

Data summary tables for Dwr Cymru Welsh Water (DWR)

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 Dŵr Cymru Welsh Water

Report Date Range: For the whole year 2016

Table DWR 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	299	0	< 0.013136	< 0.013136	0
Totals:			299	0			

Table DWR 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	6,884	1	0	0	1
E coli	C002	0 number/100 ml	6,884	0	0	0	0
Totals:			13,768	1			

Table DWR 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	6,882	-n/a	0	3
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	6,877	-n/a	0	2
Residual Disinfectant - Free	C009	No abnormal change	6,895	-n/a	0.41	1.24
Residual Disinfectant - Total	C010	No abnormal change	6,896	-n/a	0.4597	1.34
Combined Chlorine/Residual Disinfectant Combined*	-(n/a)	-(n/a)	(6,895)	-n/a	0	0.2
Turbidity (Indicator)	A002A	1 nephelometric turbidity units	7,177	0	< 0.06	0.25
Totals:			34,727	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 DWR 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	17,365	6	0	0	0
E coli	C002	0 number/100 ml	17,365	0	0	0	0
Totals:			34,730	6			

Table DWR 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	17,363	-n/a	0	7
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	17,351	-n/a	0	2
Residual Disinfectant - Free	C009	No abnormal change	17,386	-n/a	0.17	0.9
Residual Disinfectant - Total	C010	No abnormal change	17,385	-n/a	0.25	0.97
Combined Chlorine/Residual Disinfectant Combined*	-(n/a)	-(n/a)	(17,385)	-n/a	0	0.18
Totals:			69,485	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 DWR 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	222	0	< 0.051	< 0.051	0
Benzene	F002	1 µg/l	221	0	< 0.019	< 0.019	0
Boron	D005A	1 mg B/l	220	0	< 0.011	0.028	0
Bromate	F003	10 µg BrO3/l	54	0	< 0.0001	2	0
Cyanide	B003	50 µg CN/l	221	0	< 0.27	4.036	0
Fluoride	A027	1.5 mg F/l	220	0	0.01342	0.07695	0
Mercury	B005	1 µg Hg/l	220	0	< 0.00002	< 0.04	0
Pesticides - Total Substances	B010	0.5 µg/l	241	0	0	0.05832	0
Pesticides 2,4,-Db	P082	0.1 µg/l	8	0	< 0.0034	< 0.0034	0
Pesticides 2,4-D	P020	0.1 µg/l	240	0	< 0.0042	0.009836	0
Pesticides Aldrin	P002	0.03 µg/l	237	0	< 0.0039	< 0.0039	0
Pesticides Asulam	P133	0.1 µg/l	240	0	< 0.0026	< 0.0026	0
Pesticides Benazolin	P138	0.1 µg/l	8	0	< 0.0033	< 0.0033	0
Pesticides Carbetamide	P010	0.1 µg/l	7	0	< 0.0019	< 0.0019	0
Pesticides Clopyralid	P018	0.1 µg/l	11	0	< 0.0054	0.0071	0
Pesticides Diazinon	P024	0.1 µg/l	18	0	< 0.0018	< 0.0018	0
Pesticides Dicamba	P025	0.1 µg/l	8	0	< 0.0066	< 0.0066	0
Pesticides Dieldrin	P028	0.03 µg/l	237	0	< 0.0039	< 0.0039	0
Pesticides Glyphosate	P042	0.1 µg/l	237	0	< 0.002	0.003962	0
Pesticides Heptachlor	P043	0.03 µg/l	236	0	< 0.0051	< 0.0051	0
Pesticides Heptachlor epoxide	P044	0.03 µg/l	237	0	< 0.0076	< 0.0076	0
Pesticides Linuron	P051	0.1 µg/l	8	0	< 0.002	< 0.002	0
Pesticides MCPA	P054	0.1 µg/l	240	0	< 0.004	0.03508	0
Pesticides MCPP(Mecoprop)	P053	0.1 µg/l	240	0	< 0.0026	0.003059	0
Pesticides Metaldehyde	P226	0.1 µg/l	8	1	< 0.0061	0.36	1
Pesticides Phenmedipham	P224	0.1 µg/l	8	0	< 0.0026	0.021	0
Pesticides Propetamphos	P069	0.1 µg/l	1	0	< 0.0059	< 0.0059	0
Pesticides Propyzamide	P071	0.1 µg/l	8	0	< 0.0018	0.0025	0
Pesticides Trichlopyr	P131	0.1 µg/l	8	0	< 0.005	< 0.005	0
Radon	F031	100 Bq/l	71	0	8.5	52.7	0
Tetrachloroethene/Trichloroethene - sum of two substances	D009B	10 µg/l	222	0	0	0.0377	0
Totals:			4,157	1			

Table DWR 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	221	0	< 0.032	0.109	0
Totals:			221	0			

Table DWR 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	220	0	4.521	28.79
Clostridium Perfringens (Indicator)	C004A	0 number/100 ml	3,025	0	0	0
Conductivity (Indicator)	D001	2500 µS/cm	777	0	72.34	532.2
Gross Alpha Activity	F004	0.1 Bq/l	36	1	< 0.02	0.101
Gross Beta Activity	F005	1 Bq/l	36	0	< 0.04	0.109
Sulphate (Indicator)	A007	250 mg SO4/l	220	0	< 2.7	58.85
Total organic carbon (indicator)	A017	No abnormal change	220	-n/a	0.17	1.879
Tritium (Indicator)	F006	100 Bq/l	36	0	< 5.6	9.3
Totals:			4,570	1		

Table DWR 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	420	0	< 0.051	< 0.051	0
Antimony	B008A	5 µg Sb/l	623	0	0.01	0.12	0
Arsenic	B001A	10 µg As/l	623	0	< 0.06	0.6228	0
Benzene	F002	1 µg/l	420	0	< 0.019	< 0.019	0
Benzo (a) Pyrene	D007	0.01 µg/l	623	1	< 0.00077	0.001344	1
Boron	D005A	1 mg B/l	419	0	< 0.011	0.0196	0
Bromate	F003	10 µg BrO3/l	569	0	< 0.0001	1.8	0
Cadmium	B002	5 µg Cd/l	623	0	< 0.01	0.03	0
Chromium	B004	50 µg Cr/l	622	0	< 0.05	0.36	0
Copper	A024A	2 mg Cu/l	622	0	< 0.0011	0.3354	0
Cyanide	B003	50 µg CN/l	419	0	< 0.27	< 2	0
E coli	C002	0 number/100 ml	8,062	1	0	0	1
Enterococci	C003	0 number/100 ml	617	0	0	0	0
Fluoride	A027	1.5 mg F/l	419	0	0.0142	0.0982	0
Lead (>10 µg/l)	B007B	10 µg Pb/l	620	2	< 0.04	5.069	2
Mercury	B005	1 µg Hg/l	421	0	< 0.00002	< 0.04	0
Nickel	B006A	20 µg Ni/l	626	0	< 0.13	3.665	0
Nitrate	A012	50 mg NO3/l	630	0	< 2.213	< 15.3538	0
Nitrate/Nitrite Formula	A013C	1 mg NO2/l	614	0	< 0.049	< 0.3185	0
Nitrite (Consumers tap)	A013A	0.5 mg NO2/l	633	0	< 0.013136	< 0.013136	0
Pesticides - Total Substances	B010	0.5 µg/l	544	0	0	0.0371	0
Pesticides 2,4-D	P020	0.1 µg/l	542	0	< 0.0042	0.01357	0
Pesticides Aldrin	P002	0.03 µg/l	533	0	< 0.0039	< 0.0039	0
Pesticides Asulam	P133	0.1 µg/l	542	0	< 0.0026	< 0.0026	0
Pesticides Clopyralid	P018	0.1 µg/l	41	0	< 0.0054	0.013	0
Pesticides Cyfluthrin	P093	0.1 µg/l	17	0	< 0.0092	< 0.0092	0
Pesticides Dicamba	P025	0.1 µg/l	26	0	< 0.0066	< 0.0066	0
Pesticides Dieldrin	P028	0.03 µg/l	532	0	< 0.0039	< 0.0039	0
Pesticides Glyphosate	P042	0.1 µg/l	536	0	< 0.002	0.0024	0
Pesticides Heptachlor	P043	0.03 µg/l	532	0	< 0.0051	< 0.0051	0
Pesticides Heptachlor epoxide	P044	0.03 µg/l	532	0	< 0.0076	< 0.0076	0
Pesticides Linuron	P051	0.1 µg/l	157	0	< 0.002	< 0.002	0
Pesticides MCPA	P054	0.1 µg/l	543	0	< 0.004	0.024	0
Pesticides MCPP(Mecoprop)	P053	0.1 µg/l	542	0	< 0.0026	0.005542	0
Pesticides Metaldehyde	P226	0.1 µg/l	95	0	< 0.0061	0.048	0
Pesticides Phenmedipham	P224	0.1 µg/l	8	0	< 0.0026	0.016	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 Propyzamide	P071	0.1 µg/l	32	0	< 0.0018	0.0019	0
Polycyclic aromatic hydrocarbons	B011F	0.1 µg/l	622	0	0	0	0
Selenium	B009	10 µg Se/l	623	0	< 0.1	0.38	0
Tetrachloroethene/Trichloroethene - sum of two substances	D009B	10 µg/l	418	0	0	0.04	0
Total Trihalomethanes	D011	100 µg/l	624	0	3	76	0
Totals:			26,666	4			

Table DWR 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	1,957	0	< 1.9	57	0
Colour	A001	20 mg/l Pt/Co scale	1,558	0	< 0.73	3.7	0
Iron	A022	200 µg Fe/l	2,674	9	2.4	150	8
Manganese	A023	50 µg Mn/l	1,927	1	< 0.2128	12	1
Organoleptic Odour	A003	0 Dilution number	2,090	3	0	0	3
Organoleptic Taste	A004	0 Dilution number	1,889	2	0	0	2
Sodium	A009	200 mg Na/l	623	0	3.424	40.76	0
Tetrachloromethane	D008	3 µg/l	420	0	< 0.032	0.06258	0
Turbidity	A002	4 nephelometric turbidity units	1,647	0	< 0.06	0.31	0
Totals:			14,785	15			

Table DWR 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	1,670	0	< 0.003	0.009
Chloride (Indicator)	D002A	250 mg Cl/l	421	0	3.322	54.56
Coliform Bacteria (Indicator)	C001A	0 number/100 ml	8,067	6	0	0
Colony Counts After 3 Days At 22°C (Indicator)	C007	No abnormal change	1,729	-n/a	0	9
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	1,728	-n/a	0	9
Conductivity (Indicator)	D001	2500 µS/cm	1,167	0	58	373.2
Gross Alpha Activity	F004	0.1 Bq/l	70	0	< 0.02	0.094
Gross Beta Activity	F005	1 Bq/l	70	0	< 0.04	0.127
Hydrogen ion (pH)	A006	6.5 - 9.5 pH Value	2,369	0	7.3	8.4
Residual Disinfectant - Free	C009	No abnormal change	8,156	-n/a	< 0.04	0.9
Residual Disinfectant - Total	C010	No abnormal change	8,156	-n/a	0.13	0.96
Combined Chlorine/Residual Disinfectant Combined*	-(n/a)	-(n/a)	(8,156)	-n/a	0	0.2
Sulphate (Indicator)	A007	250 mg SO ₄ /l	421	0	< 2.7	69.78
Total organic carbon (indicator)	A017	No abnormal change	418	-n/a	0.3619	2.181
Tritium (Indicator)	F006	100 Bq/l	34	0	< 5.6	22.8
Totals:			34,476	6		

*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'.