.039	ND	0.021	0.002			
Alkalinity (Total)	mg/L CaCO3	49	18	12	15	1			
Aluminium	mg/L	49	0.032	0.021	0.026	0.005		0.1	√
Bromate	mg/L	12	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	12	0.03	ND	0.01	0.01			
Calcium	mg/L	49	12.0	9.2	10.4	0.01			
Calcium Hardness	mg/L	49	30	23	26	0.025			
Chlorate	mg/L	12	0.01	ND	ND	0.01	0.8		√
Chloride	mg/L	12	24.00	20.00	22.08	0.02		250	√
Chlorine Residual	mg/L	354	1.10	0.20	0.84	0.02	5	0.6-1.0	√
Chlorite	mg/L	12	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	49	ND	ND	ND	5		10	√
Conductivity	mS/cm	49	17.4	14.2	15.7	0.5			
Fluoride	mg/L	51	1.10	0.80	0.94	0.02	1.5		√
Iodide	mg/L	4	0.005	ND	0.002	0.002			
Iron (Total)	mg/L	49	0.027	0.011	0.014	0.002		0.2	√
Magnesium	mg/L	49	2.9	1.8	2.3	0.001			
Magnesium Hardness	mg/L	49	12	8	10	0.0041			
Manganese	mg/L	49	0.0190	0.0016	0.0053	0.0005	0.4	0.04	√
pH	pH Units	354	8.4	7.6	7.9	0.1		7.0-8.5	√
Potassium	mg/L	12	0.9	0.8	0.8	0.1			
Silicon	mg/L	12	16.0	9.2	12.3	0.1			
Sodium	mg/L	12	14.0	10.0	12.3	0.1		200	√
Sulphate	mg/L	12	20.00	14.00	16.75	0.02		250	√
Suspended Solids	mg/L	49	5.0	ND	0.2	0.2			
Total Hardness	mg/L	49	40	31	36	0.029		200	√
Total Organic Carbon TOC	mg/L	49	2.8	1.1	1.6	0.1			
Turbidity	NTU	354	5.5	0.1	0.3	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)**
E.coli	MPN/100mL	354*	ND	ND	ND	1	<1		√

* During 2013-14 two samples were not collected because the treatment plant was shut down on those dates

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	12	0.014	ND	0.003	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	12	0.008	ND	0.005	0.005			
Nitrate	mg/L	12	0.053	0.008	0.021	0.002	50		√
Nitrite	mg/L	12	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	12	0.1	ND	ND	0.1			
Total Phosphorus	mg/L	12	0.100	ND	0.019	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	12	ND	ND	ND	0.001	0.02		√
Arsenic	mg/L	12	0.0002	ND	0.0001	0.0001	0.01		√
Barium	mg/L	12	0.0069	0.0052	0.0059	0.0002	0.7		√
Boron	mg/L	12	0.017	0.008	0.014	0.005	1.4		√
Cadmium	mg/L	12	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	12	0.0006	0.0002	0.0003	0.0001	0.05		√
Copper	mg/L	12	0.0042	0.0016	0.0026	0.0002	2		√
Lead	mg/L	12	0.0002	ND	0.0001	0.0001	0.01		√
Lithium	mg/L	12	0.0013	0.0004	0.0007	0.0001			
Mercury	mg/L	12	ND	ND	ND	0.00005	0.007		√
Molybdenum	mg/L	12	ND	ND	ND	0.0003	0.07		√
Nickel	mg/L	12	0.0002	ND	0.0001	0.0001	0.08		√
Selenium	mg/L	12	ND	ND	ND	0.0005	0.01		√
Zinc	mg/L	12	0.004	0.001	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	54	0.0360	0.0075	0.0135	0.0001	0.06		√
Bromoform	mg/L	54	0.0100	0.0004	0.0020	0.0001	0.1		√
Chloroform	mg/L	54	0.0350	0.0067	0.0125	0.0001	0.4		√
Dibromochlorometane	mg/L	54	0.0480	0.0056	0.0128	0.0001	0.15		√
THMs Ratio		54	1.00	0.20	0.36		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	√
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	ND	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		√

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

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-dichlorophenoxyl) butanoic (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		√
MCPA	mg/L	4	ND	ND	ND	0.0001	0.002		√
Mecoprop	mg/L	4	ND	ND	ND	0.0001	0.01		√
Picloram	mg/L	4	ND	ND	ND	0.0001	0.2		√
Triclopyr	mg/L	4	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 absorption	Abs units	51	0.042	0.004	0.018	0.002			
Alkalinity (Total)	mg/L CaCO3	64	57	31	45	1			
Aluminium	mg/L	58	0.054	ND	0.035	0.005		0.1	√
Bromate	mg/L	13	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	13	0.01	ND	ND	0.01			
Calcium	mg/L	52	22.0	10.0	16.2	0.01			
Calcium Hardness	mg/L	52	56	26	41	0.025			
Chlorate	mg/L	14	0.18	0.08	0.13	0.01	0.8		√
Chloride	mg/L	13	23.00	18.00	20.31	0.02		250	√
Chlorine Residual	mg/L	364	1.13	0.47	0.89	0.02	5	0.6-1.0	√
Chlorite	mg/L	14	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	52	ND	ND	ND	5		10	√
Conductivity	mS/cm	51	25.1	19.3	22.5	0.5			
Fluoride	mg/L	52	1.10	0.78	0.91	0.02	1.5		√
Iodide	mg/L	13	0.024	ND	0.003	0.002			
Iron (Total)	mg/L	52	0.038	0.017	0.028	0.002		0.2	√
Magnesium	mg/L	52	3.3	2.4	2.8	0.001			
Magnesium Hardness	mg/L	52	14	10	11	0.0041			
Manganese	mg/L	52	0.0140	0.0007	0.0026	0.0005	0.4	0.04	√
pH	pH Units	364	8.5	7.3	7.8	0.1		7.0-8.5	√
Potassium	mg/L	51	3.8	2.7	3.1	0.1			
Silicon	mg/L	13	36.0	28.0	32.8	0.1			
Sodium	mg/L	13	22.0	18.0	19.7	0.1		200	√
Sulphate	mg/L	13	35.00	19.00	23.85	0.02		250	√
Suspended Solids	mg/L	51	0.9	ND	0.3	0.2			
Total Hardness	mg/L	52	70	37	52	0.029		200	√
Total Organic Carbon TOC	mg/L	52	2.8	0.6	1.2	0.1			
Turbidity	NTU	364	0.7	ND	0.3	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	52	ND	ND	ND	1	<1		√
Giardia (Treated Water)	cysts/100 L	52	ND	ND	ND	1	<1		√
E.coli	MPN/100mL	364*	ND	ND	ND	1	<1		√

* During 2013-14 one sample was not collected because the treatment plant was shut down on that date

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	0.009	ND	0.003	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	13	0.011	ND	0.007	0.005			
Nitrate	mg/L	13	1.600	0.100	0.437	0.002	50		√
Nitrite	mg/L	13	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	13	0.3	ND	0.1	0.1			
Total Phosphorus	mg/L	13	0.011	ND	0.007	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) phtalate	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	µg/L	13	ND	ND	ND	0.01	0.04		√
Chlordan	µg/L	13	ND	ND	ND	0.01	0.2		√
Llindane	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			
pp-DDT	µg/L	13	ND	ND	ND	0.2	1		√
Procymidone	µg/L	13	ND	ND	ND	0.2	700		√
Organonitrogen pesticides:									
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		√
Terbuthilazine	µg/L	13	ND	ND	ND	0.2	8		√
Trifularin	µg/L	13	ND	ND	ND	0.2	30		√
Organophosphorus pesticides									
Chlorpyriphos	µg/L	13	ND	ND	ND	0.2	40		√
Diazinon	µg/L	13	ND	ND	ND	0.1			
Pirymiphos 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	34	0.002	ND	ND	0.001	0.02		√
Arsenic	mg/L	26	0.0020	0.0003	0.0011	0.0001	0.01		√
Barium	mg/L	13	0.0220	0.0160	0.0179	0.0002	0.7		√
Boron	mg/L	13	0.220	0.110	0.175	0.005	1.4		√
Cadmium	mg/L	13	ND	ND	ND	0.00005	0.004		√
Chromium	mg/L	13	0.0002	ND	0.0001	0.0001	0.05		√
Copper	mg/L	13	0.0004	ND	0.0002	0.0002	2		√
Lead	mg/L	38	0.0004	ND	0.0001	0.0001	0.01		√
Lithium	mg/L	13	0.0720	0.0390	0.0569	0.0001			
Mercury	mg/L	33	0.00008	ND	ND	0.00005	0.007		√
Molibdenum	mg/L	34	0.0005	ND	0.0001	0.0003	0.07		√
Nickel	mg/L	33	0.0004	ND	0.0002	0.0001	0.08		√
Selenium	mg/L	13	ND	ND	ND	0.0005	0.01		√
Zinc	mg/L	13	0.003	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	67	0.0170	0.0015	0.0042	0.0001	0.06		√
Bromoform	mg/L	67	0.0025	0.0001	0.0009	0.0001	0.1		√
Chloroform	mg/L	67	0.0220	0.0009	0.0040	0.0001	0.4		√
Dibromochlorometane	mg/L	67	0.0110	0.0019	0.0047	0.0001	0.15		√
THMs Ratio		67	0.23	0.06	0.12		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			
1,2,3-trichlorobenzene	mg/L	13	ND	ND	ND	0			
1,2,4-trichlorobenzene	mg/L	13	ND	ND	ND	0			
1,2-dichlorobenzene	mg/L	13	ND	ND	ND	0	1.5	0.001	√
1,2-dichloroethane	mg/L	13	ND	ND	ND	0	0.03		√
1,4-dichlorobenzene	mg/L	13	ND	ND	ND	0	0.4	0.0003	√
Benzene	mg/L	13	ND	ND	ND	0	0.01		√
Carbon tetrachloride	mg/L	13	ND	ND	ND	0			
Ethylbenzene	mg/L	13	ND	ND	ND	0	0.3	0.002	√
m- & p-Xylene	mg/L	13	ND	ND	ND	0	0.6		√
Styrene	mg/L	13	ND	ND	ND	0	0.03	0.004	√
Tetrachloroethene	mg/L	13	ND	ND	ND	0	0.05		√
Toluene	mg/L	13	ND	ND	ND	0	0.8	0.03	√
trans- 1,2-dichloroethene	mg/L	13	ND	ND	ND	0	0.06		√
trichloroethene	mg/L	13	ND	ND	ND	0	0.02		√

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

Waiuku Road 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 CaCO3	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		√
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	68	68	68	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	33.00	33.00	33.00	0.02		250	√
Chlorine Residual	mg/L	123	1.16	0.58	0.90	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	34.20	34.20	34.20	0.5			
Fluoride	mg/L	1	0.05	0.05	0.05	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	12	0.003	ND	0.001	0.002		0.2	√
Magnesium	mg/L	1	7.2	7.2	7.2	0.001			√
Magnesium Hardness	mg/L	1	30	30	30	0.0041			
Manganese	mg/L	12	ND	ND	ND	0.0005	0.4	0.04	√
pH	pH Units	123	8.1	7.8	8.0	0.1		7.0-8.5	√
Potassium	mg/L	1	4.7	4.7	4.7	0.1			
Silicon	mg/L	1	32.0	32.0	32.0	0.1			
Sodium	mg/L	1	26.0	26.0	26.0	0.1		200	√
Sulphate	mg/L	1	5.10	5.10	5.10	0.02		250	√
Suspended Solids	mg/L	1	ND	ND	ND	0.2			
Total Dissolved Solids	mg/L	1	220	220	220	15		1000	√
Total Hardness	mg/L	1	97	97	97	0.03		200	√
Turbidity		123	0.3	0.0	0.0	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)**
E.coli	MPN/100mL	123	ND	ND	ND	1	<1/100mL		√

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	0.005	0.005	0.005	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	0.06	0.06	0.06	0.005			
Nitrate	mg/L	1	0.04	0.04	0.04	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.25	0.25	0.25	0.1			
Total Phosphorus	mg/L	1	0.05	0.05	0.05	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	0.0031	0.0031	0.0031	0.0001	0.01		√
Barium	mg/L	1	ND	ND	ND	0.0002	0.7		√
Boron	mg/L	1	0.019	0.019	0.019	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	0.0017	0.0017	0.0017	0.0002	2		√
Lead	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.01		√
Lithium	mg/L	1	0.015	0.015	0.015	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	0.007	0.007	0.007	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	0.0019	0.0019	0.0019	0.0001	0.06		√
Bromoform	mg/L	1	0.0014	0.0014	0.0014	0.0001	0.1		√
Chloroform	mg/L	1	0.0009	0.0009	0.0009	0.0001	0.4		√
Dibromochlorometane	mg/L	1	0.0031	0.0031	0.0031	0.0001	0.15		√
THMs Ratio		1	0.07	0.07	0.07		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	√
Toluene	mg/L	1	ND	ND	ND	0.0001	0.8	0.03	√
trichloroethene	mg/L	1	ND	ND	ND	0.0001	0.02		√

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

Warkworth 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 CaCO3	1	23	23	23	1			
Aluminium	mg/L	12	0.019	0.010	0.013	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.02	0.02	0.02	0.01			
Calcium	mg/L	1	10.0	10.0	10.0	0.01			
Calcium Hardness	mg/L	1	26	26	26	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	23.00	23.00	23.00	0.02		250	√
Chlorine Residual	mg/L	135	1.83	0.37	0.93	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	10.0	10.0	10.0	0.5			
Fluoride	mg/L	1	ND	ND	ND	0.02	1.5		√
Iodide	mg/L	1	0.002	0.002	0.002	0.002			
Iron (Total)	mg/L	1	0.049	0.049	0.049	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	1	0.0100	0.0100	0.0100	0.0005	0.4	0.04	√
pH	pH Units	135	9.1	7.0	7.4	0.1		7.0-8.5	
Potassium	mg/L	1	1.0	1.0	1.0	0.1			
Silicon	mg/L	1	16.0	16.0	16.0	0.1			
Sodium	mg/L	1	20.0	20.0	20.0	0.1		200	√
Sulphate	mg/L	1	25.00	25.00	25.00	0.02		250	√
Suspended Solids	mg/L	1	0.3	0.3	0.3	0.2			
Total Dissolved Solids	mg/L	1	120	120	120	15		1000	√
Total Hardness	mg/L	1	39	39	39	0.029		200	√
Total Organic Carbon TOC	mg/L	49	3.4	1.2	1.9	0.1			
Turbidity	NTU	135	0.9	0.0	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)**
E.coli	MPN/100mL	134	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	1	0.009	0.009	0.009	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	ND	ND	ND	0.005			
Nitrate	mg/L	1	0.200	0.200	0.200	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.2	0.2	0.2	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		√

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		√

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 Pesticides									
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		√
Pediimethalin	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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	ND	ND	ND	0.0001	0.01		√
Barium	mg/L	1	0.0200	0.0200	0.0200	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	0.0004	0.0004	0.0004	0.0001	0.05		√
Copper	mg/L	1	0.0006	0.0006	0.0006	0.0002	2		√
Lead	mg/L	1	0.0000	0.0000	0.0000	0.0001	0.01		√
Lithium	mg/L	1	0.0011	0.0010	0.0010	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	0.008	0.008	0.008	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	0.0200	ND	0.0100	0.0001	0.06		√
Bromoform	mg/L	12	ND	ND	ND	0.0001	0.1		√
Chloroform	mg/L	12	0.0200	ND	0.0100	0.0001	0.4		√
Dibromochlorometane	mg/L	12	0.0100	ND	0.0100	0.0001	0.15		√
THMs Ratio		12	0.47	0.11	0.26		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		√

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

Wellsford 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 CaCO3	1	36	36	36	1			
Aluminium	mg/L	12	0.100	ND	ND	0.005		0.1	√
Bromate	mg/L	1	ND	ND	ND	0.005	0.01		√
Bromide	mg/L	1	0.01	0.01	0.01	0.01			
Calcium	mg/L	1	10.0	10.0	10.0	0.01			
Calcium Hardness	mg/L	1	25	25	25	0.025			
Chlorate	mg/L	1	ND	ND	ND	0.01	0.8		√
Chloride	mg/L	1	24.00	24.00	24.00	0.02		250	√
Chlorine Residual	mg/L	125	1.60	0.50	0.90	0.02	5	0.6-1.0	√
Chlorite	mg/L	1	ND	ND	ND	0.005	0.8		√
Colour	Hazen Units	1	ND	ND	ND	5		10	√
Conductivity	mS/cm	1	23.0	23.0	23.0	0.5			
Fluoride	mg/L	1	0.03	0.03	0.03	0.02	1.5		√
Iodide	mg/L	1	ND	ND	ND	0.002			
Iron (Total)	mg/L	1	0.110	0.110	0.110	0.002		0.2	√
Magnesium	mg/L	1	3.5	3.5	3.5	0.001			
Magnesium Hardness	mg/L	1	15	15	15	0.0041			
Manganese	mg/L	1	0.0100	0.0100	0.0100	0.0005	0.4	0.04	√
pH	pH Units	125	8.4	7.0	7.3	0.1		7.0-8.5	√
Potassium	mg/L	1	1.4	1.4	1.4	0.1			
Silicon	mg/L	1	15.0	15.0	15.0	0.1			
Sodium	mg/L	1	26.0	26.0	26.0	0.1		200	√
Sulphate	mg/L	1	26.00	26.00	26.00	0.02		250	√
Suspended Solids	mg/L	1	0.2	0.2	0.2	0.2			
Total Dissolved Solids	mg/L	1	160	160	160	15		1000	√
Total Hardness	mg/L	1	40	40	40	0.029		200	√
Total Organic Carbon TOC	mg/L	12	2.2	1.5	1.9	0.1			
Turbidity	NTU	125	4.1	0.0	0.3	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)**
E.coli	MPN/100mL	125	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	1	0.009	0.009	0.009	0.005		1.5	√
Dissolved Reactive Phosphorus	mg/L	1	ND	ND	ND	0.005			
Nitrate	mg/L	1	0.370	0.370	0.370	0.002	50		√
Nitrite	mg/L	1	ND	ND	ND	0.002	0.20		√
TKN (Total Kjeldahl Nitrogen)	mg/L N	1	0.3	0.3	0.3	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		√

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		√

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 Pesticides									
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		√
Trifularin	µg/L	1	ND	ND	ND	0.2	30		√
Organophosphorus Pesticides									
Chlorpyriphos	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	0.0001	0.0001	0.0001	0.0001	0.01		√
Barium	mg/L	1	0.0190	0.0190	0.0190	0.0002	0.7		√
Boron	mg/L	1	0.009	0.009	0.009	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	0.0038	0.0038	0.0038	0.0002	2		√
Lead	mg/L	1	0.0002	0.0002	0.0002	0.0001	0.01		√
Lithium	mg/L	1	0.0011	0.001	0.001	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	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	0.008	0.008	0.008	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	17	0.0300	0.0100	0.0200	0.0001	0.06		√
Bromoform	mg/L	17	ND	ND	ND	0.0001	0.1		√
Chloroform	mg/L	17	0.0400	0.0100	0.0200	0.0001	0.4		√
Dibromochlorometane	mg/L	17	0.0200	ND	0.0100	0.0001	0.15		√
THMs Ratio		17	0.69	0.17	0.38		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		√

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