

Data summary tables for Bristol Water Plc (BRL)

These tables contain a summary of results of monitoring undertaken by the water company in 2016 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 2016*.

The tables and full content of the Drinking Water Inspectorate's annual report are available on the Inspectorate's website at <http://www.dwi.defra.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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Site Summary Data for Bristol Water Plc

Report Date Range: For the whole year 2016

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

Parameter Name	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 (Works)	A013B	0.1 mg NO ₂ /l	150	0	< 0.002	0.01394	0
Totals:			150	0			

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

Parameter Name	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	3,609	0	0	0	0
E coli	C002	0 number/100 ml	3,609	0	0	0	0
Totals:			7,218	0			

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

Parameter Name	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 (Indicator)	C007	No abnormal change	3,609	-n/a	0	2
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	3,609	-n/a	0	1
Residual Disinfectant - Free	C009	No abnormal change	3,612	-n/a	0.35	1.36
Residual Disinfectant - Total	C010	No abnormal change	3,612	-n/a	0.4013	1.42
Combined Chlorine/Residual Disinfectant Combined*	-(n/a)	-(n/a)	(3,612)	-n/a	0	0.24
Turbidity (Indicator)	A002A	1 nephelometric turbidity units	3,609	0	< 0.03	0.4
Totals:			18,051	0		

*Residual disinfectant combined is presented for information. It is not a parameter required by the regulations. It is derived from the parameters 'Residual Disinfectant - Total' minus 'Residual Disinfectant - Free'.

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

Parameter Name	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	8,161	1	0	0	0
E coli	C002	0 number/100 ml	8,161	0	0	0	0
Totals:			16,322	1			

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

Parameter Name	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 (Indicator)	C007	No abnormal change	8,161	-n/a	0	19
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	8,161	-n/a	0	11
Residual Disinfectant - Free	C009	No abnormal change	8,161	-n/a	0.05	0.81
Residual Disinfectant - Total	C010	No abnormal change	8,161	-n/a	0.14	0.92
Combined Chlorine/Residual Disinfectant Combined*	-(n/a)	-(n/a)	(8,161)	-n/a	0	0.22
Totals:			32,644	0		

*Residual disinfectant combined is presented for information. It is not a parameter required by the regulations. It is derived from the parameters 'Residual Disinfectant - Total' minus 'Residual Disinfectant - Free'.

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

Parameter Name	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	149	0	< 0.07	< 0.1	0
Benzene	F002	1 µg/l	149	0	< 0.02	< 0.07	0
Boron	D005A	1 mg B/l	151	0	0.011808	0.15748	0
Cyanide	B003	50 µg CN/l	148	0	< 0.7	8.971	0
Fluoride	A027	1.5 mg F/l	152	0	0.04	0.5604	0
Mercury	B005	1 µg Hg/l	150	0	< 0.02	0.0796	0
Pesticides - Total Substances	B010	0.5 µg/l	160	0	0	0.0745	0
Pesticides 2,4-D	P020	0.1 µg/l	85	0	< 0.004	< 0.007	0
Pesticides Asulam	P133	0.1 µg/l	101	0	< 0.003	< 0.004	0
Pesticides Atrazine	P004	0.1 µg/l	112	0	< 0.001	0.00674	0
Pesticides Boscalid	P231	0.1 µg/l	155	0	< 0.004	< 0.02896	0
Pesticides Bromoxynil	P008	0.1 µg/l	49	0	< 0.003	< 0.006	0
Pesticides Carbendazim	P150	0.1 µg/l	93	0	< 0.001	0.034	0
Pesticides Carbetamide	P010	0.1 µg/l	110	0	< 0.002	0.00934	0
Pesticides Chloromequat	P163	0.1 µg/l	161	0	< 0.002	< 0.00566	0
Pesticides Chlorothalonil	P015	0.1 µg/l	105	0	< 0.001	< 0.00964	0
Pesticides Chlorpyrifos	P017	0.1 µg/l	9	0	< 0.002	< 0.003	0
Pesticides Chlortoluron	P014	0.1 µg/l	84	0	< 0.002	< 0.015	0
Pesticides Clopyralid	P018	0.1 µg/l	156	0	< 0.005	0.02387	0
Pesticides Cypermethrin	P094	0.1 µg/l	74	0	< 0.001	< 0.021	0
Pesticides Cyproconazole	P207	0.1 µg/l	152	0	< 0.002	0.00735	0
Pesticides Dicamba	P025	0.1 µg/l	37	0	< 0.005	< 0.015	0
Pesticides Diflufenican	P157	0.1 µg/l	152	0	< 0.002	< 0.00682	0
Pesticides Diuron	P032	0.1 µg/l	77	0	< 0.003	< 0.015	0
Pesticides Epoxyconazole	P217	0.1 µg/l	146	0	< 0.002	< 0.00718	0
Pesticides Flufenacet	P230	0.1 µg/l	153	0	< 0.002	0.01068	0
Pesticides Fluroxypyr	P040	0.1 µg/l	139	0	< 0.003	< 0.0056	0
Pesticides Flusilazole	P159	0.1 µg/l	94	0	< 0.002	< 0.01	0
Pesticides Flutriafol	P039	0.1 µg/l	45	0	< 0.002	< 0.004	0
Pesticides Fluxapyroxad	P274	0.1 µg/l	61	0	< 0.001	< 0.002	0
Pesticides Glyphosate	P042	0.1 µg/l	157	0	< 0.003	0.00384	0
Pesticides Isoproturon	P048	0.1 µg/l	40	0	< 0.002	< 0.01	0
Pesticides Linuron	P051	0.1 µg/l	40	0	< 0.003	< 0.035	0
Pesticides MCPA	P054	0.1 µg/l	164	0	< 0.003	< 0.004	0
Pesticides MCPB	P055	0.1 µg/l	103	0	< 0.003	< 0.005	0
Pesticides MCPP(Mecoprop)	P053	0.1 µg/l	164	0	< 0.002	0.00535	0

Parameter Name	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
Pesticides Mepiquat	P165	0.1 µg/l	62	0	< 0.003	0.003	0
Pesticides Metaldehyde	P226	0.1 µg/l	153	0	< 0.005	0.05962	0
Pesticides Metazachlor	P203	0.1 µg/l	112	0	< 0.002	< 0.00922	0
Pesticides Methiocarb	P056	0.1 µg/l	49	0	< 0.001	< 0.005	0
Pesticides Pendimethalin	P118	0.1 µg/l	163	0	< 0.002	< 0.00796	0
Pesticides Propiconazole	P068	0.1 µg/l	107	0	< 0.002	< 0.00492	0
Pesticides Propyzamide	P071	0.1 µg/l	103	0	< 0.002	0.02428	0
Pesticides Prosulfocarb	P243	0.1 µg/l	162	0	< 0.002	< 0.01	0
Pesticides Prothioconazole	P242	0.1 µg/l	157	0	< 0.0057	< 0.006	0
Pesticides Quinmerac	P244	0.1 µg/l	102	0	< 0.001	0.00694	0
Pesticides Simazine	P073	0.1 µg/l	149	0	< 0.001	< 0.0055	0
Pesticides Spiroxamine	P239	0.1 µg/l	45	0	< 0.001	0.001	0
Pesticides Tebuconazole	P177	0.1 µg/l	155	0	< 0.002	< 0.00664	0
Pesticides Trichlopyr	P131	0.1 µg/l	139	0	< 0.006	< 0.007	0
Radon	F031	100 Bq/l	37	0	2.16	28.9	0
Tetrachloroethene/Trichloroethene - sum of two substances	D009B	10 µg/l	147	0	0.1	0.73	0
Totals:			5,919	0			

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

Parameter Name	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	149	0	< 0.02	< 0.14	0
Totals:			149	0			

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

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests exceeding specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Chloride (Indicator)	D002A	250 mg Cl/l	152	0	12.253	66.815
Clostridium Perfringens (Indicator)	C004A	0 number/100 ml	1,342	0	0	0
Conductivity (Indicator)	D001	2500 µS/cm	1,342	0	214.43	717.14
Gross Alpha Activity	F004	0.1 Bq/l	25	0	< 0.022	0.068
Gross Beta Activity	F005	1 Bq/l	25	0	0.066	0.103
Sulphate (Indicator)	A007	250 mg SO4/l	151	0	7.4348	109.48
Total organic carbon (indicator)	A017	No abnormal change	150	-n/a	< 0.1559	2.449
Totals:			3,187	0		

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

Parameter Name	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 failing standard
1,2 Dichloroethane	F001	3 µg/l	7	0	< 0.07	< 0.1	0
Antimony	B008A	5 µg Sb/l	238	0	< 0.033	0.44064	0
Arsenic	B001A	10 µg As/l	237	0	< 0.18	4.9374	0
Benzene	F002	1 µg/l	7	0	< 0.02	< 0.07	0
Benzo (a) Pyrene	D007	0.01 µg/l	217	0	< 0.00022	< 0.00044	0
Boron	D005A	1 mg B/l	8	0	< 0.0149	0.0559	0
Bromate	F003	10 µg BrO3/l	236	0	< 0.1	3.526	0
Cadmium	B002	5 µg Cd/l	238	0	< 0.006	0.69222	0
Chromium	B004	50 µg Cr/l	238	0	< 0.06	1.5722	0
Copper	A024A	2 mg Cu/l	238	0	< 0.0006	0.50498	0
Cyanide	B003	50 µg CN/l	7	0	< 0.7	2.6	0
E coli	C002	0 number/100 ml	3,230	2	0	0	2
Enterococci	C003	0 number/100 ml	236	0	0	0	0
Fluoride	A027	1.5 mg F/l	8	0	< 0.05	0.33	0
Lead (>10 µg/l)	B007B	10 µg Pb/l	221	1	< 0.03	9.9208	1
Mercury	B005	1 µg Hg/l	7	0	< 0.05	< 0.05	0
Nickel	B006A	20 µg Ni/l	238	0	< 0.13	5.4169	0
Nitrate	A012	50 mg NO3/l	238	0	0.7685	31.0583	0
Nitrate/Nitrite Formula	A013C	1 mg NO2/l	238	0	0.01817	0.62401	0
Nitrite (Consumers tap)	A013A	0.5 mg NO2/l	238	0	< 0.002	0.009	0
Pesticides - Total Substances	B010	0.5 µg/l	20	0	0	0.014	0
Pesticides 2,4,-Db	P082	0.1 µg/l	20	0	< 0.005	< 0.007	0
Pesticides 2,4-D	P020	0.1 µg/l	20	0	< 0.004	< 0.007	0
Pesticides Alpha-HCH	P003	0.1 µg/l	19	0	< 0.001	< 0.001	0
Pesticides Atrazine	P004	0.1 µg/l	20	0	< 0.001	< 0.002	0
Pesticides Boscalid	P231	0.1 µg/l	20	0	< 0.004	0.01	0
Pesticides Carbetamide	P010	0.1 µg/l	20	0	< 0.002	< 0.002	0
Pesticides Chlormequat	P163	0.1 µg/l	21	0	< 0.003	< 0.003	0
Pesticides Chlorpyrifos	P017	0.1 µg/l	20	0	< 0.002	< 0.003	0
Pesticides Chlortoluron	P014	0.1 µg/l	20	0	< 0.002	< 0.003	0
Pesticides Clopyralid	P018	0.1 µg/l	20	0	< 0.005	0.009	0
Pesticides Dicamba	P025	0.1 µg/l	20	0	< 0.005	< 0.006	0
Pesticides Diuron	P032	0.1 µg/l	20	0	< 0.003	< 0.003	0
Pesticides Flufenacet	P230	0.1 µg/l	20	0	< 0.002	< 0.003	0
Pesticides Fluroxypyr	P040	0.1 µg/l	20	0	< 0.003	< 0.005	0
Pesticides Flutriafol	P039	0.1 µg/l	20	0	< 0.002	< 0.002	0

Parameter Name	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 failing standard
Pesticides Gamma-HCH (Lindane)	P041	0.1 µg/l	20	0	< 0.001	< 0.002	0
Pesticides Glyphosate	P042	0.1 µg/l	20	0	< 0.003	< 0.015	0
Pesticides Isoproturon	P048	0.1 µg/l	20	0	< 0.002	< 0.002	0
Pesticides Linuron	P051	0.1 µg/l	20	0	< 0.003	< 0.007	0
Pesticides MCPA	P054	0.1 µg/l	20	0	< 0.003	< 0.004	0
Pesticides MCPB	P055	0.1 µg/l	20	0	< 0.003	< 0.005	0
Pesticides MCPP(Mecoprop)	P053	0.1 µg/l	20	0	< 0.002	< 0.003	0
Pesticides Metazachlor	P203	0.1 µg/l	20	0	< 0.002	< 0.002	0
Pesticides Methiocarb	P056	0.1 µg/l	20	0	< 0.001	< 0.003	0
Pesticides Prometryn	P070	0.1 µg/l	20	0	< 0.001	< 0.002	0
Pesticides Propazine	P066	0.1 µg/l	20	0	< 0.001	< 0.001	0
Pesticides Propyzamide	P071	0.1 µg/l	20	0	< 0.002	0.005	0
Pesticides Quinmerac	P244	0.1 µg/l	20	0	< 0.001	0.004	0
Pesticides Simazine	P073	0.1 µg/l	20	0	< 0.001	< 0.003	0
Pesticides Tri-allate	P079	0.1 µg/l	20	0	< 0.003	< 0.004	0
Pesticides Trichlopyr	P131	0.1 µg/l	20	0	< 0.006	< 0.007	0
Polycyclic aromatic hydrocarbons	B011F	0.1 µg/l	217	0	0	0.0020328	0
Selenium	B009	10 µg Se/l	238	0	< 0.31	1.6666	0
Tetrachloroethene/Trichloroethene - sum of two substances	D009B	10 µg/l	7	0	0.1	0.73	0
Total Trihalomethanes	D011	100 µg/l	232	0	3.6518	53.4426	0
Totals:			7,659	3			

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

Parameter Name	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 failing standard
Aluminium	A021	200 µg Al/l	1,084	0	< 0.9	53.05	0
Colour	A001	20 mg/l Pt/Co scale	1,080	0	< 0.5	2.119	0
Iron	A022	200 µg Fe/l	1,083	1	2.3916	94.504	1
Manganese	A023	50 µg Mn/l	1,079	0	0.188	6.3	0
Organoleptic Odour	A003	0 Dilution number	1,122	2	0	0	2
Organoleptic Taste	A004	0 Dilution number	1,087	5	0	0	4
Sodium	A009	200 mg Na/l	238	0	6.6	52.793	0
Tetrachloromethane	D008	3 µg/l	7	0	< 0.02	< 0.14	0
Turbidity	A002	4 nephelometric turbidity units	1,079	0	< 0.03	0.44	0
Totals:			7,859	8			

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

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests exceeding specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Ammonium (Indicator)	A014	0.5 mg NH ₄ /l	1,081	0	< 0.004	0.023
Chloride (Indicator)	D002A	250 mg Cl/l	8	0	14.8	26.7
Clostridium Perfringens (Indicator)	C004A	0 number/100 ml	8	0	0	0
Coliform Bacteria (Indicator)	C001A	0 number/100 ml	3,230	5	0	0
Colony Counts After 3 Days At 22°C (Indicator)	C007	No abnormal change	3,230	-n/a	0	28
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	3,230	-n/a	0	38
Conductivity (Indicator)	D001	2500 µS/cm	24	0	283	596
Gross Alpha Activity	F004	0.1 Bq/l	7	0	< 0.015	0.056
Gross Beta Activity	F005	1 Bq/l	7	0	< 0.009	0.11
Hydrogen ion (pH)	A006	6.5 - 9.5 pH Value	1,082	0	7.05	7.8117
Residual Disinfectant - Free	C009	No abnormal change	3,232	-n/a	< 0.05	0.8767
Residual Disinfectant - Total	C010	No abnormal change	3,232	-n/a	0.17	1.01
Combined Chlorine/Residual Disinfectant Combined*	-(n/a)	-(n/a)	(3,232)	-n/a	0.01	0.27
Sulphate (Indicator)	A007	250 mg SO ₄ /l	8	0	10.1	54.7
Total organic carbon (indicator)	A017	No abnormal change	8	-n/a	0.4	1.5
Tritium (Indicator)	F006	100 Bq/l	7	0	< 5	< 5
Totals:			18,394	5		

*Residual disinfectant combined is presented for information. It is not a parameter required by the regulations. It is derived from the parameters 'Residual Disinfectant - Total' minus 'Residual Disinfectant - Free'.