

## **Data Summary Tables for Bristol Water Plc (BRL)**

These tables contain a summary of results of monitoring undertaken by the water company in 2006 and submitted to the Drinking Water Inspectorate. The tables are published by the Inspectorate as part of the Chief Inspector's Report entitled 'Drinking water 2006'.

The tables and full content of the Drinking Water Inspectorate's annual report are available on the Inspectorate's website at <http://www.dwi.gov.uk>

### **Notes relating to the interpretation of the tables : -**

Columns on the following tables that are headed '1 percentile representing a minimum' and '99 percentile representing a maximum' contain figures for the 1 percentile and 99 percentile sample results respectively except where less than 100 samples were taken, when the figures are the actual maximum and minimum results.

The symbol < indicates that the result was less than the limit of detection of the analytical method used.

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Data Summary 2006 for BRISTOL WATER PLC (BRL)

Table BRL 1: Quality of water leaving treatment works - European Standards

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of works with failures
Nitrite	A013B	0.1 mg NO <sub>2</sub> /l	151	0	<0.002	0.02184	0
<b>TOTAL</b>	-	-	<b>151</b>	<b>0</b>	-	-	-

Table BRL 2: Quality of water leaving treatment works - National Standards

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of works with failures
Coliform Bacteria	C001	0 number/100 ml	3115	2	0	0	2
Cryptosporidium	C111	oocysts >1 in10 litres	921	0	-	-	0
<i>E. coli</i>	C002	0 number/100 ml	3115	1	0	0	1
<b>TOTAL</b>	-	-	<b>7151</b>	<b>3</b>	-	-	-

Table BRL 3: Quality of water leaving treatment works - Additional Monitoring Requirements

Indicator Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests Exceeding Specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Colony Counts After 3 Days At 22°C	C007	No abnormal change	3115	n/a	<1	30
Colony Counts After 48 Hours At 37°C	C013	No abnormal change	3115	n/a	<1	78
Residual Disinfectant - Free	C009	No abnormal change	3116	n/a	0.2817	1.3
Residual Disinfectant - Total	C010	No abnormal change	3116	n/a	0.38	1.5366
Turbidity	A002A	1 NTU	3114	1	<0.05	0.18
<b>TOTAL</b>	-	-	<b>15576</b>	<b>1</b>	-	-

**Table BRL 4: Quality of water leaving service reservoirs - National Standards**

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of reservoirs failing standard
Coliform Bacteria	C001	0 number/100 ml	8814	8	0	0	0
<i>E. coli</i>	C002	0 number/100 ml	8814	1	0	0	1
<b>TOTAL</b>	-	-	<b>17628</b>	<b>9</b>	-	-	-

**Table BRL 5: Quality of water leaving service reservoirs - Additional Monitoring Requirements**

Indicator Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests Exceeding Specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Colony Counts After 3 Days At 22°C	C007	No abnormal change	8815	n/a	<1	155
Colony Counts After 48 Hours At 37°C	C013	No abnormal change	8815	n/a	<1	45
Residual Disinfectant - Free	C009	No abnormal change	8816	n/a	<0.05	0.61
Residual Disinfectant - Total	C010	No abnormal change	8816	n/a	0.06	0.78
<b>TOTAL</b>	-	-	<b>35262</b>	<b>0</b>	-	-

**Table BRL 6: Quality of water leaving bulk supply points - European Standards**

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of supply points with failures
1,2 Dichloroethane	F001	3 µg/l	151	0	<0.08	<0.08	0
Benzene	F002	1 µg/l	151	0	<0.06	<0.06	0
Boron	D005A	1 mg B/l	151	0	<0.013	0.17972	0
Cyanide	B003	50 µg CN/l	151	0	<0.4	<0.4	0
Fluoride	A027	1.5 mg F/l	151	0	<0.00952	0.4648	0
Mercury	B005	1 µg Hg/l	151	0	<0.012	<0.015	0
Tetrachloroethene/Trichloroethene	D009B	10 µg/l	151	0	0.24	0.3136	0
Pesticides (2,4,-Db)	P082	µg/l	191	0	<0.002	<0.003	0
Pesticides (2,4-D)	P020	µg/l	191	0	<0.002	0.00916	0
Pesticides (Aldrin)	P002	µg/l	185	0	<0.001	<0.002	0
Pesticides (Asulam)	P133	µg/l	90	0	<0.005	<0.005	0
Pesticides (Atrazine)	P004	µg/l	191	0	<0.001	0.01372	0
Pesticides (Benazolin)	P138	µg/l	73	0	<0.002	<0.002	0
Pesticides (Bromoxynil)	P008	µg/l	191	0	<0.001	<0.002	0
Pesticides (Carbendazim)	P150	µg/l	189	0	<0.002	<0.0074	0
Pesticides (Carbetamide)	P010	µg/l	32	0	<0.002	<0.003	0
Pesticides (Chlorothalonil)	P015	µg/l	126	0	<0.001	<0.003	0
Pesticides (Chlorpyrifos)	P017	µg/l	146	0	<0.003	<0.00459	0
Pesticides (Chlortoluron)	P014	µg/l	188	0	<0.002	<0.00708	0
Pesticides (Clopyralid)	P018	µg/l	191	0	<0.001	0.01524	0
Pesticides (Cyanazine)	P092	µg/l	32	0	<0.002	<0.002	0
Pesticides (Cypermethrin)	P094	µg/l	65	0	<0.004	<0.04	0
Pesticides (Dieldrin)	P028	µg/l	191	0	<0.002	<0.002	0
Pesticides (Diuron)	P032	µg/l	191	0	<0.003	<0.004	0
Pesticides (Fenpropimorph)	P037	µg/l	191	0	<0.006	<0.006	0
Pesticides (Fluroxypyr)	P040	µg/l	191	0	<0.002	<0.003	0
Pesticides (Gamma-HCH (Lindane))	P041	µg/l	99	0	<0.001	0.002	0
Pesticides (Glyphosate)	P042	µg/l	191	0	<0.008	<0.08064	0
Pesticides (Heptachlor)	P043	µg/l	191	0	<0.001	<0.002	0
Pesticides (Heptachlor epoxide)	P044	µg/l	191	0	<0.002	<0.002	0
Pesticides (Ioxynil)	P049	µg/l	65	0	<0.001	<0.002	0
Pesticides (Isoproturon)	P048	µg/l	191	0	<0.003	<0.004	0
Pesticides (Linuron)	P051	µg/l	191	0	<0.003	<0.007	0
Pesticides (MCPA)	P054	µg/l	92	0	<0.002	0.002	0

Pesticides (MCPD(Mecoprop))	P053	µg/l	191	0	<0.001	0.00716	0
Pesticides (Pendimethalin)	P118	µg/l	191	0	<0.003	<0.003	0
Pesticides (Propyzamide)	P071	µg/l	34	0	<0.002	<0.002	0
Pesticides (Simazine)	P073	µg/l	191	0	<0.001	0.0124	0
Pesticides (Tri-allate)	P079	µg/l	34	0	<0.001	0.001	0
Pesticides (Trichlopyr)	P131	µg/l	166	0	<0.003	0.005	0
Pesticides (Trifluralin)	P081	µg/l	191	0	<0.002	<0.002	0
Pesticides - Total Substances	B010	0.5 µg/l	191	0	0	0.08024	0
<b>TOTAL</b>	-	-	<b>6302</b>	<b>0</b>	-	-	-

**Table BRL 7: Quality of water leaving bulk supply points - National Standards**

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of supply points with failures
Tetrachloromethane	D008	3 µg/l	151	0	<0.02	<0.04	0
<b>TOTAL</b>	-	-	<b>151</b>	<b>0</b>	-	-	-

**Table BRL 8: Quality of water leaving bulk supply points - Additional Monitoring Requirements**

Indicator Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests Exceeding Specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Chloride	D002A	250 mg Cl/l	151	0	14.164	88.944
<i>Clostridium perfringens</i>	C004A	0 number/100 ml	1162	0	0	0
Conductivity	D001	2500 µS/cm	1163	0	272.64	752.36
Radioactivity - Gross Alpha	F004	0.1 Bq/l	83	2*	<0.01	0.16
Radioactivity - Gross Beta	F005	1 Bq/l	83	0	0.03	0.17
Radioactivity - Tritium	F006	100 Bq/l	63	0	<1.4	3
Sulphate	A007	250 mg SO <sub>4</sub> /l	151	0	9.316	110
Total Organic Carbon (TOC)	A017	No abnormal change	151	n/a	0.2836	4.3028
<b>TOTAL</b>	-	-	<b>3007</b>	<b>2</b>	-	-

\* requires more specific analysis to determine the source and type of radioactivity (Total Indicative Dose).

**Table BRL 9: Quality of water at consumer's tap (zones) - European Standards**

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of zones with failures
1,2 Dichloroethane	F001	3 µg/l	9	0	0.08	<0.08	0
Antimony	B008A	5 µg Sb/l	389	0	<0.1	0.6	0
Arsenic	B001A	10 µg As/l	389	0	<0.4	4.76	0
Benzene	F002	1 µg/l	9	0	0.06	<0.06	0
Benzo (a) Pyrene	D007	0.01 µg/l	389	0	<0.001	0.003	0
Boron	D005A	1 mg B/l	9	0	0.013	0.055	0
Bromate	F003	10 µg BrO <sub>3</sub> /l	389	0	<0.6	3.31	0
Cadmium	B002	5 µg Cd/l	389	0	<0.06	0.701	0
Chromium	B004	50 µg Cr/l	389	0	<0.3	2.55	0
Copper	A024A	2 mg Cu/l	389	0	<0.0012	0.3786	0
Cyanide	B003	50 µg CN/l	9	0	0.4	<0.4	0
<i>E. coli</i>	C002	0 number/100 ml	2925	1	0	0	1
Enterococci	C003	0 number/100 ml	389	0	0	0	0
Fluoride	A027	1.5 mg F/l	9	0	0.04	0.28	0
Lead	B007A	25 µg Pb/l	389	1	<0.5	17.3	1
Mercury	B005	1 µg Hg/l	9	0	0.012	<0.015	0
Nickel	B006A	20 µg Ni/l	389	1	<0.9	4.93	1
Nitrate	A012	50 mg NO <sub>3</sub> /l	389	0	1.08	41.85	0
Nitrite	A013A	0.5 mg NO <sub>2</sub> /l	389	0	<0.002	0.0208	0
Nitrate/Nitrite Formula	A013C	1 mg NO <sub>2</sub> /l	389	0	0.0226	0.838	0
Polycyclic aromatic hydrocarbons (PAHs)	B011F	0.1 µg/l	389	0	0	0.0081	0
Selenium	B009	10 µg Se/l	389	0	<0.2	1.4	0
Tetrachloroethene/Trichloroethene	D009B	10 µg/l	9	0	0.24	0.28	0
Trihalomethanes (THMs)	D011	100 µg/l	389	2	4.883	83.371	2
Pesticides (Aldrin)	P002	µg/l	10	0	0.001	<0.002	0
Pesticides (Alpha-HCH)	P003	µg/l	10	0	<0.001	<0.001	0
Pesticides (Atrazine)	P004	µg/l	10	0	0.001	0.01	0
Pesticides (Chlortoluron)	P014	µg/l	10	0	0.002	<0.004	0
Pesticides (Dicamba)	P025	µg/l	10	0	<0.001	<0.002	0
Pesticides (Dieldrin)	P028	µg/l	10	0	0.002	<0.002	0
Pesticides (Diuron)	P032	µg/l	10	0	0.003	<0.004	0
Pesticides (Gamma-HCH (Lindane))	P041	µg/l	10	0	0.001	<0.002	0
Pesticides (Heptachlor)	P043	µg/l	10	0	0.001	<0.002	0
Pesticides (Heptachlor epoxide)	P044	µg/l	10	0	0.002	<0.002	0
Pesticides (Isoproturon)	P048	µg/l	10	0	0.003	<0.004	0
Pesticides (Linuron)	P051	µg/l	10	0	0.003	<0.007	0

Pesticides (MCPA)	P054	µg/l	10	0	0.002	<0.002	0
Pesticides (MCP (Mecoprop))	P053	µg/l	10	0	0.001	<0.002	0
Pesticides (Prometryn)	P070	µg/l	10	0	<0.002	<0.002	0
Pesticides (Propazine)	P066	µg/l	10	0	<0.001	<0.001	0
Pesticides (Simazine)	P073	µg/l	10	0	0.001	0.005	0
Pesticides (Tri-allate)	P079	µg/l	10	0	0.001	<0.001	0
Pesticides - Total Substances	B010	0.5 µg/l	10	0	0	0.015	0
<b>TOTAL</b>	-	-	<b>9402</b>	<b>5</b>	-	-	-

**Table BRL 10: Quality of water at consumer's tap (zones) - National Standards**

Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of zones with failures
Aluminium	A021	200 µg Al/l	1195	0	<5	40.04	0
Colour	A001	20 mg/l Pt/Co scale	1197	0	<0.4	2.602	0
Hydrogen ion (pH)	A006	6.5 -10 pH value	1194	0	7.15	7.86	0
Iron	A022	200 µg Fe/l	1201	12	<7	210.72	10
Manganese	A023	50 µg Mn/l	1192	1	<1.5	11	1
Organoleptic Odour	A003	Dilution no. 3 at 25°C	636	0	0	0	0
Organoleptic Taste	A004	Dilution no. 3 at 25°C	636	0	0	0	0
Sodium	A009	200 mg Na/l	389	0	<0.3	143	0
Tetrachloromethane	D008	3 µg/l	9	0	0.02	<0.04	0
Turbidity	A002	4 NTUs	1194	0	<0.05	0.6635	0
<b>TOTAL</b>	-	-	<b>8843</b>	<b>13</b>	-	-	-

**Table BRL 11: Quality of water at consumer's tap (zones) - Additional Monitoring Requirements**

Indicator Parameter	Parameter Code	Prescribed Concentration or Value	Total number of tests	Tests Exceeding Specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Ammonium	A014	0.5 mg NH <sub>4</sub> /l	1200	0	<0.021	0.03399
Chloride	D002A	250 mg Cl/l	9	0	16.7	21.6
<i>Clostridium perfringens</i>	C004A	0 number/100 ml	11	0	0	0
Coliform Bacteria	C001A	0 number/100 ml	2925	10	0	0
Colony Counts After 3 Days At 22°C	C007	No abnormal change	2925	n/a	<1	113
Colony Counts After 48 Hours At 37°C	C013	No abnormal change	2925	n/a	<1	51
Conductivity	D001	2500 µS/cm	10	0	281	587

Hydrogen ion (pH)	A006A	9.5 pH Value	1194	0	7.15	7.86
Radioactivity - Gross Alpha	F004	0.1 Bq/l	9	0	0.02	<0.06
Radioactivity - Gross Beta	F005	1 Bq/l	9	0	0.04	0.11
Radioactivity - Tritium	F006	100 Bq/l	9	0	1.5	10.2
Residual Disinfectant - Free	C009	No abnormal change	2927	n/a	<0.05	0.71
Residual Disinfectant - Total	C010	No abnormal change	2927	n/a	0.1	0.9072
Sulphate	A007	250 mg SO <sub>4</sub> /l	9	0	20	48.5
Total Organic Carbon (TOC)	A017	No abnormal change	9	n/a	0.81	1.69
<b>TOTAL</b>	-	-	<b>17098</b>	<b>10</b>	-	-