



**Water Quality Report
2005**

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1 Executive Summary

During 2005 Jersey Water supplied 7,291 million litres of drinking water to its customers and I am pleased to report that 99.84 % of the regulatory analyses of water carried out during the year complied with the maximum allowable concentrations set out in the Water (Jersey) Law 1972.

The following tables show the results of the treated water quality monitoring programme. The tables show the minimum, mean and maximum concentrations of physical, bacteriological and chemical quality parameters, together with the respective Maximum Allowable Concentration (MAC) and the percentage compliance with the MAC.

In order to ensure that the water quality results are representative of the water we supplied during the year, a monitoring programme is adopted which ensures an optimum frequency of sampling is applied. The monitoring programme is based on the Water Supply (Water Quality) Regulations 2000 for England & Wales. The Water (Jersey) Law 1972 requires the proposed annual monitoring programme to be approved by the Planning & Environment department.

I am also pleased to report that 92% of the drinking water samples for nitrates during the year were below the 50 mg/l limit. The maximum level of nitrate detected was 54 mg/l. The level of nitrates in streams regularly exceeds the 50 mg/l limit between the months of March and May, the concentration being dependant on the volume of rainfall in these months and more importantly the intensity of the rainfall. Since Jersey Water has no controls over the levels of nitrates in water resources, a dispensation under the law has been granted, which allows 33% of our samples to be above the 50 mg/l level, but not greater than 70 mg/l.

“I am pleased to report that the quality of water we supply is of a very high standard and is comparable to water supplied by water companies in the United Kingdom, which are recognised to have the highest quality standards in the world.”

Jersey Water and our consultants carried out 18,388 analyses of the treated water supplied for compliance purposes and in addition to this, a comprehensive monitoring programme is in place for sampling and analysing the quality of water resources and water stored in our reservoir storage system. This programme, together with on-line monitoring systems, allows our operating staff to select the most suitable water to be taken for treatment and distribution to our customers.

From the information contained in this report I am pleased to report that the quality of water we supply is of a very high standard and is comparable to water supplied by water companies in the United Kingdom, which are recognised to have the highest quality standards in the world.

Howard N Snowden
Managing Director & Engineer

2 The Water Quality Monitoring Team

To enable monitoring and analysis of the water we supply Jersey Water has a modern and comprehensive water quality monitoring laboratory at Millbrook Depot, St Lawrence.

Our Water Quality Manager, David Mayman is a Chartered Chemist and a Member of the Royal Society of Chemistry. David has over 20 years experience in water supply quality and is ably supported by assistant manager Anna Le Sueur and laboratory technician Sarah Gavey. The Department has three samplers, Keith Quemard, Bob Langford and Edward Huchet, who have taken 8300 samples of water in 2005, attended to customer queries and carried out sampling preparatory work in the laboratory.

“Our Water Quality Manager, David Mayman is a Chartered Chemist and a Member of the Royal Society of Chemistry.”

The water quality laboratory is a purpose designed facility, consisting of a preparatory room with auto-claves for sterilisation of sample bottles and equipment, a bacteriological laboratory and chemical laboratory. The laboratory uses membrane type technology for bacteriological testing, which is more sensitive than the classic media type analytical process.



Water Quality Laboratory

3 Raw Water Quality

Jersey Water derives the majority of its water from the collection of surface water streams. These streams either flow directly into the main reservoirs or are pumped from a number of stream abstraction stations which are remote from the reservoirs.

During 2005, 908 water samples were taken from stream sources and analysed for physical, bacteriological and chemical parameters. There were 24 herbicides and pesticides detected in water samples taken from the streams.



Raw water sample collection



Handois Raw Water Storage Reservoir

4 Treatment Works and Service Reservoir Performance

Jersey Water operates two treatment works located at Handois, St Lawrence and Augrès, Trinity. Both treatment works have identical treatment processes, which use a chemically-assisted primary treatment system, using aluminium sulphate, followed by dual media (sand and anthracite) rapid gravity filtration.

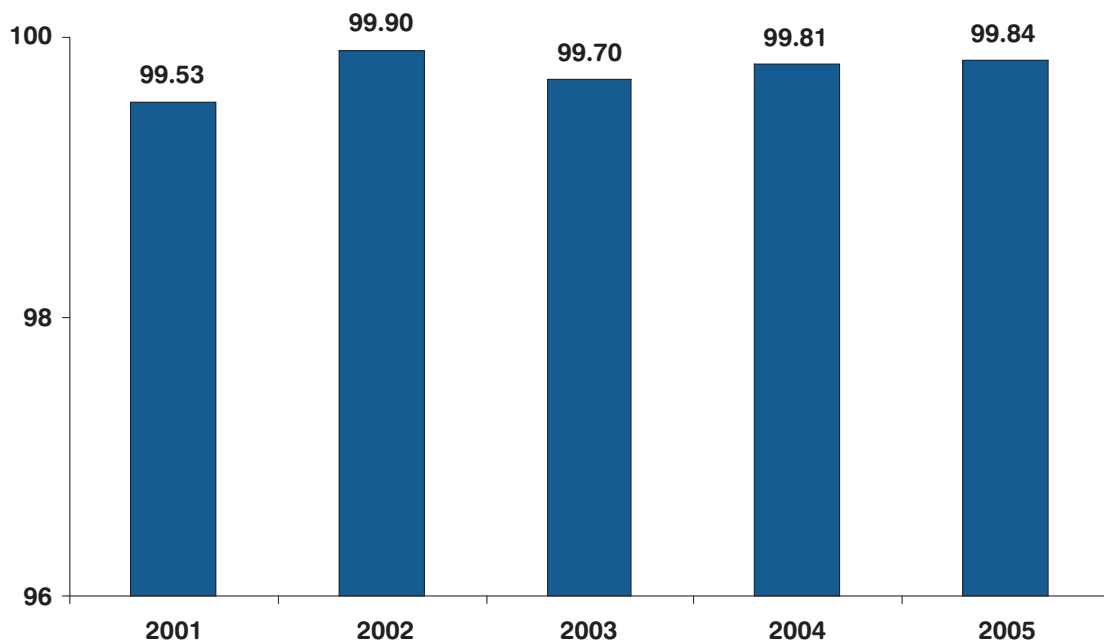
Disinfection is the key to a safe water supply. The use of chlorine in the water industry has been mandatory in England and Wales since the 1945 Water Act and has resulted in the eradication of diseases which were caused by waterborne pathogens. Disinfection of the water in Jersey is carried out by the use of chlorine and ammonia, which provides a compound called chloramine. This process ensures a residual concentration of chlorine exists in the water throughout the relatively long and radial type distribution system to ensure bacteriological standards are maintained.

Twenty nine non-compliant analyses were found in samples taken from the supply points and the supply zone during 2005, out of 18,388 analyses taken for compliance purposes. This gives a percentage compliance of 99.84%, slightly up on last years figure of 99.81%.



Augrès Treatment Works

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



4 Treatment Works and Service Reservoir performance (continued)

The water quality regulations stipulate that two kinds of monitoring are required - check and audit monitoring. The check monitoring is done on a more frequent basis to ensure that the treatment works and the water in distribution is suitable for supply whereas the audit monitoring is used to investigate the quality of the 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 of the audit monitoring programme can be found in the appendix section).

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	1	0 per 100ml	99.7
Colony counts	No abnormal change	No abnormal change	100
Nitrite	0.040	0.1 mg NO ₂ /l	100
Residual disinfectant	0.74	No value mg Cl ₂ /l	100
Turbidity	0.43	4 NTU	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	569	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	1	0 per 100ml	99.7
Colony counts	No abnormal change	No abnormal change	100
Nitrite	0.009	0.1 mg NO ₂ /l	100
Residual disinfectant	0.54	No value mg Cl ₂ /l	100
Turbidity	0.36	4 NTU	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	862	2500 µS/cm at 20°C	100

4 Treatment Works and Service Reservoir performance (continued)

Treated water reservoirs are located at Les Platons, Trinity and Westmount Road, above St Helier. These reservoirs are provided to ensure adequate treated water is in-hand to supply our customers at periods of peak daily demand, which are normally 0700 to 0900 and 1700 to 1900 hours.

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	1	0 per 100ml (95% of samples)	98.7
Colony counts	No abnormal change	No abnormal change	100
Clostridium perfringens	0	0 per 100ml	100
Conductivity	563	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	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	571	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	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 μ S/cm at 20°C	100

5 Water Quality in the Distribution System

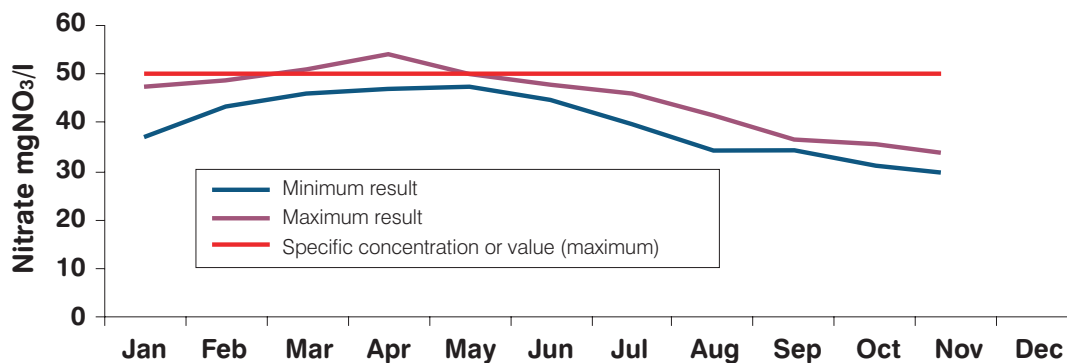
During 2005, 1,272 water samples were taken from all parts of the distribution system and analysed for physical, bacteriological and chemical standards.

The following tables show the results of the check and audit monitoring programmes and the percentage compliance of samples taken from the distribution system.

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	636	100
Coliforms	0 per 100ml	0	0	1	636	99.4
Residual disinfectant	No value mg Cl ₂ /l	<0.02	0.11	0.44	536	100
Aluminium	200 µg Al/l	<20	26	115	100	100
Ammonium	0.50 mg NH ₄ /l	<0.04	<0.04	0.23	100	100
Clostridium perfringens	0 per 100ml	0	0	0	100	100
Colony counts	No abnormal change	No abnormal change			536	100
Colour	20 mg/l Pt/Co	<0.69	1.30	3.03	100	100
Conductivity	2500 µS/cm at 20°C	392	521	580	100	100
Hydrogen ion	10.0 pH value 6.5 (min)	6.66	7.57	8.25	100	100
Iron	200 µg Fe/l	<10	29	120	100	100
Manganese	50 µg Mn/l	<1.0	5.0	50.0	100	100
Nitrate	50 mg NO ₃ /l	28.3	41.6	54.0	100	92
Nitrite	0.5 mg NO ₂ /l	<0.013	0.031	0.413	100	100
Odour	3 at 25°C Dilution number	1	1	1	100	100
Taste	3 at 25°C Dilution number	1	1	1	98	100
Turbidity	4 NTU	0.12	0.29	0.73	100	100

Nitrate levels in distribution 2005



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	<0.40	<0.40	0.50	12	100
Arsenic	10 µg As/l	<0.40	<0.40	0.70	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	0.060	0.100	12	100
Cadmium	5.0 µg Cd/l	<0.5	<0.5	<0.5	12	100
Chromium	50 µg Cr/l	<0.6	<0.6	<0.6	12	100
Copper	2.0 mg Cu/l	<0.004	0.007	0.032	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	0.066	0.130	12	100
Lead	25 µg Pb/l	<1	<1	<1	12	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.007	12	100
Nickel	20 µg Ni/l	<2	<2	2	12	100
Linuron ¹	0.1 µg/l	<0.004	0.006	0.035	11	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.030	11	100
Carbetamide ¹	0.1 µg/l	<0.005	<0.005	0.017	11	100
MCPA ¹	0.1 µg/l	<0.010	0.015	0.160	12	92
Mecoprop ¹	0.1 µg/l	<0.010	0.013	0.140	12	92
Dicamba ¹	0.1 µg/l	<0.010	<0.010	0.039	12	100
Atrazine ¹	0.1 µg/l	<0.002	0.009	0.025	12	100
Simazine ¹	0.1 µg/l	<0.009	<0.009	0.019	12	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.004	12	100
Propazine ¹	0.1 µg/l	<0.003	<0.003	0.017	12	100

¹ Detected pesticide - 71 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
Cyanazine ¹	0.1 µg/l	<0.007	0.022	0.083	11	100
Terbutylazine ¹	0.1 µg/l	<0.002	0.002	0.019	12	100
Propiconazole ¹	0.1 µg/l	<0.002	<0.002	0.005	12	100
Dalapon ¹	0.1 µg/l	<0.010	0.010	0.045	11	100
Pesticides total	0.5 µg/l	<0.010	0.090	0.465	12	100
Polycyclic aromatic hydrocarbons	0.10 µg/l	<0.010	<0.010	<0.010	12	100
Selenium	10 µg Se/l	<1.0	<1.0	<1.0	12	100
Sodium	200 mg Na/l	40.5	52.8	61.2	12	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.5	<0.5	<0.5	12	100
Tetrachloromethane	3 µg/l	<0.12	<0.12	<0.12	12	100
Trihalomethanes	100 µg/l	6.0	10.9	17.1	12	100
Chloride	250 mg Cl/l	50.7	59.3	63.0	12	100
Sulphate	250 mg SO ₄ /l	86.4	98.2	122.0	12	100
Total Organic Carbon	No abnormal change	0.95	1.69	2.35	12	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	12	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	0.04	12	100
Gross beta	1.0 Bq/l	0.17	0.20	0.22	12	100

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

6 Water Quality Complaints

Jersey Water received 130 queries from customers relating to water quality. The following table shows a break-down of these queries, from which it can be seen that there were 122 water quality complaints. The majority of these complaints were due to discolouration of the water resulting from old corroded steel and unlined cast iron pipes, some of which were privately owned pipe work which is not the responsibility of Jersey Water.

All samples taken from customer queries undergo a full physical, bacteriological and chemical analysis. A detailed report is sent to the customer.

The Planning & Environment department are responsible for the administration of the Water (Jersey) Law 1972 and their officers make quarterly visits to our laboratory to examine analytical results of samples derived from water quality complaints from our customers.

Type of query	No	Bacteriological compliance %
Discoloured water	84	100
Taste/odour	25	100
Requests for analysis	8	100
Illness	1	100
Other	12	100
Total	130	100

Since the year 2000 Jersey Water has had an extensive programme to replace old unlined cast iron and steel pipe work in areas where water is becoming discoloured. In 2005, 2.45km of old water pipes were replaced with modern lined pipes, which has improved water quality for customers in these areas.

Jersey Water plans further investment in the renewal of old water pipes in future years.



Testing water quality

7 New Water Mains

Where new and replacement water mains are installed, they are disinfected, flushed and sampled to ensure that no E.coli and Coliforms are present and the pipe work is bacteriologically fit for operation. The water main is subjected to 3 separate samples, each 24 hours apart, to ensure bacteriological standards are satisfactory before the main is passed for operation.

During 2005, 191 samples from new and replacement water mains were taken for analysis.



Laying of a replacement 150mm diameter water main in St Helier



St Peter's Valley - replacement 300mm diameter raw water transfer main and new 90mm diameter treated water main

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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	<0.040	0.073	0.212	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<5	<5	5.0	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	0.06	0.11	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.002	10	100
Linuron ¹	0.1 µg/l	<0.004	<0.004	0.051	37	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.014	37	100
Carbetamide ¹	0.1 µg/l	<0.005	<0.005	0.022	37	100
MCPA ¹	0.1 µg/l	<0.010	0.019	0.290	36	94
Mecoprop ¹	0.1 µg/l	<0.010	0.015	0.220	36	94
Dicamba ¹	0.1 µg/l	<0.010	<0.010	0.052	36	100
Atrazine ¹	0.1 µg/l	<0.002	0.006	0.025	36	100
Simazine ¹	0.1 µg/l	<0.009	<0.009	0.020	36	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.005	36	100
Propazine ¹	0.1 µg/l	<0.004	<0.004	0.013	36	100
Cyanazine ¹	0.1 µg/l	<0.007	0.022	0.097	37	100
Terbuthylazine ¹	0.1 µg/l	<0.002	<0.002	0.017	36	100
Dalapon ¹	0.1 µg/l	<0.010	<0.010	0.019	10	100
Pesticides total	0.5 µg/l	<0.010	0.105	0.629	10	90
Trichloroethene and Tetrachloroethene	10 µg/l	<0.5	<0.5	<0.5	10	100
Tetrachloromethane	3 µg/l	<0.12	<0.12	0.121	10	100
Chloride	250 mg Cl/l	58.5	61.3	63.1	10	100
Sulphate	250 mg SO ₄ /l	88.4	92.9	99.8	10	100
Total Organic Carbon	No abnormal change	1.54	1.72	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	0.15	0.18	0.21	10	100

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

8 Appendices (continued)

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	10	100
Boron	1.0 mg B/l	<0.040	0.053	0.097	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	0.05	0.13	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.004	10	100
Linuron ¹	0.1 µg/l	<0.004	<0.004	0.033	36	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.007	35	100
Carbetamide ¹	0.1 µg/l	<0.005	<0.005	0.017	36	100
Mecoprop ¹	0.1 µg/l	<0.010	<0.010	0.012	36	100
Atrazine ¹	0.1 µg/l	<0.002	0.014	0.024	36	100
Simazine ¹	0.1 µg/l	<0.009	<0.009	0.024	36	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.023	36	100
Propazine ¹	0.1 µg/l	<0.004	<0.004	0.018	36	100
Cyanazine ¹	0.1 µg/l	<0.007	0.035	0.123	35	97
Terbuthylazine ¹	0.1 µg/l	<0.002	<0.002	0.019	36	100
Dieldrin ¹	0.03 µg/l	<0.003	<0.003	0.003	10	100
Dalapon ¹	0.1 µg/l	<0.010	0.025	0.167	9	89
Pesticides total	0.5 µg/l	0.031	0.083	0.225	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.5	<0.5	<0.5	10	100
Tetrachloromethane	3 µg/l	<0.12	0.026	0.131	10	100
Chloride	250 mg Cl/l	50.6	57.0	60.6	10	100
Sulphate	250 mg SO ₄ /l	72.4	91.3	102.0	10	100
Total Organic Carbon	No abnormal change	1.53	1.88	2.76	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	0.04	10	100
Gross beta	1.0 Bq/l	0.18	0.22	0.24	10	100

¹ Detected pesticide - 75 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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	<0.04	0.042	0.091	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	9	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	0.003	10	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.016	10	100
MCPA ¹	0.1 µg/l	<0.010	0.012	0.120	10	90
Mecoprop ¹	0.1 µg/l	<0.010	0.010	0.097	10	100
2,3,6-TBA ¹	0.1 µg/l	<0.010	<0.010	0.025	10	100
Atrazine ¹	0.1 µg/l	<0.002	0.004	0.012	10	100
Simazine ¹	0.1 µg/l	<0.009	<0.009	0.012	10	100
Prometryne ¹	0.1 µg/l	<0.002	<0.002	0.004	10	100
Cyanazine ¹	0.1 µg/l	<0.007	0.023	0.070	10	100
Propiconazole ¹	0.1 µg/l	<0.004	<0.004	0.005	10	100
Dalapon ¹	0.1 µg/l	<0.010	0.015	0.025	10	100
Pesticides total	0.5 µg/l	<0.010	0.071	0.274	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.5	<0.5	<0.5	10	100
Tetrachloromethane	3 µg/l	<0.12	<0.12	<0.12	10	100
Chloride	250 mg Cl/l	59.3	61.7	63.9	10	100
Sulphate	250 mg SO ₄ /l	56.4	89.1	98.6	10	100
Total Organic Carbon	No abnormal change	1.37	1.65	2.01	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	0.04	10	100
Gross beta	1.0 Bq/l	0.16	0.19	0.21	10	100

¹ Detected pesticide - 75 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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	<0.04	0.054	0.141	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	0.05	0.09	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	<0.002	10	100
Linuron ¹	0.1 µg/l	<0.004	<0.004	0.011	10	100
Diuron ¹	0.1 µg/l	<0.005	<0.005	0.005	10	100
Carbetamide ¹	0.1 µg/l	<0.005	<0.005	0.023	10	100
Chlorpropham ¹	0.1 µg/l	<0.013	<0.013	0.025	6	100
MCPA ¹	0.1 µg/l	<0.010	<0.010	0.048	10	100
Mecoprop ¹	0.1 µg/l	<0.010	<0.010	0.039	10	100
Dicamba ¹	0.1 µg/l	<0.010	<0.010	0.014	10	100
Atrazine ¹	0.1 µg/l	<0.002	0.003	0.013	10	100
Simazine ¹	0.1 µg/l	<0.009	0.010	0.066	10	100
Propazine ¹	0.1 µg/l	<0.004	<0.004	0.012	10	100
Cyanazine ¹	0.1 µg/l	<0.007	0.020	0.104	10	90
Dalapon ¹	0.1 µg/l	<0.010	<0.010	0.020	10	100
Pesticides total	0.5 µg/l	<0.010	0.059	0.154	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.5	<0.5	<0.5	10	100
Tetrachloromethane	3 µg/l	<0.12	<0.12	<0.12	10	100
Chloride	250 mg Cl/l	60.3	62.9	65.3	10	100
Sulphate	250 mg SO ₄ /l	94.4	98.9	117.0	10	100
Total Organic Carbon	No abnormal change	1.42	1.67	1.88	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	0.19	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	<0.06	<0.06	<0.06	10	100
Boron	1.0 mg B/l	<0.04	0.058	0.150	10	100
Bromate	10 µg BrO ₃ /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<5	<5	5.0	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	0.10	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.005	10	100
Carbetamide ¹	0.1 µg/l	<0.005	<0.005	0.017	10	100
MCPA ¹	0.1 µg/l	<0.010	0.012	0.110	10	90
Mecoprop ¹	0.1 µg/l	<0.010	0.010	0.089	10	100
Dicamba ¹	0.1 µg/l	<0.010	<0.010	0.022	10	100
Atrazine ¹	0.1 µg/l	<0.002	0.012	0.020	9	100
Simazine ¹	0.1 µg/l	<0.009	<0.009	0.022	10	100
Prometryne ¹	0.1 µg/l	<0.002	0.002	0.017	10	100
Terbutryn ¹	0.1 µg/l	<0.003	<0.003	0.014	10	100
Cyanazine ¹	0.1 µg/l	<0.007	0.030	0.068	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	0.014	10	100
Dalapon ¹	0.1 µg/l	<0.010	<0.010	0.025	10	100
Pesticides total	0.5 µg/l	0.014	0.085	0.256	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.5	<0.5	<0.5	10	100
Tetrachloromethane	3 µg/l	<0.12	<0.12	<0.12	10	100
Chloride	250 mg Cl/l	56.4	60.0	63.0	10	100
Sulphate	250 mg SO ₄ /l	51.2	92.0	105.0	10	100
Total Organic Carbon	No abnormal change	1.38	1.67	2.03	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	0.04	10	100
Gross beta	1.0 Bq/l	0.19	0.20	0.22	10	100

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



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