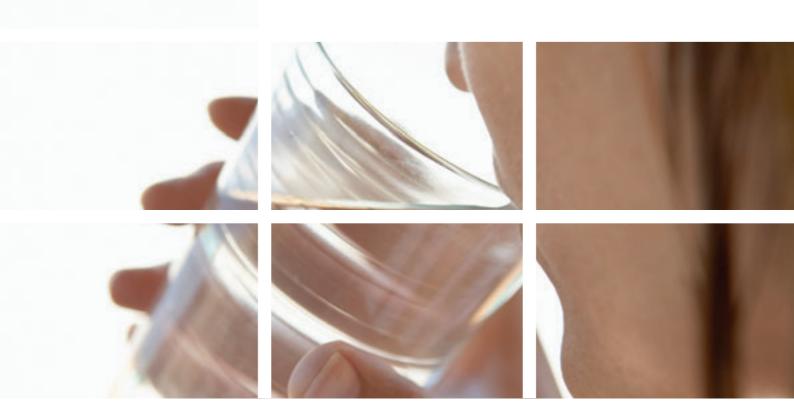
Water Quality Report 2006





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
ŝ	Water Quality Complaints	Page 11
7	New Water Mains	Page 12
3	Appendices	Page 13

1 Executive Summary

Similar to previous years, I am pleased to report that in 2006 the water we supplied was to a very high standard. Only 6 analyses of treated water out of 18,382 taken during the year, failed to comply with bacteriological and chemical parameters, this equates to an overall compliance level of 99.97%.

The average daily demand for water supplied by Jersey Water was 20.5Ml, with a total of 7,484 million litres of treated water supplied to its customers in 2006.

The water quality monitoring programme and parameters analysed during the year were in accordance with a programme approved by the States of Jersey Planning & Environment department, as required by the Water (Jersey) Law 1972. The programme closely follows the requirements set out in the Water Supply (Water Quality) Regulations 2000 for England & Wales. Monitoring and surveillance of the treated water we supply to our customers is undertaken on a continuous basis.

As well as monitoring treated water quality, Jersey Water has an extensive programme of raw water quality monitoring, at the streams, reservoirs and throughout the treatment processes. This programme, together with on-line quality monitoring equipment installed at the treatment works, allows our operating staff to select and optimise the most suitable water to be taken for treatment.

The sampling for nitrates showed that only three analyses were above the 50 mg/l limit and the highest recorded figure was 51.4 mg/l. Jersey Water has no controls over the source of nitrates in water resources, consequently a dispensation has been granted, which allows 33% of regulatory analyses to be above 50 mg/l, but not greater than 70 mg/l.

We supplied to our customers during 2006 was to an exceptionally high standard and above the highest water quality levels reported by water supply undertakings in England & Wales.

The tables in this report show the results of the treated water monitoring programme carried out in 2006. The tables show the maximum, mean and minimum concentration of the particular parameter.

It gives me great pleasure to announce that the quality of water we supplied to our customers during 2006 was to an exceptionally high standard and above the highest water quality levels reported by water supply undertakings in England & Wales.

Howard N Snowden

Managing Director & Engineer

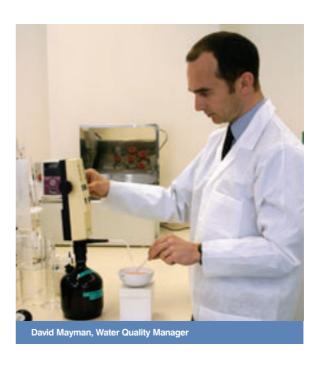
The Water Quality Monitoring Team 2

Jersey Water has long realised the importance of having an in-house water quality monitoring facility in order to maintain a high standard and secure water supply. To this end Jersey Water has a modern laboratory situated at Millbrook, St Lawrence.

The Water Quality Manager, David Mayman, has over 22 years experience in water quality monitoring, is a Chartered Chemist and member of the Royal Society of Chemistry. Mrs Anna Le Sueur who was the assistant manager left the Company in 2006 to start a family and her role was ably filled by Mrs Sarah Gavey who has been with the Company for over 12 years. The laboratory technician position has been filled by Mrs Nora Treanor, who brings with her a wealth of experience from her previous roles in agriculture, dairy industry and other laboratories.

6 It is essential that the task of taking treated water samples is done with care and diligence to minimise sample contamination.

The importance of the role of the samplers cannot be underestimated. It is essential that the task of taking treated water samples is done with care and diligence to minimise sample contamination. Our samplers Keith Quemard, Bob Langford and Edward Huchet have continued to provide an excellent service to the laboratory and first-line contact with customers on water quality issues.



Raw Water Quality 3

The majority of water supplied by Jersey Water is derived from surface water resources, with streams across the Island either feeding directly into or pumped to 6 large storage reservoirs. A small volume of ground water is abstracted from the sand aquifer located in southern part of St Ouen's Bay area.

For operational and monitoring purposes Jersey Water takes samples of water from streams and reservoirs. This enables our operational staff to select the most suitable waters to be taken for treatment. Analysis is carried out for physical, bacteriological and chemical parameters. In 2006 our results showed that out of 4,416 analyses for herbicides and pesticides in the stream courses only 19 were above the 0.1 ug/l limit compared to 42 in 2005.



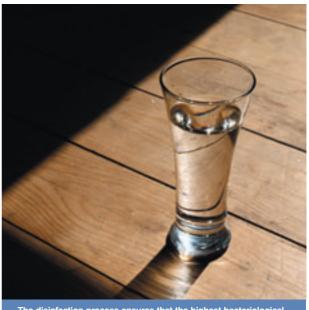
The majority of water supplied by Jersey Water is derived from surface water resources, with streams across the Island either feeding directly into or pumped to 6 large storage reservoirs

Treatment Works and Service Reservoir Performance

Treatment of the raw water is undertaken at two treatment works, located at Handois, St Lawrence and Augrès, Trinity. Both these works have identical treatment processes, which include chemically assisted clarification, followed by filtration using a combination of sand and anthracite.

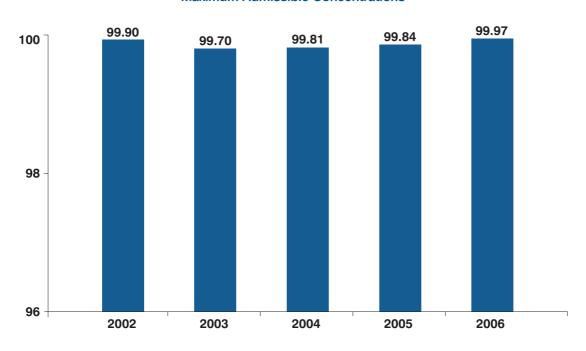
Disinfection of the treated water ensures that any remaining bacteria present in the water are killed before it passes into the distribution network and to customers premises. A combination of chlorine and ammonia is used to effect the disinfection process and a relatively long retention time in holding tanks is allowed to optimise the process, which is also time dependant. The amount of chlorine and ammonia added to the treated water is very small and is continuously monitored to ensure concentrations are within acceptable aesthetic levels. The disinfection process also ensures that the highest bacteriological standards are maintained up to the customers tap.

There were 6 non-compliant analyses detected in 2006, out of the 18,382 analyses taken for compliance purposes, giving a percentage compliance of 99.97%. The following table shows the percentage compliance in treated water for 2006 and the previous four years.



The disinfection process ensures that the highest bacteriological standards are maintained up to the customers tap

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	Мах	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	0.014	0.1 mg NO ₂ /l	100
Residual disinfectant	0.74	No value mg Cl₂/l	
Turbidity	0.37	4 NTU	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	605	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	0.010	0.1 mg NO ₂ /l	100
Residual disinfectant	0.62	No value mg Cl₂/l	
Turbidity	0.40	4 NTU	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	589	2500 µS/cm at 20°C	100

In order to ensure adequate treated water is available to meet peak demand periods and exceptional summer time demand, treated water storage reservoirs are provided within the distribution system.

The total storage capacity of the reservoirs is 18Ml, just below the average daily demand of 20Ml. Jersey Water has two service reservoirs, strategically located on high ground at Westmount Road, St Helier and Les Platons, Trinity.

Treatment Works and Service Reservoir performance (continued) 4

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	No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	563	2500 μS/cm at 20°C	100

Check Monitoring: Les Platons Service Reservoir, West Compartment

Substances and parameters	Мах	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	No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	563	2500 μS/cm at 20°C	100

Check Monitoring: Westmount Service Reservoir

Substances and parameters	Мах	Specific concentration or value (maximum) or state	% compliance
E.coli	0	0 per 100ml	100
Coliform bacteria	1	0 per 100ml (95% of samples)	99.7
Colony counts	No abnormal change	No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	635	2500 μS/cm at 20°C	100

5 Water Quality in the Distribution System

Sampling of water throughout the distribution network is undertaken in accordance with a programme to ensure the water we supply meets physical, bacteriological and chemical standards.

During 2006, 1300 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	650	100
Coliform bacteria	0 per 100ml	0	0	1	650	99.8
Residual disinfectant	No value mg Cl₂/l	<0.02	0.13	0.58	550	
Aluminium	200 μg Al/l	<20	25	125	100	100
Ammonium	0.50 mg NH ₄ /l	<0.04	<0.04	0.15	100	100
Clostridium perfringens	0 per 100ml	0	0	0	100	100
Colony counts	No abnormal change	No ab	normal c	hange	550	100
Colour	20 mg/l Pt/Co	< 0.69	1.28	5.27	100	100
Conductivity	2500 µS/cm at 20°C	463	533	593	100	100
Hydrogen ion	10.0 pH value 6.5(min)	7.24	7.76	8.24	100	100
Iron	200 μg Fe/l	<10	27	371	100	99
Manganese	50 μg Mn/l	<1.0	4.4	21.3	100	100
Nitrate	50 mg NO₃/I	19.4	36.9	51.4	100	97
Nitrite	0.5 mg NO ₂ /l	<0.01	0.033	0.449	100	100
Odour	3 at 25°C Dilution number	1	1	3	100	100
Taste	3 at 25°C Dilution number	1	1	3	97	100
Turbidity	4 NTU	0.09	0.27	2.76	99	100

Water Quality in the Distribution System (continued) 5

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	<0.20	<0.20	0.36	11	100
Arsenic	10 μg As/l	< 0.40	< 0.40	0.64	11	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	11	100
Boron	1.0 mg B/l	0.055	0.136	0.352	12	100
Cadmium	5.0 μg Cd/l	<0.5	< 0.5	<0.5	11	100
Chromium	50 μg Cr/l	<0.6	<0.6	0.67	11	100
Copper	2.0 mg Cu/l	< 0.004	0.009	0.026	11	100
Cyanide	50 μg CN/I	< 0.005	< 0.005	0.008	12	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	12	100
Enterococci	0 per 100ml	0	0	0	11	100
Fluoride	1.5 mg F/l	< 0.050	< 0.050	0.06	12	100
Lead ¹	25 µg Pb/l	<0.5	< 0.5	0.8	11	100
Mercury	1.0 µg Hg/l	< 0.002	0.004	0.030	12	100
Nickel	20 μg Ni/l	<2	<2	2	11	100
Atrazine ²	0.1 μg/l	< 0.002	0.002	0.007	11	100
Prometryne ²	0.1 μg/l	< 0.002	<0.002	0.010	11	100
Tebuconazole ²	0.1 μg/l	< 0.002	<0.002	0.008	11	100
Dalapon ²	0.1 μg/l	< 0.010	0.012	0.027	11	100
Pesticides total	0.5 μg/l	< 0.010	0.015	0.035	12	100

 $^{^1}$ The value of 25 μ g Pb/l is valid until immediately before 25th December 2013, reducing to 10 μ g Pb/l on and after 25th December 2013. 2 Detected pesticide - 83 other pesticides analysed for and not detected.

5 Water Quality in the Distribution System (continued)

Audit Monitoring : Supply Zone (continued)

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	11	100
Selenium	10 μg Se/l	<1.0	<1.0	2.0	11	100
Sodium	200 mg Na/l	44.2	55.6	69.9	11	100
Trichloroethene and Tetrachloroethene	10 μg/l	<0.1	<0.1	0.3	12	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.1	12	100
Trihalomethanes	100 μg/l	3.3	11.5	16.6	11	100
Chloride	250 mg Cl/l	57.4	67.4	85.5	12	100
Sulphate	250 mg SO ₄ /I	73.0	95.6	111.0	12	100
Total Organic Carbon	No abnormal change	0.99	1.48	1.83	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	0.19	0.23	12	100

Water Quality Complaints

During 2006 we received 127 complaints and queries from customers relating to water quality. An Inspector is dispatched to every reported complaint to take a sample of water and make on the spot assessment of the customer's complaint. 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 explaining the results.

The following table shows a breakdown of the type of complaint or query received and the analytical compliance level.

6 In 2006, some 2.1 km of treated water mains and 300 service pipes were replaced with pipe work made of modern lined materials.

Type of query	No	Bacteriological compliance %
Discoloured water	87	100
Taste/Odour	14	100
Air in supply	7	100
Illness	4	100
Other	15	100
Total	127	100

The majority of complaints are due to discolouration of water, resulting from old corroded steel or cast iron pipes, some of which are privately owned and not the responsibility of Jersey Water.

An extensive programme of replacing old pipe work and service connections within the distribution system is in progress, unfortunately the work required in this area does disrupt water supplies and may cause discolouration of water for very small periods. In 2006, some 2.1 km of treated water mains and 300 service pipes were replaced with pipe work made of modern lined materials. Customers are always advised in advance of the planned works to be carried out, 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.



An extensive programme of replacing old pipe work and service connections within the distribution system

New Water Mains

When new and replacement treated water mains are laid, a rigorous programme is undertaken to ensure that they are sterilised before being brought into service. Disinfection and flushing of the main is undertaken, followed by a programme of sampling and analysis of water within the pipes. The sampling programme requires three samples to be taken, with each sample taken at least 24 hours apart, with all three samples being subject to a full physical and bacteriological analysis to ensure the water main is sterile and fit for service.

In 2006 some 280 samples were taken from new and replacement treated water mains.



When new and replacement treated water mains are laid, a rigorous programme is undertaken to ensure that they are sterilised before being brought into service

Appendices 8

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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	< 0.040	0.119	0.311	10	100
Bromate	10 μg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 μg CN/I	<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	< 0.05	0.16	10	100
Mercury	1.0 µg Hg/l	< 0.002	<0.002	0.008	10	100
Chlortoluron ¹	0.1 μg/l	< 0.003	< 0.003	0.008	36	100
Isoproturon ¹	0.1 μg/l	< 0.004	< 0.004	0.004	36	100
Linuron ¹	0.1 μg/l	< 0.004	< 0.004	0.008	36	100
Diuron ¹	0.1 μg/l	< 0.005	<0.005	0.013	36	100
Chlorpropham ¹	0.1 μg/l	< 0.036	< 0.036	0.040	35	100
Atrazine ¹	0.1 μg/l	< 0.002	0.002	0.009	36	100
Prometryne ¹	0.1 μg/l	<0.002	<0.002	0.012	36	100
Propazine ¹	0.1 μg/l	< 0.004	< 0.004	0.011	36	100
Terbutryne ¹	0.1 μg/l	< 0.003	< 0.003	0.015	36	100
Terbuthylazine ¹	0.1 μg/l	<0.002	<0.002	0.004	36	100
Dalapon ¹	0.1 μg/l	< 0.010	0.012	0.035	10	100
Pesticides total	0.5 μg/l	< 0.010	0.034	0.057	10	100
Trichloroethene and Tetrachloroethene	10 μg/l	<0.1	0.140	0.400	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.200	10	100
Chloride	250 mg Cl/l	59.7	68.4	84.3	10	100
Sulphate	250 mg SO4/l	61.4	91.2	102.0	10	100
Total Organic Carbon	No abnormal change	1.07	1.55	1.98	10	100
Tritium	100 Bq/I	<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	0.19	0.22	10	100

¹ Detected pesticide - 76 other pesticides analysed for and not detected.

Appendix B
Audit Monitoring: Augrès TW

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
Benzene	1.0 μg/l	<0.06	<0.06	< 0.06	9	100
Boron	1.0 mg B/l	0.041	0.091	0.131	10	100
Bromate	10 µg BrO₃/l	<1.0	<1.0	<1.0	10	100
Cyanide	50 μg CN/I	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	9	100
Fluoride	1.5 mg F/l	< 0.05	< 0.05	0.07	10	100
Mercury	1.0 µg Hg/l	< 0.002	<0.002	0.008	10	100
Isoproturon ¹	0.1 μg/l	< 0.003	< 0.003	0.005	35	100
Linuron ¹	0.1 μg/l	< 0.004	< 0.004	0.011	35	100
Diuron ¹	0.1 μg/l	< 0.005	< 0.005	0.014	35	100
Mecoprop ¹	0.1 μg/l	< 0.010	< 0.010	0.014	36	100
2,4,5-T ¹	0.1 μg/l	< 0.015	< 0.015	0.041	36	100
Triclopyr ¹	0.1 μg/l	< 0.015	< 0.015	0.038	36	100
Atrazine ¹	0.1 μg/l	< 0.002	0.003	0.018	35	100
Simazine ¹	0.1 μg/l	< 0.009	< 0.009	0.009	35	100
Prometryne ¹	0.1 μg/l	< 0.002	<0.002	0.013	35	100
Trietazine ¹	0.1 μg/l	< 0.003	< 0.003	0.012	35	100
Terbutryne ¹	0.1 μg/l	< 0.004	< 0.004	0.029	34	100
Cyanazine ¹	0.1 μg/l	< 0.007	< 0.007	0.016	34	100
Terbuthylazine ¹	0.1 μg/l	< 0.002	<0.002	0.011	35	100
Tebuconazole 1	0.1 μg/l	< 0.002	<0.002	0.004	34	100
Dalapon ¹	0.1 μg/l	< 0.010	< 0.010	0.043	10	100
Pesticides total	0.5 μg/l	< 0.010	0.026	0.098	10	100
Trichloroethene and Tetrachloroethene	10 μg/l	<0.1	<0.1	0.300	10	100
Tetrachloromethane	3 μg/l	<0.1	<0.1	0.1	10	100
Chloride	250 mg Cl/l	53.5	61.2	68.9	10	100
Sulphate	250 mg SO ₄ /I	85.0	95.5	105.0	10	100
Total Organic Carbon	No abnormal change	1.59	2.07	4.15	11	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	0.21	0.25	10	100

¹ Detected pesticide - 72 other pesticides analysed for and not detected.

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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	<0.04	0.116	0.341	10	100
Bromate	10 µg BrO₃/l	<1.0	<1.0	<1.0	10	100
Cyanide	50 μg CN/I	<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	< 0.05	0.09	10	100
Mercury	1.0 μg Hg/l	< 0.002	0.002	0.005	10	100
Atrazine ¹	0.1 μg/l	< 0.002	< 0.002	0.008	10	100
Prometryne ¹	0.1 μg/l	< 0.002	<0.002	0.006	10	100
Terbuthylazine ¹	0.1 μg/l	< 0.002	< 0.002	0.004	10	100
Tebuconazole 1	0.1 μg/l	< 0.004	< 0.004	0.026	10	100
Dalapon ¹	0.1 μg/l	< 0.010	0.012	0.024	10	100
Pesticides total	0.5 μg/l	< 0.010	0.016	0.036	10	100
Trichloroethene and Tetrachloroethene	10 μg/l	<0.1	0.1	0.300	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.1	10	100
Chloride	250 mg Cl/l	58.8	69.6	90.9	10	100
Sulphate	250 mg SO ₄ /I	86.8	95.8	113.0	10	100
Total Organic Carbon	No abnormal change	1.27	1.62	2.26	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	0.22	10	100

¹ Detected pesticide - 82 other pesticides analysed for and not detected.

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	<0.06	<0.06	< 0.06	9	100
Boron	1.0 mg B/l	< 0.04	0.124	0.295	10	100
Bromate	10 μg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 μg CN/I	<5	<5	<5	10	100
1,2 dichloroethane	3.0 µg/l	<0.1	<0.1	<0.1	8	100
Fluoride	1.5 mg F/l	< 0.05	<0.05	0.08	10	100
Mercury	1.0 µg Hg/l	<0.002	0.002	0.004	10	100
Diuron ¹	0.1 μg/l	<0.005	< 0.005	0.025	10	100
Atrazine ¹	0.1 μg/l	<0.002	<0.002	0.004	10	100
Prometryne ¹	0.1 μg/l	<0.002	0.004	0.033	10	100
Terbutryne ¹	0.1 μg/l	< 0.004	< 0.004	0.007	10	100
Terbuthylazine ¹	0.1 μg/l	< 0.002	<0.002	0.006	10	100
Dalapon ¹	0.1 μg/l	< 0.010	0.015	0.025	10	100
Pesticides total	0.5 μg/l	< 0.010	0.024	0.053	10	100
Trichloroethene and Tetrachloroethene	10 μg/l	<0.1	0.110	0.200	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.123	10	100
Chloride	250 mg Cl/l	60.8	69.7	88.0	10	100
Sulphate	250 mg SO ₄ /I	74.0	94.1	110.0	10	100
Total Organic Carbon	No abnormal change	1.21	1.57	1.84	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	0.18	0.21	10	100

¹ Detected pesticide - 81 other pesticides analysed for and not detected.

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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	<0.04	0.114	0.214	10	100
Bromate	10 µg BrO₃/l	<1.0	<1.0	<1.0	10	100
Cyanide	50 μg CN/I	<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	< 0.05	0.06	10	100
Mercury	1.0 µg Hg/l	< 0.002	< 0.002	0.004	10	100
Monolinuron ¹	0.1 μg/l	< 0.010	0.010	0.096	10	100
Atrazine ¹	0.1 μg/l	< 0.002	0.002	0.008	10	100
Prometryne ¹	0.1 μg/l	< 0.002	< 0.002	0.006	10	100
Terbutryn ¹	0.1 μg/l	< 0.003	< 0.003	0.017	10	100
Terbuthylazine ¹	0.1 μg/l	< 0.002	0.002	0.010	10	100
Tebuconazole 1	0.1 μg/l	< 0.003	< 0.003	0.008	10	100
Dalapon ¹	0.1 μg/l	< 0.010	< 0.010	0.022	10	100
Pesticides total	0.5 μg/l	< 0.010	0.024	0.104	10	100
Trichloroethene and Tetrachloroethene	10 μg/l	<0.1	0.130	0.300	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.153	10	100
Chloride	250 mg Cl/l	56.7	65.0	79.8	10	100
Sulphate	250 mg SO ₄ /I	84.0	95.2	108.0	10	100
Total Organic Carbon	No abnormal change	1.24	1.65	2.04	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha ²	0.1 Bq/l	< 0.03	< 0.03	0.03	10	100
Gross beta ²	1.0 Bq/l	0.16	0.20	0.24	10	100

 $^{^{\}rm 1}$ Detected pesticide - 80 other pesticides analysed for and not detected.



Mulcaster House, Westmount Road, St. Helier, Jersey, JE1 1DG

Telephone: 01534 707300 Facsimile: 01534 707400 Email: info@jerseywater.je Website: www.jerseywater.je

Jersey Water is the trading name of The Jersey New Waterworks Company Limited.