

# Water Quality Report

# 2008



  
**JerseyWater**

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# 1 Executive Summary

During 2008 Jersey Water supplied 7,402 million litres of drinking water to its customers and I am pleased to report that 99.97% 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. This compliance level is marginally better than the average figure (99.96%) for the England & Wales water industry.

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.

**99.97% 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.**

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 and 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 there were no samples for nitrates during the year above the 50 mg/l limit. This was due to a relatively dry start to 2008, as rainfall at this time is a critical factor in the leaching of nitrates into water resources. As the Company has no control over nitrates in water resources, the Minister for Planning & Environment has agreed to dispensations for nitrates under the Water (Jersey) Law. The dispensations allow 33% of our annual samples to be above the 50 mg/l level, but not greater than 70 mg/l.

Jersey Water and our consultants carried out 18,476 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 continues to be of a very high standard. The results are comparable to water supplied by water companies in the England and Wales, which are recognised to have some of the highest quality standards in the world.

**Howard N Snowden**  
Managing Director & Engineer

## 2 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 24 years experience in the laboratory and is ably supported by assistant manager Sarah Gavey and laboratory technician Nora Treanor. The Department has three samplers, Keith Quemard, Bob Langford and Matthew Parkin, who have taken 8672 samples of water in 2008, attended to customer queries and carried out sampling preparatory work in the laboratory.

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.



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 2008, 919 water samples were taken from stream sources and analysed for physical, bacteriological and chemical parameters. There were 21 herbicides and pesticides detected in water samples taken from the streams.



Val de la Mare Reservoir



Raw water stream

## 4 Treatment Works and Service Reservoir Performance

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

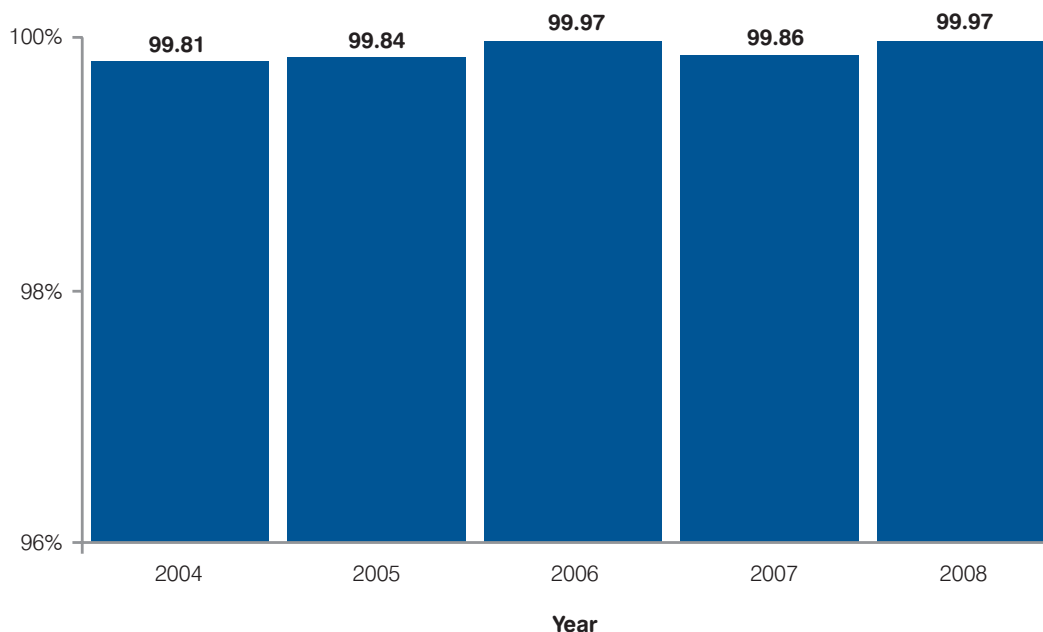
Disinfection is the key to a safe water supply. The use of chlorine in the water industry has been mandatory in England and Wales since the 1945 Water Act and has resulted in the eradication of diseases which were caused by waterborne pathogens. Disinfection of the water in Jersey is carried out by the 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.

Five non-compliant analyses were found in samples taken from the supply points and the supply zone during 2008, out of 18,476 analyses taken for compliance purposes. This gives a percentage compliance of 99.97%, slightly up on last years figure of 99.86%.



Les Platons Service Reservoir

**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	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
E.coli	0 per 100ml	0	0	0	312	100
Coliform bacteria	0 per 100ml	0	0	0	312	100
Colony counts	No abnormal change	No abnormal change			312	100
Nitrite	0.1 mg NO <sub>2</sub> /l	<0.003	0.005	0.014	104	100
Residual disinfectant	No value mg Cl <sub>2</sub> /l	0.22	0.56	0.72	312	
Turbidity	4 NTU	0.14	0.24	0.52	252	100
Clostridium perfringens	0 per 100ml	0	0	1	52	98
Conductivity	2500 µS/cm at 20°C	385	440	495	52	100

### Check Monitoring: Augrès WTW

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	313	100
Coliform bacteria	0 per 100ml	0	0	1	313	99.7
Colony counts	No abnormal change	No abnormal change			313	100
Nitrite	0.1 mg NO <sub>2</sub> /l	<0.003	0.003	0.009	104	100
Residual disinfectant	No value mg Cl <sub>2</sub> /l	0.09	0.43	0.54	313	
Turbidity	4 NTU	0.09	0.21	0.58	251	100
Clostridium perfringens	0 per 100ml	0	0	0	52	100
Conductivity	2500 µS/cm at 20°C	379	446	515	52	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	Specific concentration or value (maximum) or state	Min	Mean	Max	No. of samples	% compliance
E.coli	0 per 100ml	0	0	0	313	100
Coliform bacteria	0 per 100ml (95% of samples)	0	0	1	313	99.7
Colony counts	No abnormal change	No abnormal change			313	100
Clostridium perfringens	0 per 100ml	0	0	0	52	100
Conductivity	2500 $\mu$ S/cm at 20°C	385	446	514	52	100

### Check Monitoring: Les Platons Service Reservoir, West Compartment

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	313	100
Coliform bacteria	0 per 100ml (95% of samples)	0	0	0	313	100
Colony counts	No abnormal change	No abnormal change			313	100
Clostridium perfringens	0 per 100ml	0	0	0	52	100
Conductivity	2500 $\mu$ S/cm at 20°C	385	449	571	52	100

### Check Monitoring: Westmount Service Reservoir

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	301	100
Coliform bacteria	0 per 100ml (95% of samples)	0	0	0	301	100
Colony counts	No abnormal change	No abnormal change			301	100
Clostridium perfringens	0 per 100ml	0	0	0	51	100
Conductivity	2500 $\mu$ S/cm at 20°C	360	446	545	52	100



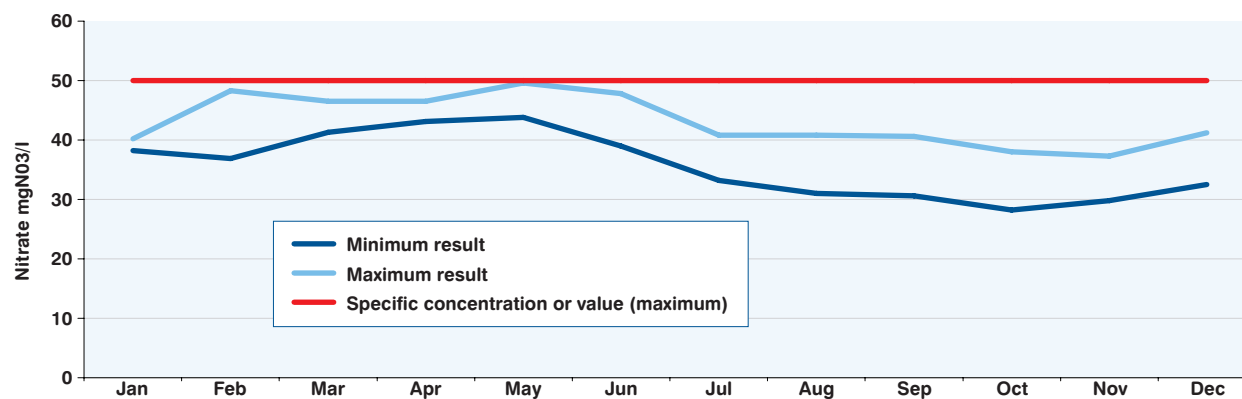
## 5 Water Quality in the Distribution System

During 2008, 1,376 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	688	100
Coliform bacteria	0 per 100ml	0	0	1	688	99.9
Residual disinfectant	No value mg Cl <sub>2</sub> /l	<0.02	0.14	0.52	591	
Aluminium	200 µg Al/l	<20	27	99	98	100
Ammonium	0.50 mg NH <sub>4</sub> /l	<0.04	0.05	0.22	98	100
Clostridium perfringens	0 per 100ml	0	0	0	100	100
Colony counts	No abnormal change	No abnormal change			591	100
Colour	20 mg/l Pt/Co	<0.69	2.18	9.38	98	100
Conductivity	2500 µS/cm at 20 °C	385	455	606	98	100
Hydrogen ion	10.0 pH value 6.5 (min)	7.26	7.79	8.40	251	100
Iron	200 µg Fe/l	<10	22	94	98	100
Manganese	50 µg Mn/l	<0.7	3.4	21.0	98	100
Nitrate	50 mg NO <sub>3</sub> /l	28.2	39.7	49.6	98	100
Nitrite	0.5 mg NO <sub>2</sub> /l	<0.013	0.026	0.262	98	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	0.09	0.19	0.49	98	100

Nitrate levels in distribution 2008



## 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	0.23	0.29	0.38	12	100
Arsenic	10 µg As/l	0.26	0.47	0.67	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	0.041	0.088	0.150	12	100
Cadmium	5.0 µg Cd/l	<0.5	<0.5	<0.5	12	100
Chromium	50 µg Cr/l	0.17	0.36	0.63	12	100
Copper	2.0 mg Cu/l	0.002	0.008	0.024	12	100
Cyanide	50 µg CN/l	<0.005	0.417	3.000	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	0.113	0.710	12	100
Lead	25 µg Pb/l <sup>1</sup>	<0.5	<0.5	<0.5	12	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.003	12	100
Nickel	20 µg Ni/l	1.20	1.54	2.10	12	100
Linuron <sup>1</sup>	0.1 µg/l	<0.004	0.008	0.026	12	100
Diuron <sup>1</sup>	0.1 µg/l	<0.005	0.005	0.015	12	100
M.C.P.A. <sup>1</sup>	0.1 µg/l	<0.009	<0.009	0.017	12	100
2,4-D <sup>1</sup>	0.1 µg/l	<0.011	<0.011	0.042	12	100
Atrazine <sup>1</sup>	0.1 µg/l	<0.002	0.002	0.005	12	100
Terbutryn <sup>1</sup>	0.1 µg/l	<0.003	<0.003	0.003	12	100
Pesticides total	0.5 µg/l	<0.010	0.022	0.083	12	100

<sup>1</sup> Detected pesticide - 80 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	<0.010	<0.010	<0.010	12	100
Selenium	10 µg Se/l	<0.20	0.81	1.10	12	100
Sodium	200 mg Na/l	42.3	49.1	55.0	12	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	<0.1	11	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	<0.1	11	100
Trihalomethanes	100 µg/l	6.6	11.7	17.3	11	100
Chloride	250 mg Cl/l	54.0	62.5	70.0	12	100
Sulphate	250 mg SO <sub>4</sub> /l	84.0	88.8	99.1	12	100
Total Organic Carbon	No abnormal change	1.73	1.98	2.40	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	0.17	0.21	0.24	12	100

## 6 Water Quality Complaints

Jersey Water received 119 queries from customers relating to water quality. The following table shows a break-down of these queries, from which it can be seen that the majority 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 analyses. 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.



All samples taken from customer queries undergo a full physical, bacteriological and chemical analyses.

Type of query	No	Bacteriological compliance %
Discoloured water	87	100
Taste / odour	16	100
Air in supply	2	100
Illness	1	100
Other	13	100
<b>Total</b>	<b>119</b>	<b>100</b>

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 2008, 2.75km of old water pipes were replaced with modern lined pipes, which have improved water quality for customers in these areas.

The Company plans further investment in the renewal of old water pipes in future years.

In 2008, 2.75km of old water pipes were replaced with modern lined pipes, which have improved water quality for customers in these areas.

## 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 2008, 176 samples from new and replacement water mains were taken for analysis.



Laying the 300mm trunk main in Trinity.

## 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	0.063	0.100	10	100
Bromate	10 µg BrO <sub>3</sub> /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<1	<1	3.0	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	0.063	0.090	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.006	10	100
Chlortoluron <sup>1</sup>	0.1 µg/l	<0.003	<0.003	0.003	36	100
Isoproturon <sup>1</sup>	0.1 µg/l	<0.003	<0.003	0.007	36	100
Linuron <sup>1</sup>	0.1 µg/l	<0.004	0.013	0.053	36	100
Diuron <sup>1</sup>	0.1 µg/l	<0.005	0.005	0.029	36	100
Propachlor <sup>1</sup>	0.1 µg/l	<0.008	<0.008	0.019	6	100
2,4-D <sup>1</sup>	0.1 µg/l	<0.01	<0.01	0.032	36	100
Mecoprop <sup>1</sup>	0.1 µg/l	<0.01	<0.01	0.021	36	100
Atrazine <sup>1</sup>	0.1 µg/l	<0.002	0.003	0.064	36	100
Simazine <sup>1</sup>	0.1 µg/l	<0.002	<0.002	0.059	36	100
Dalapon <sup>1</sup>	0.1 µg/l	<0.050	<0.050	0.059	36	100
Pesticides total	0.5 µg/l	<0.010	0.022	0.074	36	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	0.2	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	0.2	10	100
Chloride	250 mg Cl/l	59.3	62.2	66.1	10	100
Sulphate	250 mg SO <sub>4</sub> /l	78.1	87.8	92.9	10	100
Total Organic Carbon	No abnormal change	1.84	2.48	4.47	10	100
Tritium	100 Bq/l	<10.0	<10.0	<10.0	10	100
Gross alpha	0.1 Bq/l	<0.03	<0.03	0.05	10	100
Gross beta	1.0 Bq/l	0.15	0.20	0.28	10	100

<sup>1</sup> Detected pesticide - 76 other pesticides analysed for and not detected.

## 8 Appendices (continued)

### Appendix B

#### Audit Monitoring: Augrés 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	<0.040	0.068	0.120	9	100
Bromate	10 µg BrO <sub>3</sub> /l	<1.0	<1.0	<1.0	9	100
Cyanide	50 µg CN/l	<1	<1	2	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	0.07	10	100
Mercury	1.0 µg Hg/l	<0.002	0.002	0.005	10	100
Linuron <sup>1</sup>	0.1 µg/l	<0.003	0.003	0.016	35	100
Diuron <sup>1</sup>	0.1 µg/l	<0.004	<0.004	0.013	35	100
2,4-D <sup>1</sup>	0.1 µg/l	<0.010	<0.010	0.012	34	100
Mecoprop <sup>1</sup>	0.1 µg/l	<0.010	<0.010	0.015	34	100
Atrazine <sup>1</sup>	0.1 µg/l	<0.002	0.003	0.009	35	100
Terbutryne <sup>1</sup>	0.1 µg/l	<0.004	<0.004	0.004	35	100
Cyanazine <sup>1</sup>	0.1 µg/l	<0.007	<0.007	0.017	35	100
Propiconazole <sup>1</sup>	0.1 µg/l	<0.004	<0.004	0.008	35	100
Tebuconazole <sup>1</sup>	0.1 µg/l	<0.002	<0.002	0.004	35	100
Dalapon <sup>1</sup>	0.1 µg/l	<0.010	<0.010	0.055	35	100
Pesticides total	0.5 µg/l	<0.010	0.011	0.033	35	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	<0.1	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	<0.1	9	100
Chloride	250 mg Cl/l	54.1	60.7	67.2	10	100
Sulphate	250 mg SO <sub>4</sub> /l	82.0	93.0	104	10	100
Total Organic Carbon	No abnormal change	1.63	1.92	2.28	9	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	0.22	0.28	10	100

<sup>1</sup> Detected pesticide - 76 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	0.074	0.110	10	100
Bromate	10 µg BrO <sub>3</sub> /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<1	<1	3	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	0.07	0.09	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.002	10	100
Linuron <sup>1</sup>	0.1 µg/l	<0.004	0.012	0.039	10	100
Diuron <sup>1</sup>	0.1 µg/l	<0.005	<0.005	0.015	10	100
2,4-D <sup>1</sup>	0.1 µg/l	<0.010	<0.010	0.012	10	100
Atrazine <sup>1</sup>	0.1 µg/l	<0.002	<0.002	0.004	10	100
Pesticides total	0.5 µg/l	<0.010	0.016	0.051	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	<0.1	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	<0.1	10	100
Chloride	250 mg Cl/l	60.6	67.6	108.0	10	100
Sulphate	250 mg SO <sub>4</sub> /l	80.0	88.0	94.7	10	100
Total Organic Carbon	No abnormal change	1.74	2.01	2.37	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	<0.06	0.18	0.22	10	100

<sup>1</sup> Detected pesticide - 82 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	0.072	0.110	10	100
Bromate	10 µg BrO <sub>3</sub> /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<1	<1	3	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	0.08	10	100
Mercury	1.0 µg Hg/l	<0.002	<0.002	0.004	10	100
Linuron <sup>1</sup>	0.1 µg/l	<0.004	0.010	0.033	10	100
Diuron <sup>1</sup>	0.1 µg/l	<0.005	<0.005	0.018	10	100
2,4-D <sup>1</sup>	0.1 µg/l	<0.011	<0.011	0.038	10	100
Atrazine <sup>1</sup>	0.1 µg/l	<0.002	<0.002	0.008	10	100
Pesticides total	0.5 µg/l	<0.010	0.018	0.089	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	<0.1	10	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	<0.1	10	100
Chloride	250 mg Cl/l	60.0	64.0	72.0	10	100
Sulphate	250 mg SO <sub>4</sub> /l	77.2	88.7	94.1	10	100
Total Organic Carbon	No abnormal change	0.94	1.99	2.54	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	0.26	10	100

<sup>1</sup> Detected pesticide - 82 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	0.086	0.140	10	100
Bromate	10 µg BrO <sub>3</sub> /l	<1.0	<1.0	<1.0	10	100
Cyanide	50 µg CN/l	<1	<1	4	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	0.08	10	100
Mercury	1.0 µg Hg/l	<0.002	0.007	0.044	10	100
Linuron <sup>1</sup>	0.1 µg/l	<0.004	0.008	0.026	10	100
Diuron <sup>1</sup>	0.1 µg/l	<0.005	<0.005	0.011	10	100
Propachlor <sup>1</sup>	0.1 µg/l	<0.008	<0.008	0.010	6	100
Atrazine <sup>1</sup>	0.1 µg/l	<0.002	0.003	0.006	10	100
Cyanazine <sup>1</sup>	0.1 µg/l	<0.002	<0.002	0.007	10	100
Pesticides total	0.5 µg/l	<0.010	0.016	0.041	10	100
Trichloroethene and Tetrachloroethene	10 µg/l	<0.1	<0.1	0.2	9	100
Tetrachloromethane	3 µg/l	<0.1	<0.1	<0.1	9	100
Chloride	250 mg Cl/l	58.5	61.2	65.3	9	100
Sulphate	250 mg SO <sub>4</sub> /l	84.1	91.9	97.7	9	100
Total Organic Carbon	No abnormal change	1.51	2.04	2.48	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	0.19	0.21	0.23	10	100

<sup>1</sup> Detected pesticide - 81 other pesticides analysed for and not detected.









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