

Data summary tables for Essex and Suffolk Water (ESK)

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 Essex & Suffolk Water

Report Date Range: For the whole year 2016

Table ESK 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	2,822	0	< 0.0029	0.003554	0
Totals:			2,822	0			

Table ESK 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	3,668	1	0	0	1
E coli	C002	0 number/100 ml	3,668	0	0	0	0
Totals:			7,336	1			

Table ESK 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	3,679	-n/a	0	9
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	3,658	-n/a	0	11
Residual Disinfectant - Total	C010	No abnormal change	3,690	-n/a	0.38	1.43
Turbidity (Indicator)	A002A	1 nephelometric turbidity units	3,668	1	0.061	0.2
Totals:			14,695	1		

Table ESK 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	4,795	3	0	0	1
E coli	C002	0 number/100 ml	4,795	0	0	0	0
Totals:			9,590	3			

Table ESK 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	4,805	-n/a	0	> 300
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	4,777	-n/a	0	32
Residual Disinfectant - Total	C010	No abnormal change	4,812	-n/a	0.1	1.03
Totals:			14,394	0		

Table ESK 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	68	0	< 0.024	< 0.025	0
Benzene	F002	1 µg/l	68	0	< 0.013	0.028	0
Boron	D005A	1 mg B/l	68	0	0.045	0.086	0
Cyanide	B003	50 µg CN/l	68	0	< 0.3	7.8	0
Fluoride	A027	1.5 mg F/l	68	0	0.17	0.39	0
Mercury	B005	1 µg Hg/l	68	0	< 0.013	< 0.055	0
Pesticides - Total Substances	B010	0.5 µg/l	75	0	0	0.478	0
Pesticides 2,4,5-T	P076	0.1 µg/l	68	0	< 0.0013	0.0038	0
Pesticides 2,4,-Db	P082	0.1 µg/l	68	0	< 0.0034	< 0.0034	0
Pesticides 2,4-D	P020	0.1 µg/l	68	0	< 0.0011	0.015	0
Pesticides Aldrin	P002	0.03 µg/l	68	0	< 0.0022	< 0.0022	0
Pesticides AMPA	P273	0.1 µg/l	68	0	< 0.0031	< 0.0062	0
Pesticides Asulam	P133	0.1 µg/l	68	0	< 0.004	< 0.0049	0
Pesticides Atrazine	P004	0.1 µg/l	68	0	< 0.0025	< 0.013	0
Pesticides Bentazone	P006	0.1 µg/l	68	2	< 0.00073	0.29	2
Pesticides Carbetamide	P010	0.1 µg/l	68	0	< 0.0018	0.013	0
Pesticides Chloridazon	P162	0.1 µg/l	68	0	< 0.0015	0.01	0
Pesticides Chlormequat	P163	0.1 µg/l	68	0	< 0.0059	< 0.0059	0
Pesticides Chlorothalonil	P015	0.1 µg/l	68	0	< 0.0098	< 0.0098	0
Pesticides Chlortoluron	P014	0.1 µg/l	68	0	< 0.0019	< 0.0019	0
Pesticides Clopyralid	P018	0.1 µg/l	68	0	< 0.0039	0.06	0
Pesticides Dicamba	P025	0.1 µg/l	68	0	< 0.012	< 0.012	0
Pesticides Dichlorprop	P026	0.1 µg/l	68	0	< 0.0013	0.015	0
Pesticides Dieldrin	P028	0.03 µg/l	68	0	< 0.0024	< 0.0025	0
Pesticides Diuron	P032	0.1 µg/l	68	0	< 0.0033	0.0085	0
Pesticides Fenpropidin	P168	0.1 µg/l	68	0	< 0.0036	< 0.018	0
Pesticides Fenpropimorph	P037	0.1 µg/l	68	0	< 0.0027	< 0.014	0
Pesticides Flufenacet	P230	0.1 µg/l	68	0	< 0.02	0.024	0
Pesticides Fluroxypyr	P040	0.1 µg/l	68	0	< 0.0052	0.021	0
Pesticides Glyphosate	P042	0.1 µg/l	68	0	< 0.0034	0.015	0
Pesticides Heptachlor	P043	0.03 µg/l	68	0	< 0.0048	< 0.0048	0
Pesticides Heptachlor epoxide	P044	0.03 µg/l	68	0	0	0	0
Pesticides Hexachlorobenzene	P045	0.1 µg/l	68	0	< 0.0056	< 0.0056	0
Pesticides Isoproturon	P048	0.1 µg/l	68	0	< 0.0017	< 0.0017	0
Pesticides Linuron	P051	0.1 µg/l	68	0	< 0.0055	< 0.0055	0
Pesticides MCPA	P054	0.1 µg/l	68	0	< 0.00055	0.015	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 MCPB	P055	0.1 µg/l	68	0 < 0.0041	0.02	0	
Pesticides MCPP(Mecoprop)	P053	0.1 µg/l	68	0 < 0.0013	0.019	0	
Pesticides Metaldehyde	P226	0.1 µg/l	68	1 0.011	0.16	1	
Pesticides Metamitron	P194	0.1 µg/l	68	0 < 0.0032	< 0.0032	0	
Pesticides Metazachlor	P203	0.1 µg/l	68	0 < 0.003	< 0.015	0	
Pesticides Oxamyl	P263	0.1 µg/l	68	0 < 0.02	< 0.02	0	
Pesticides Pendimethalin	P118	0.1 µg/l	68	0 < 0.0025	< 0.013	0	
Pesticides Pentachlorophenol	P060	0.1 µg/l	73	0 < 0.0019	< 0.018	0	
Pesticides Picloram	P122	0.1 µg/l	68	0 < 0.0035	< 0.011	0	
Pesticides Propyzamide	P071	0.1 µg/l	68	0 < 0.0022	0.037	0	
Pesticides Quinmerac	P244	0.1 µg/l	68	0 < 0.0016	0.018	0	
Pesticides Terbutryn	P077	0.1 µg/l	68	0 < 0.0022	< 0.011	0	
Pesticides Trichlopyr	P131	0.1 µg/l	68	0 < 0.0035	0.014	0	
Radon	F031	100 Bq/l	8	0 < 10	< 10	0	
Tetrachloroethene/Trichloroethene - sum of two substances	D009B	10 µg/l	68	0 0	0.4	0	
Totals:			3,420	3			

Table ESK 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	68	0 < 0.025	0.04	0	
Totals:			68	0			

Table ESK 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	68	0	48	84
Gross Alpha Activity	F004	0.1 Bq/l	68	2	0.012	0.264
Gross Beta Activity	F005	1 Bq/l	68	0 < 0.025	0.298	
Sulphate (Indicator)	A007	250 mg SO ₄ /l	68	0	49	120
Total organic carbon (indicator)	A017	No abnormal change	68	-n/a	1.7	4.3
Tritium (Indicator)	F006	100 Bq/l	68	0 < 5	< 10	
Totals:			408	2		

Table ESK 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	134	0	< 0.024	< 0.025	0
Antimony	B008A	5 µg Sb/l	326	0	< 0.033	0.62	0
Arsenic	B001A	10 µg As/l	326	0	0.15	2.419	0
Benzene	F002	1 µg/l	134	0	< 0.013	0.0369	0
Benzo (a) Pyrene	D007	0.01 µg/l	326	0	< 0.00056	< 0.00056	0
Boron	D005A	1 mg B/l	134	0	0.0184	0.1365	0
Bromate	F003	10 µg BrO3/l	326	0	< 0.3	5.814	0
Cadmium	B002	5 µg Cd/l	326	0	< 0.0024	0.05057	0
Chromium	B004	50 µg Cr/l	326	0	< 0.025	0.2119	0
Copper	A024A	2 mg Cu/l	326	0	0.0013	0.3738	0
Cyanide	B003	50 µg CN/l	134	0	< 0.3	13.6	0
E coli	C002	0 number/100 ml	4,723	1	0	0	1
Enterococci	C003	0 number/100 ml	326	0	0	0	0
Fluoride	A027	1.5 mg F/l	134	0	0.08335	1.265	0
Lead (>10 µg/l)	B007B	10 µg Pb/l	326	1	0.02127	8.122	1
Mercury	B005	1 µg Hg/l	134	0	< 0.013	< 0.055	0
Nickel	B006A	20 µg Ni/l	326	0	0.06897	6.376	0
Nitrate	A012	50 mg NO3/l	1,519	0	< 1.7	38	0
Nitrate/Nitrite Formula	A013C	1 mg NO2/l	1,519	0	< 0.03	0.786	0
Nitrite (Consumers tap)	A013A	0.5 mg NO2/l	1,519	2	< 0.0029	0.388	2
Pesticides - Total Substances	B010	0.5 µg/l	145	0	0	0.33152	0
Pesticides 2,4,5-T	P076	0.1 µg/l	134	0	< 0.0013	0.01165	0
Pesticides 2,4,-Db	P082	0.1 µg/l	134	0	< 0.0034	0.013045	0
Pesticides 2,4-D	P020	0.1 µg/l	134	0	< 0.0011	0.011265	0
Pesticides Aldrin	P002	0.03 µg/l	134	0	< 0.0022	< 0.0022	0
Pesticides AMPA	P273	0.1 µg/l	134	0	< 0.0031	0.03595	0
Pesticides Asulam	P133	0.1 µg/l	134	0	< 0.004	0.024	0
Pesticides Atrazine	P004	0.1 µg/l	134	0	< 0.0025	< 0.0034	0
Pesticides Bentazone	P006	0.1 µg/l	134	2	< 0.00073	0.12	2
Pesticides Carbetamide	P010	0.1 µg/l	134	0	< 0.0018	0.009755	0
Pesticides Chloridazon	P162	0.1 µg/l	134	0	< 0.0015	0.02265	0
Pesticides Chlormequat	P163	0.1 µg/l	134	0	< 0.0059	< 0.0059	0
Pesticides Chlorothalonil	P015	0.1 µg/l	134	0	< 0.0098	< 0.0098	0
Pesticides Chlortoluron	P014	0.1 µg/l	134	0	< 0.0019	0.003565	0
Pesticides Clopyralid	P018	0.1 µg/l	134	0	< 0.0039	0.09055	0
Pesticides Dicamba	P025	0.1 µg/l	134	0	< 0.012	< 0.012	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 Dichlorprop	P026	0.1 µg/l	134	0	< 0.0013	0.011	0
Pesticides Dieldrin	P028	0.03 µg/l	134	0	< 0.0024	< 0.0025	0
Pesticides Diuron	P032	0.1 µg/l	134	0	< 0.0033	0.007535	0
Pesticides Fenpropidin	P168	0.1 µg/l	134	0	< 0.0036	< 0.007105	0
Pesticides Fenpropimorph	P037	0.1 µg/l	134	0	< 0.0027	< 0.0044	0
Pesticides Flufenacet	P230	0.1 µg/l	134	0	< 0.02	< 0.0252	0
Pesticides Fluroxypyr	P040	0.1 µg/l	134	0	< 0.0052	0.01665	0
Pesticides Glyphosate	P042	0.1 µg/l	134	0	< 0.0034	0.011585	0
Pesticides Heptachlor	P043	0.03 µg/l	134	0	< 0.0048	< 0.0048	0
Pesticides Heptachlor epoxide	P044	0.03 µg/l	134	0	0	0	0
Pesticides Hexachlorobenzene	P045	0.1 µg/l	134	0	< 0.0056	< 0.0056	0
Pesticides Isoproturon	P048	0.1 µg/l	134	0	< 0.0017	0.00613	0
Pesticides Linuron	P051	0.1 µg/l	134	0	< 0.0055	< 0.0055	0
Pesticides MCPA	P054	0.1 µg/l	134	0	< 0.00055	0.015	0
Pesticides MCPB	P055	0.1 µg/l	134	0	< 0.0041	0.01825	0
Pesticides MCPP(Mecoprop)	P053	0.1 µg/l	134	0	< 0.0013	0.015	0
Pesticides Metaldehyde	P226	0.1 µg/l	134	1	< 0.0061	0.1065	1
Pesticides Metamitron	P194	0.1 µg/l	134	0	< 0.0032	< 0.00827	0
Pesticides Metazachlor	P203	0.1 µg/l	134	0	< 0.003	< 0.00531	0
Pesticides Oxamyl	P263	0.1 µg/l	134	0	< 0.02	< 0.02	0
Pesticides Pendimethalin	P118	0.1 µg/l	134	0	< 0.0025	< 0.0038	0
Pesticides Pentachlorophenol	P060	0.1 µg/l	146	0	< 0.0019	< 0.01813	0
Pesticides Picloram	P122	0.1 µg/l	134	0	< 0.0035	< 0.01425	0
Pesticides Propyzamide	P071	0.1 µg/l	134	0	< 0.0022	0.014	0
Pesticides Quinmerac	P244	0.1 µg/l	134	0	< 0.0016	0.01795	0
Pesticides Terbutryn	P077	0.1 µg/l	134	0	< 0.0022	< 0.005	0
Pesticides Trichlopyr	P131	0.1 µg/l	134	0	< 0.0035	0.0143	0
Polycyclic aromatic hydrocarbons	B011F	0.1 µg/l	326	0	0	0.0041514	0
Selenium	B009	10 µg Se/l	326	0	< 0.07827	3.673	0
Tetrachloroethene/Trichloroethene - sum of two substances	D009B	10 µg/l	134	0	0	0.5045	0
Total Trihalomethanes	D011	100 µg/l	326	0	12.07	59.211	0
Totals:			20,241	7			

Table ESK 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	1,519	1	< 6.6	20	1
Colour	A001	20 mg/l Pt/Co scale	1,588	0	< 0.93	3	0
Iron	A022	200 µg Fe/l	1,519	1	< 1.2	52.8	1
Manganese	A023	50 µg Mn/l	1,519	0	< 0.18	4.14	0
Organoleptic Odour	A003	0 Dilution number	1,026	10	0	0.73	9
Organoleptic Taste	A004	0 Dilution number	1,026	6	0	0	5
Sodium	A009	200 mg Na/l	326	0	18.43	98.11	0
Tetrachloromethane	D008	3 µg/l	134	0	< 0.025	0.10615	0
Turbidity	A002	4 nephelometric turbidity units	1,588	1	0.073	0.29	1
Totals:			10,245	19			

Table ESK 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	1,588	0	< 0.0072	0.28
Chloride (Indicator)	D002A	250 mg Cl/l	134	0	35	160
Clostridium Perfringens (Indicator)	C004A	0 number/100 ml	1,519	2	0	0
Coliform Bacteria (Indicator)	C001A	0 number/100 ml	4,723	13	0	0
Colony Counts After 3 Days At 22°C (Indicator)	C007	No abnormal change	1,588	-n/a	0	197
Colony Counts After 48 Hours At 37°C (Indicator)	C013	No abnormal change	1,576	-n/a	0	157
Conductivity (Indicator)	D001	2500 µS/cm	1,588	0	510	1000
Gross Alpha Activity	F004	0.1 Bq/l	134	0	0.01435	0.084
Gross Beta Activity	F005	1 Bq/l	134	0	0.0717	0.38715
Hydrogen ion (pH)	A006	6.5 - 9.5 pH Value	1,588	0	7.28	8.11
Residual Disinfectant - Total	C010	No abnormal change	4,724	-n/a	0.11	1.03
Sulphate (Indicator)	A007	250 mg SO ₄ /l	134	0	37.45	190
Total organic carbon (indicator)	A017	No abnormal change	134	-n/a	0.248	3.965
Tritium (Indicator)	F006	100 Bq/l	134	0	< 5	< 10
Totals:			19,698	15		