



Water Quality Report



2007

Contents

1	Executive Summary	Page 2
2	The Water Quality Monitoring Team	Page 3
3	Raw Water Quality	Page 4
4	Treatment Works and Service Reservoir performance	Page 5
5	Water Quality in the Distribution System	Page 8
6	Water Quality Complaints	Page 11
7	New Water Mains	Page 12
8	Appendices	Page 13

1 Executive Summary

I am pleased to report that the quality of water supplied by Jersey Water in 2007 was of a very high standard. Overall, the quality of the water supplied was 99.86% compliant with the drinking water standards required by the Water (Jersey) Law 1972.

The Company supplied 7,182 million litres of drinking water to its customers, which represents an average of 19.7 million litres per day.

During the year, 18,323 analyses were undertaken to measure the physical, microbiological and chemical parameters within the water supplied. Whilst 26 analyses failed to meet the standard, 23 of these failures were due to nitrate. However, dispensations are in place for this eventuality as the Company has no control over the nitrate levels in our water resources. Only 3 failures were due to microbiological parameters and all of the immediate follow up testing proved to be negative.

During 2007 there were no breaches of the pesticide limit of 0.1 mg/l in treated water.

The monitoring programme for water quality and the respective parameters analysed during the year were approved by the States of Jersey Planning & Environment Department; which is a requirement of the Water (Jersey) Law 1972. The approved programme is broadly in-line with the requirements of the Water Supply (Water Quality) Regulations 2000 for England and Wales.

Since the majority of water resources in Jersey are surface derived, Jersey Water has an extensive monitoring programme of streams, intakes, reservoirs and throughout the treatment processes. In addition to laboratory analysis Jersey Water has a number of on-line quality monitoring equipment installed at strategic raw water resource sites and treatment works. This provides real-time information on water quality and is of great assistance to operating staff in both selecting and blending waters to optimise water treatment and provide the highest quality water.

The quality of the water supplied was 99.86% compliant with the drinking water standards required by the Water (Jersey) Law 1972.

The first quarter of 2007 proved to be very wet, with average rainfall some 60% above the average. Whilst this is good news for water resources, the timing is not good for increased run off when nitrates are being applied to the ground. Nitrate levels in all water resources across the Island exceeded the 50 mg/l limit and with rainfall above average for most months of the year, nitrate levels remained higher than normal throughout this period. However, through effective blending and selecting the best quality raw water resources, the maximum level of nitrate in supply was 57.7mg/l, well within the dispensation limit of 70mg/l as allowed by the Water (Jersey) Law 1972.

The tables in this report show the results of the treated water monitoring programme carried out during the year and show the maximum, mean and minimum concentration of the particular parameter.

Howard N Snowden
Managing Director & Engineer

2 Water Quality Monitoring Team

The high standards in water quality are gained by the efforts of everyone throughout the organisation in some way or another.

Our operational staff are responsible for the continuous and uninterrupted operation of plant and equipment to treat the water to a high standard.

The distribution staff ensure water is distributed throughout the Island at adequate volumes and pressure to meet the needs of individual customers.

The water quality monitoring team measure the quality of raw water to ensure it is suitable for treatment and test that the quality of water throughout the process of treatment and distribution meets the stringent drinking water quality standards.

Our water quality laboratory is based in a purpose designed laboratory facility at Millbrook, St Lawrence.

Our Water Quality Manager, David Mayman, is a Chartered Chemist and Member of the Royal Society of Chemistry. He is ably assisted by Mrs Sarah Gavey, Mrs Nora Treanor and the water quality sampling team. Sampling and analysis of water is a continuous process, resulting in the fact that the laboratory is manned 365 days of the year.

The importance of care and diligence required when taking treated water samples cannot be understated. Due to the very high standards of microbiological monitoring used, the sterile condition of sampling taps, bottles, together with general hygiene conditions and skilled staff are essential to ensure water samples are truly representative, and do not become contaminated during the sampling process.



David Mayman, Water Quality Manager

3 Raw Water Quality

Most of the water we supply is derived from surface water resources, with streams feeding directly into, or, where outside the natural catchment areas, pumped into our six large storage reservoirs. Some minor volumes of ground water are abstracted from the sand aquifer, which lies at the southern end of St Ouen's Bay.

Jersey Water uses the EU Directive for standards of surface water to be used for drinking water production. This Directive sets out the maximum allowable concentrations for a number of important quality parameters which must be complied with for the specific treatment process.

To gather further information on raw water quality throughout our resources Jersey Water also takes samples of water from streams throughout the Island. This provides useful information and data for comparison, and highlights any pollution or changes in land use that may occur in the particular catchment area.

During 2007, 4,942 analyses for herbicides and pesticides in the stream courses were undertaken and 37 were above the 0.1 ug/l (drinking water) limit, compared to 19 in 2006.

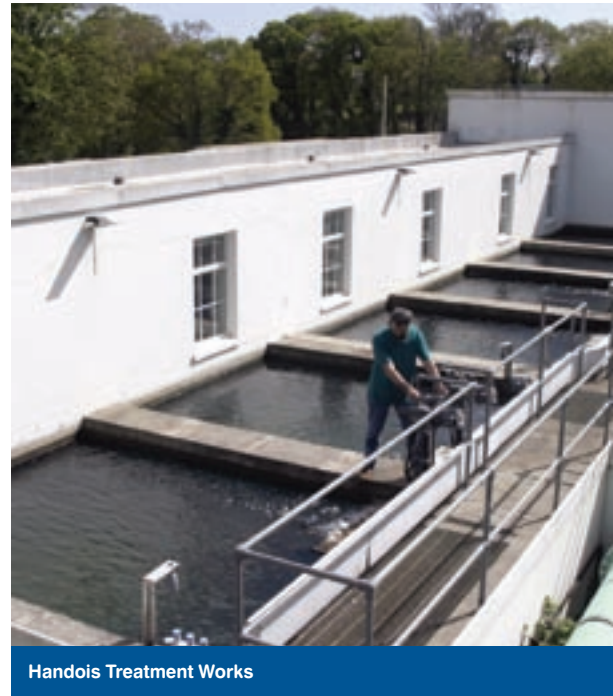


Collecting raw water samples

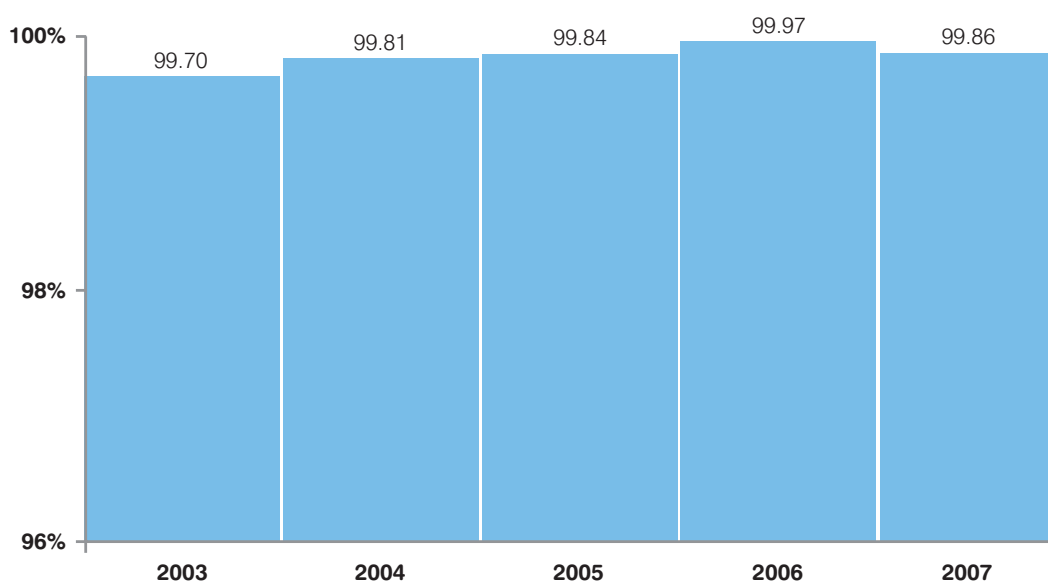
4 Treatment Works and Service Reservoir Performance

Jersey Water operates two treatment works located at Handois, St Lawrence and Augrès, Trinity. With the majority of water derived from surface water resources, full treatment of the water is required to produce high quality drinking water. A two-stage treatment process is used comprising; chemically assisted clarification, followed by filtration using a combination of sand and anthracite media.

Following treatment, the water is disinfected to ensure any remaining bacteria present in the water are removed before it passes into the supply distribution network and to our customers. The disinfection process is essential to ensure safe drinking water and is widely used in the western world for this purpose. Disinfection is carried out using a combination of chlorine and ammonia, which results in longer retention of chlorine levels in the water as it passes through the distribution network. The quantities of chemicals used in disinfection are infinitesimal, with levels being continuously monitored to ensure they are within acceptable aesthetic levels.



**Overall compliance with the water quality
Maximum Admissible Concentrations %**



4 Treatment Works and Service Reservoir Performance (continued)

The water quality regulations require two types of monitoring to be undertaken, these are designated as “check” and “audit” monitoring. Check monitoring is carried out on a frequent basis to ensure the treatment processes are operating as expected and the water in the distribution system is of an acceptable standard, whereas the audit monitoring is used to investigate the quality of water more thoroughly.

The results of the check monitoring of treated water leaving the treatment works, their respective Maximum Allowable Concentrations and compliance levels are shown in the following tables. The results from the audit monitoring programme can be found in the appendix.

Check Monitoring: Handois WTW

Substances and parameters	Max	Specific concentration or value (maximum) or state	% compliance
E.coli	0	0 per 100ml	100
Coliform bacteria	0	0 per 100ml	100
Colony counts	No abnormal change	No abnormal change	100
Nitrite	0.008	0.1 mg NO ₂ /l	100
Residual disinfectant	0.74	No value mg Cl ₂ /l	
Turbidity	0.49	4 NTU	100
Clostridium perfringens	1	0 per 100ml	98
Conductivity	545	2500 µS/cm at 20°C	100

Check Monitoring: Augrès WTW

Substances and parameters	Max	Specific concentration or value (maximum) or state	% compliance
E.coli	0	0 per 100ml	100
Coliform bacteria	0	0 per 100ml	100
Colony counts	No abnormal change	No abnormal change	100
Nitrite	0.008	0.1 mg NO ₂ /l	100
Residual disinfectant	0.56	No value mg Cl ₂ /l	
Turbidity	0.39	4 NTU	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	541	2500 µS/cm at 20°C	100

In order to ensure adequate treated water is available to meet peak demand periods in the morning and evening and exceptional hot summer days, enclosed storage reservoirs are provided within the distribution system.

The total storage capacity of the reservoirs is 18 ML, just below the average daily demand of 19.6 ML. There are two service reservoirs which are strategically located on high ground; situated at Westmount Road, St Helier and at Les Platons, Trinity.

4 Treatment Works and Service Reservoir Performance (continued)

The results of the check monitoring of treated water leaving the water storage reservoirs, their respective Maximum Allowable Concentrations and compliance levels are shown in the following tables.

The results from the audit monitoring programme can be found in the appendix.

Check Monitoring: Les Platons Service Reservoir, East Compartment

Substances and parameters	Max	Specific concentration or value (maximum) or state	% compliance
E.coli	0	0 per 100ml	100
Coliform bacteria	0	0 per 100ml (95% of samples)	100
Colony counts		No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	543	2500 μ S/cm at 20°C	100

Check Monitoring: Les Platons Service Reservoir, West Compartment

Substances and parameters	Max	Specific concentration or value (maximum) or state	% compliance
E.coli	0	0 per 100ml	100
Coliform bacteria	0	0 per 100ml (95% of samples)	100
Colony counts		No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	541	2500 μ S/cm at 20°C	100

Check Monitoring: Westmount Service Reservoir

Substances and parameters	Max	Specific concentration or value (maximum) or state	% compliance
E.coli	1	0 per 100ml	99.7
Coliform bacteria	4	0 per 100ml (95% of samples)	99.7
Colony counts		No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	540	2500 μ S/cm at 20°C	100

5 Water Quality in the Distribution System

It is very important that the quality of water is maintained as it passes through the distribution network. Accordingly, sampling of water is carried out throughout the distribution network in accordance with an approved programme. Analysis is carried out to ensure the water maintains its high physical, bacteriological and chemical standards from leaving the treatment works to customers' stop taps.

During 2007, 1280 samples of water were taken and the following tables show the results of the check and audit monitoring programme together with the compliance levels.

Check Monitoring: Supply Zone

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
E.coli	0 per 100ml	0	0	0	640	100
Coliform bacteria	0 per 100ml	0	0	0	640	100
Residual disinfectant	No value mg Cl ₂ /l	<0.02	0.13	0.52	540	-
Aluminium	200 µg Al/l	<20	20	63	100	100
Ammonium	0.50 mg NH ₄ /l	<0.04	<0.04	0.13	100	100
Clostridium perfringens	0 per 100ml	0	0	0	100	100
Colony counts	No abnormal change	No abnormal change			540	100
Colour	20 mg/l Pt/Co	<0.69	2.02	5.25	100	100
Conductivity	2500 µS/cm at 20°C	417	495	614	100	100
Hydrogen ion	10.0 pH value 6.5(min)	7.39	7.71	8.29	100	100
Iron	200 µg Fe/l	<10	24	167	100	100
Manganese	50 µg Mn/l	0.7	4.9	22.7	100	100
Nitrate	50 mg NO ₃ /l	30.9	43.6	57.6	100	77
Nitrite	0.5 mg NO ₂ /l	<0.01	0.019	0.195	100	100
Odour	3 at 25°C Dilution number	1	1	1	100	100
Taste	3 at 25°C Dilution number	1	1	1	99	100
Turbidity	4 NTU	0.10	0.21	0.88	100	100

5 Water Quality in the Distribution System (continued)

Audit Monitoring: Supply Zone

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Antimony	5.0 µg Sb/l	0.25	0.33	0.45	12	100
Arsenic	10 µg As/l	0.40	0.56	0.75	12	100
Benzene	1.0 µg/l	<0.06	<0.06	<0.06	12	100
Benzo(a)pyrene	0.010 µg/l	<0.001	<0.001	<0.001	12	100
Boron	1.0 mg B/l	<0.040	0.100	0.179	12	100
Cadmium	5.0 µg Cd/l	<0.5	<0.5	<0.5	12	100
Chromium	50 µg Cr/l	0.11	0.29	0.73	12	100
Copper	2.0 mg Cu/l	0.003	0.016	0.053	12	100
Cyanide	50 µg CN/l	<0.005	<0.005	<0.005	12	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	12	100
Enterococci	0 per 100ml	0	0	0	12	100
Fluoride	1.5 mg F/l	<0.050	0.17	0.84	12	100
Lead	25 µg Pb/l ¹	<0.5	<0.5	5.0	12	100
Mercury	1.0 µg Hg/l	<0.002	0.016	0.178	12	100
Nickel	20 µg Ni/l	1.20	1.43	1.80	12	100
Linuron ²	0.1 µg/l	<0.004	<0.004	0.012	12	100
Diuron ²	0.1 µg/l	<0.005	<0.005	0.005	12	100
2,4-D ²	0.1 µg/l	<0.011	0.012	0.038	12	100
Mecoprop ²	0.1 µg/l	<0.010	<0.010	0.021	12	100
Atrazine ²	0.1 µg/l	<0.002	<0.002	0.008	12	100
Prometryne ²	0.1 µg/l	<0.002	<0.002	0.009	12	100
Terbutryn ²	0.1 µg/l	<0.003	<0.003	0.014	12	100
Terbutylazine ²	0.1 µg/l	<0.002	<0.002	0.003	12	100
Dalapon ²	0.1 µg/l	<0.010	0.015	0.031	12	100
Pesticides total	0.5 µg/l	<0.010	<0.010	0.082	12	100

¹ The value of 25 µg Pb/l is valid until immediately before 25th December 2013, reducing to 10 µg Pb/l on and after 25th December 2013.

² Detected pesticide - 76 other pesticides analysed for and not detected.

5 Water Quality in the Distribution System (continued)

Audit Monitoring: Supply Zone

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Polycyclic aromatic hydrocarbons	0.10 µg/l	<0.01	<0.01	<0.01	12	100
Selenium	10 µg Se/l	0.70	1.02	1.70	12	100
Sodium	200 mg Na/l	46.2	50.2	53.7	12	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	0.1	12	100
Tetrachloromethane	3 µg/l	<0.1	0.1	0.4	12	100
Trihalomethanes	100 µg/l	5.8	13.1	19.2	12	100
Chloride	250 mg Cl/l	60.6	65.0	68.3	12	100
Sulphate	250 mg SO ₄ /l	84.0	92.5	99.5	12	100
Total Organic Carbon	No abnormal change	1.67	1.90	2.12	12	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	12	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	<0.03	12	100
Gross beta	1.0 Bq/l	0.12	0.18	0.22	12	100

6 Water Quality Complaints

During the year the Company received 122 complaints and queries from customers relating to water quality. Every reported complaint is investigated and samples of water are taken. Where possible an on-the-spot assessment of the customer's complaint is undertaken and action taken to rectify the problem. Samples of water taken from customers taps are, where appropriate, given a full physical, bacteriological and chemical analysis and the results are sent to the customer, with a narrative explanation. The following table shows a breakdown of the type of complaint or query received and the analytical compliance level.

Where possible an on-the-spot assessment of the customer's complaint is undertaken and action taken to rectify the problem.

Type of query	No	Bacteriological compliance %
Discoloured water	85	100
Taste/Odour	15	100
Air in supply	5	100
Illness	5	100
Other	12	100
Total	122	100

Most water quality complaints are due to discoloured water, resulting from old corroded steel or cast iron pipes. Many water quality issues, which are influenced by private plumbing and pipe work systems which are old or in poor internal condition are not within the control of Jersey Water. Whilst Jersey Water is not responsible for replacing these pipes, we do provide assistance in advising customers on the most effective solutions.

The programme of replacing old pipes and service connections within the distribution system continues and unfortunately these works require the water supply to be disrupted, which may cause discolouration of water for very small periods. During the year 1.98 km of treated water mains and 505 service pipes were replaced with pipe work made of modern lined materials. These works require a great deal of planning and customers are always advised in advance of the planned works, which results in improvements to the infrastructure supplying them with water and we are grateful for their cooperation.

The Planning & Environment Department are responsible for the administration of the Water (Jersey) Law 1972 and their officers make quarterly inspections of analytical results of samples derived from customer water quality complaints.



Samples of water taken from customers taps are, where appropriate, given a full analysis and the results are sent to the customer.

7 New and Replacement Water Mains

The process of replacing and laying new water mains involves disinfection of the pipes before the infrastructure is deemed safe for operation. All such infrastructure is disinfected, flushed and sampled before being brought into service. The sampling programme is rigorous and requires three samples to be taken, each sample taken at least 24 hours apart, with all three samples being subject to a full physical and bacteriological analysis to ensure the pipes are sterile and fit for service.

Before any new water mains are brought into service they are signed off by the Water Quality Manager and Managing Director.

During the year some 5.5 km of new water mains were laid and 1.98 km of water mains were replaced, requiring 195 water samples to be taken and analysed.



During the year some 5.5 km of new water mains were laid and 1.98 km of water mains were replaced.

8 Appendices

Appendix A

Audit Monitoring: Handois TW

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Benzene	1.0 µg/l	<0.060	<0.060	<0.060	10	100
Boron	1.0 mg B/l	<0.040	0.079	0.342	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	10	100
Fluoride	1.5 mg F/l	<0.050	<0.050	0.0900	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.003	10	100
Linuron ¹	0.1 µg/l	<0.004	0.008	0.066	36	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.018	36	100
M.C.P.A. ¹	0.1 µg/l	<0.010	<0.010	0.030	36	100
2,4-D ¹	0.1 µg/l	<0.010	0.012	0.080	36	100
Mecoprop ¹	0.1 µg/l	<0.010	<0.010	0.022	36	100
Atrazine ¹	0.1 µg/l	<0.002	<0.002	0.010	36	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.020	36	100
Terbutryn ¹	0.1 µg/l	<0.003	<0.003	0.022	36	100
Terbutylazine ¹	0.1 µg/l	<0.002	<0.002	0.004	36	100
Lindane ¹	0.1 µg/l	<0.010	<0.010	0.026	10	100
Metoxuron ¹	0.1 µg/l	<0.003	<0.003	0.006	4	100
Dalapon ¹	0.1 µg/l	<0.010	0.014	0.040	23	100
Pesticides total	0.5 µg/l	<0.010	0.036	0.181	36	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	0.3	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.1	10	100
Chloride	250 mg Cl/l	63.6	66.1	72.8	10	100
Sulphate	250 mg SO ₄ /l	82.1	91.7	100.0	10	100
Total Organic Carbon	No abnormal change	1.71	2.02	2.56	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	<0.03	10	100
Gross beta	1.0 Bq/l	0.16	0.19	0.23	10	100

¹ Detected pesticide - 73 other pesticides analysed for and not detected.

8 Appendices (continued)

Appendix B

Audit Monitoring: Augres TW

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Benzene	1.0 µg/l	<0.060	<0.060	<0.060	10	100
Boron	1.0 mg B/l	<0.040	0.058	0.128	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	10	100
Fluoride	1.5 mg F/l	<0.050	<0.050	0.080	10	100
Mercury	1.0 µg Hg/l	<0.002	0.003	0.007	10	100
Isoproturon ¹	0.1 µg/l	<0.003	<0.003	0.006	36	100
Linuron ¹	0.1 µg/l	<0.004	<0.004	0.013	36	100
Carbetamide ¹	0.1 µg/l	<0.005	<0.005	0.006	36	100
M.C.P.A. ¹	0.1 µg/l	<0.010	<0.010	0.016	36	100
M.C.P.B. ¹	0.1 µg/l	<0.010	<0.010	0.012	36	100
2,4-D ¹	0.1 µg/l	<0.010	<0.010	0.019	36	100
Mecoprop ¹	0.1 µg/l	<0.010	<0.010	0.024	36	100
Dichlorprop ¹	0.1 µg/l	<0.010	<0.010	0.013	36	100
Atrazine ¹	0.1 µg/l	<0.002	0.004	0.015	36	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.006	36	100
Terbutryn ¹	0.1 µg/l	<0.004	<0.004	0.015	36	100
Cyanazine ¹	0.1 µg/l	<0.007	<0.007	0.019	36	100
Tebuconazole ¹	0.1 µg/l	<0.002	<0.002	0.011	36	100
Dalapon ¹	0.1 µg/l	<0.010	0.015	0.047	23	100
Pesticides total	0.5 µg/l	<0.010	0.021	0.054	36	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	0.14	0.40	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.2	10	100
Chloride	250 mg Cl/l	54.8	60.0	65.3	10	100
Sulphate	250 mg SO ₄ /l	82.4	90.8	96.8	10	100
Total Organic Carbon	No abnormal change	1.79	2.00	2.20	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	<0.03	10	100
Gross beta	1.0 Bq/l	0.18	0.21	0.24	10	100

¹ Detected pesticide - 71 other pesticides analysed for and not detected.

8 Appendices (continued)

Appendix C

Audit Monitoring: Les Platons Service Reservoir, East Compartment

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Benzene	1.0 µg/l	<0.060	<0.060	<0.060	10	100
Boron	1.0 mg B/l	<0.040	0.067	0.145	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	10	100
Fluoride	1.5 mg F/l	<0.05	0.055	0.090	10	100
Mercury	1.0 µg Hg/l	<0.002	0.002	0.010	10	100
Isoproturon ¹	0.1 µg/l	<0.003	<0.003	0.004	10	100
Linuron ¹	0.1 µg/l	<0.004	0.007	0.024	10	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.008	10	100
M.C.P.A. ¹	0.1 µg/l	<0.010	<0.010	0.010	10	100
2,4-D ¹	0.1 µg/l	<0.010	0.016	0.056	10	100
Atrazine ¹	0.1 µg/l	<0.002	<0.002	0.006	10	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.017	10	100
Terbutryn ¹	0.1 µg/l	<0.002	0.004	0.022	10	100
Terbutylazine ¹	0.1 µg/l	<0.002	<0.002	0.012	10	100
Propiconazole ¹	0.1 µg/l	<0.004	<0.004	0.006	10	100
Tebuconazole ¹	0.1 µg/l	<0.003	<0.003	0.003	10	100
Dalapon ¹	0.1 µg/l	<0.010	0.016	0.034	10	100
Pesticides total	0.5 µg/l	<0.010	0.051	0.095	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	0.11	0.70	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.1	10	100
Chloride	250 mg Cl/l	61.8	65.8	69.7	10	100
Sulphate	250 mg SO ₄ /l	83.6	95.8	106.0	10	100
Total Organic Carbon	No abnormal change	1.73	2.05	2.35	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	<0.03	10	100
Gross beta	1.0 Bq/l	0.14	0.18	0.23	10	100

¹ Detected pesticide - 73 other pesticides analysed for and not detected.

8 Appendices (continued)

Appendix D

Audit Monitoring: Les Platons Service Reservoir, West Compartment

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Benzene	1.0 µg/l	<0.060	<0.060	<0.060	10	100
Boron	1.0 mg B/l	<0.040	<0.040	0.128	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	10	100
Fluoride	1.5 mg F/l	<0.05	0.11	0.54	10	100
Mercury	1.0 µg Hg/l	<0.002	0.013	0.116	10	100
Linuron ¹	0.1 µg/l	<0.004	0.005	0.029	10	100
M.C.P.A. ¹	0.1 µg/l	<0.009	<0.009	0.009	10	100
2,4-D ¹	0.1 µg/l	<0.011	<0.011	0.038	10	100
Mecoprop ¹	0.1 µg/l	<0.010	<0.010	0.015	10	100
Atrazine ¹	0.1 µg/l	<0.002	<0.002	0.003	10	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.007	10	100
Terbutryn ¹	0.1 µg/l	<0.003	<0.003	0.014	10	100
Terbuthylazine ¹	0.1 µg/l	<0.002	<0.002	0.004	10	100
Propiconazole ¹	0.1 µg/l	<0.004	<0.004	0.006	10	100
Tebuconazole ¹	0.1 µg/l	<0.003	<0.003	0.011	10	100
HCH Alpha ¹	0.1 µg/l	<0.010	<0.010	0.023	10	100
Dalapon ¹	0.1 µg/l	<0.010	0.019	0.033	10	100
Pesticides total	0.5 µg/l	<0.010	0.052	0.107	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	0.4	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.2	10	100
Chloride	250 mg Cl/l	61.3	66.2	71.6	10	100
Sulphate	250 mg SO ₄ /l	83.3	93.0	103.0	10	100
Total Organic Carbon	No abnormal change	1.77	1.95	2.39	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	<0.03	10	100
Gross beta	1.0 Bq/l	0.12	0.18	0.21	10	100

¹ Detected pesticide - 73 other pesticides analysed for and not detected.

8 Appendices (continued)

Appendix E

Audit Monitoring: Westmount Service Reservoir

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Benzene	1.0 µg/l	<0.060	<0.060	<0.060	10	100
Boron	1.0 mg B/l	<0.040	0.072	0.146	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	3.30	10	100
Cyanide	50 µg CN/l	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	10	100
Fluoride	1.5 mg F/l	<0.05	0.11	0.76	10	100
Mercury	1.0 µg Hg/l	<0.002	0.005	0.028	10	100
Linuron ¹	0.1 µg/l	<0.010	<0.010	0.062	10	100
M.C.P.A. ¹	0.1 µg/l	<0.009	<0.009	0.017	10	100
2,4-D ¹	0.1 µg/l	<0.011	<0.011	0.038	10	100
Mecoprop ¹	0.1 µg/l	<0.010	<0.010	0.020	10	100
Atrazine ¹	0.1 µg/l	<0.002	0.003	0.007	10	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.010	10	100
Terbutryn ¹	0.1 µg/l	<0.003	0.005	0.018	10	100
Cyanazine ¹	0.1 µg/l	<0.002	<0.002	0.008	10	100
Propiconazole ¹	0.1 µg/l	<0.003	<0.003	0.005	10	100
Dalapon ¹	0.1 µg/l	<0.010	0.015	0.029	10	100
Pesticides total	0.5 µg/l	<0.010	0.046	0.112	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.10	0.130	0.40	10	100
Tetrachloromethane	3 µg/l	<0.10	<0.10	0.20	10	100
Chloride	250 mg Cl/l	58.4	63.3	66.7	10	100
Sulphate	250 mg SO ₄ /l	78.2	90.1	96.6	10	100
Total Organic Carbon	No abnormal change	1.67	2.10	2.92	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	<0.03	10	100
Gross beta	1.0 Bq/l	0.17	0.20	0.24	10	100

¹ Detected pesticide - 75 other pesticides analysed for and not detected.



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Jersey Water is the trading name of
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