

## **Data Summary Tables for Essex & Suffolk Water (ESK)**

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 ESSEX & SUFFOLK WATER (ESK)

Table ESK 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	3006	0	<0.0014	0.013	0
<b>TOTAL</b>	-	-	<b>3006</b>	<b>0</b>	-	-	-

Table ESK 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	4095	4	0	0	2
Cryptosporidium	C111	oocysts >1 in10 litres	1442	0	-	-	0
<i>E. coli</i>	C002	0 number/100 ml	4095	0	0	0	0
<b>TOTAL</b>	-	-	<b>9632</b>	<b>4</b>	-	-	-

Table ESK 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	4095	n/a	0	139
Colony Counts After 48 Hours At 37°C	C013	No abnormal change	4096	n/a	0	20
Residual Disinfectant - Total	C010	No abnormal change	4108	n/a	0.38	1.2
Turbidity	A002A	1 NTU	4095	0	0.06	0.2804
<b>TOTAL</b>	-	-	<b>16394</b>	<b>0</b>	-	-

**Table ESK 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	5620	8	0	0	0
<i>E. coli</i>	C002	0 number/100 ml	5620	0	0	0	0
<b>TOTAL</b>	-	-	<b>11240</b>	<b>8</b>	-	-	-

**Table ESK 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	5620	n/a	0	>300
Colony Counts After 48 Hours At 37°C	C013	No abnormal change	5620	n/a	0	97
Residual Disinfectant - Total	C010	No abnormal change	5650	n/a	0.1	0.73
<b>TOTAL</b>	-	-	<b>16890</b>	<b>0</b>	-	-

**Table ESK 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	88	0	<0.085	<0.085	0
Benzene	F002	1 µg/l	88	0	<0.042	<0.042	0
Boron	D005A	1 mg B/l	88	0	<0.026	0.17	0
Cyanide	B003	50 µg CN/l	88	0	<0.66	33	0
Mercury	B005	1 µg Hg/l	88	0	<0.037	0.039	0
Pesticides (2,4,5-T)	P076	µg/l	88	0	<0.0036	<0.0036	0
Pesticides (2,4,-Db)	P082	µg/l	88	0	<0.0025	0.0059	0
Pesticides (2,4-D)	P020	µg/l	88	0	<0.0049	0.016	0
Pesticides (Aldrin)	P002	µg/l	88	0	<0.0043	<0.0043	0
Pesticides (Atrazine)	P004	µg/l	88	0	<0.0079	0.016	0
Pesticides (Bentazone)	P006	µg/l	88	0	<0.002	0.05	0
Pesticides (Bromoxynil)	P008	µg/l	88	0	<0.0023	0.0027	0
Pesticides (Carbetamide)	P010	µg/l	88	0	<0.0026	0.048	0
Pesticides (Chlormequat)	P163	µg/l	88	0	<0.0027	0.041	0
Pesticides (Chlorothalonil)	P015	µg/l	88	0	<0.0072	<0.0072	0
Pesticides (Chlorthal)	P175	µg/l	88	0	<0.0055	<0.0055	0
Pesticides (Chlortoluron)	P014	µg/l	88	0	<0.0047	0.019	0
Pesticides (Clopyralid)	P018	µg/l	88	0	<0.0069	0.056	0
Pesticides (Dicamba)	P025	µg/l	88	0	<0.0034	0.0056	0
Pesticides (Dichlorprop)	P026	µg/l	88	0	<0.0026	0.03	0
Pesticides (Dieldrin)	P028	µg/l	88	0	<0.0056	<0.0056	0
Pesticides (Diuron)	P032	µg/l	88	0	<0.0019	0.029	0
Pesticides (Heptachlor)	P043	µg/l	88	0	<0.0019	<0.0019	0
Pesticides (Heptachlor epoxide)	P044	µg/l	88	0	<0.0063	<0.0063	0
Pesticides (Ioxynil)	P049	µg/l	88	0	<0.0028	0.0041	0
Pesticides (Isoproturon)	P048	µg/l	88	0	<0.0029	0.044	0
Pesticides (Linuron)	P051	µg/l	88	0	<0.003	0.015	0
Pesticides (MCPA)	P054	µg/l	88	0	<0.0037	0.016	0
Pesticides (MCPB)	P055	µg/l	88	0	<0.0039	<0.0039	0
Pesticides (MCPB(Mecoprop))	P053	µg/l	88	0	<0.0059	0.028	0
Pesticides (Metamitron)	P194	µg/l	88	0	<0.0046	<0.0046	0
Pesticides (Methabenzthiazuron)	P167	µg/l	88	0	<0.0029	<0.0029	0
Pesticides (Monuron)	P113	µg/l	88	0	<0.0027	<0.0027	0
Pesticides (Pendimethalin)	P118	µg/l	88	0	<0.0049	0.015	0

Pesticides (Pirimicarb)	P064	µg/l	88	0	<0.012	<0.012	0
Pesticides (Prometryn)	P070	µg/l	88	0	<0.0075	<0.0075	0
Pesticides (Propazine)	P066	µg/l	88	0	<0.007	<0.007	0
Pesticides (Simazine)	P073	µg/l	88	0	<0.0089	0.037	0
Pesticides (Tebuthiuron)	P189	µg/l	88	0	<0.0048	<0.0048	0
Pesticides (Tecnazene)	P130	µg/l	88	0	<0.012	<0.012	0
Pesticides (Terbutylazine)	P173	µg/l	88	0	<0.0098	<0.0098	0
Pesticides (Terbutryn)	P077	µg/l	88	0	<0.0066	<0.0066	0
Pesticides (Trietazine)	P132	µg/l	88	0	<0.0075	<0.0075	0
Pesticides (Trifluralin)	P081	µg/l	88	0	<0.0076	0.012	0
Pesticides - Total Substances	B010	0.5 µg/l	98	0	0	0.153	0
<b>TOTAL</b>	-	-	<b>3970</b>	<b>0</b>	-	-	-

**Table ESK 7: 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)
Radioactivity - Gross Alpha	F004	0.1 Bq/l	88	0	<0.04	<0.04
Radioactivity - Gross Beta	F005	1 Bq/l	88	0	<0.07	0.72
Radioactivity - Tritium	F006	100 Bq/l	88	0	<3.3	4.1
Total Organic Carbon (TOC)	A017	No abnormal change	88	n/a	1.2	4.7
<b>TOTAL</b>	-	-	<b>352</b>	<b>0</b>	-	-

**Table ESK 8: 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	145	0	<0.085	<0.085	0
Antimony	B008A	5 µg Sb/l	373	0	<0.28	1.026	0
Arsenic	B001A	10 µg As/l	373	0	0.37	2.6	0
Benzene	F002	1 µg/l	145	0	<0.042	<0.042	0
Benzo (a) Pyrene	D007	0.01 µg/l	373	0	<0.0006	0.0008	0
Boron	D005A	1 mg B/l	145	0	<0.026	0.2162	0
Bromate	F003	10 µg BrO <sub>3</sub> /l	373	0	<0.95	5.02	0
Cadmium	B002	5 µg Cd/l	373	0	<0.017	0.08742	0
Chromium	B004	50 µg Cr/l	373	0	<0.28	0.7178	0
Copper	A024A	2 mg Cu/l	373	0	0.002	0.4982	0
Cyanide	B003	50 µg CN/l	145	0	<0.66	24.08	0
<i>E. coli</i>	C002	0 number/100 ml	4528	2	0	0	2
Enterococci	C003	0 number/100 ml	373	0	0	0	0
Fluoride	A027	1.5 mg F/l	373	0	0.0737	0.8	0
Lead	B007A	25 µg Pb/l	373	2	<0.17	23.26	2
Mercury	B005	1 µg Hg/l	145	0	<0.037	0.0608	0
Nickel	B006A	20 µg Ni/l	373	1	<0.16	6.138	1
Nitrate	A012	50 mg NO <sub>3</sub> /l	1589	0	1.2	37	0
Nitrite	A013A	0.5 mg NO <sub>2</sub> /l	1589	0	<0.0014	0.27	0
Nitrate/Nitrite Formula	A013C	1 mg NO <sub>2</sub> /l	1589	0	<0.029	<0.74	0
Polycyclic aromatic hydrocarbons (PAHs)	B011F	0.1 µg/l	373	0	0	0.002326	0
Selenium	B009	10 µg Se/l	373	0	<0.31	3.826	0
Tetrachloroethene/Trichloroethene	D009B	10 µg/l	373	0	0	0.3034	0
Trihalomethanes (THMs)	D011	100 µg/l	373	0	6.396	58	0
Pesticides (2,4,5-T)	P076	µg/l	145	0	<0.0036	0.008596	0
Pesticides (2,4,-Db)	P082	µg/l	145	0	<0.0025	0.005574	0
Pesticides (2,4-D)	P020	µg/l	145	0	<0.0049	0.012068	0
Pesticides (Aldrin)	P002	µg/l	145	0	<0.0043	<0.0043	0
Pesticides (Atrazine)	P004	µg/l	145	0	<0.0079	0.01108	0
Pesticides (Bentazone)	P006	µg/l	145	0	<0.002	0.03794	0
Pesticides (Bromoxynil)	P008	µg/l	145	0	<0.0023	0.006448	0
Pesticides (Carbetamide)	P010	µg/l	145	0	<0.0026	0.01762	0
Pesticides (Chlormequat)	P163	µg/l	145	0	<0.0027	0.03564	0
Pesticides (Chlorothalonil)	P015	µg/l	145	0	<0.0072	<0.0072	0
Pesticides (Chlorthal)	P175	µg/l	145	0	<0.0055	<0.0055	0
Pesticides (Chlortoluron)	P014	µg/l	145	0	<0.0047	0.00852	0

Pesticides (Clopyralid)	P018	µg/l	145	0	<0.0069	0.03932	0
Pesticides (Dicamba)	P025	µg/l	145	0	<0.0034	<0.004102	0
Pesticides (Dichlorprop)	P026	µg/l	145	0	<0.0026	0.020902	0
Pesticides (Dieldrin)	P028	µg/l	145	0	<0.0056	<0.0056	0
Pesticides (Diuron)	P032	µg/l	145	0	<0.0019	0.01654	0
Pesticides (Heptachlor)	P043	µg/l	145	0	<0.0019	<0.00325	0
Pesticides (Heptachlor epoxide)	P044	µg/l	145	0	<0.0063	<0.0063	0
Pesticides (Ioxynil)	P049	µg/l	145	0	<0.0028	0.00955	0
Pesticides (Isoproturon)	P048	µg/l	145	0	<0.0029	0.02926	0
Pesticides (Linuron)	P051	µg/l	145	0	<0.003	<0.00894	0
Pesticides (MCPA)	P054	µg/l	145	0	<0.0037	0.01786	0
Pesticides (MCPB)	P055	µg/l	145	0	<0.0039	0.007882	0
Pesticides (MCPB(Mecoprop))	P053	µg/l	145	0	<0.0059	0.02926	0
Pesticides (Metamitron)	P194	µg/l	145	0	<0.0046	<0.007516	0
Pesticides (Methabenzthiazuron)	P167	µg/l	145	0	<0.0029	<0.0029	0
Pesticides (Monuron)	P113	µg/l	145	0	<0.0027	<0.015282	0
Pesticides (Pendimethalin)	P118	µg/l	145	0	<0.0049	0.010436	0
Pesticides (Pirimicarb)	P064	µg/l	145	0	<0.012	<0.012	0
Pesticides (Prometryn)	P070	µg/l	145	0	<0.0075	<0.0075	0
Pesticides (Propazine)	P066	µg/l	145	0	<0.007	<0.007	0
Pesticides (Simazine)	P073	µg/l	145	0	<0.0089	0.02708	0
Pesticides (Tebuthiuron)	P189	µg/l	145	0	<0.0048	<0.0048	0
Pesticides (Tecnazene)	P130	µg/l	145	0	<0.012	<0.012	0
Pesticides (Terbutylazine)	P173	µg/l	145	0	<0.0098	<0.0098	0
Pesticides (Terbutryn)	P077	µg/l	145	0	<0.0066	<0.0066	0
Pesticides (Trietazine)	P132	µg/l	145	0	<0.0075	<0.0075	0
Pesticides (Trifluralin)	P081	µg/l	145	0	<0.0076	0.03386	0
Pesticides - Total Substances	B010	0.5 µg/l	167	0	0	0.12684	0
<b>TOTAL</b>	-	-	<b>21437</b>	<b>5</b>	-	-	-

**Table ESK 9: 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	1625	0	<2.2	12	0
Colour	A001	20 mg/l Pt/Co scale	1678	0	<1.2	4.1	0
Hydrogen ion (pH)	A006	6.5 -10 pH value	1678	0	7.07	8.13	0
Iron	A022	200 µg Fe/l	1641	0	<4	66.58	0
Manganese	A023	50 µg Mn/l	1625	0	<0.27	6.848	0

Organoleptic Odour	A003	Dilution no. 3 at 25°C	1678	2	0	0	2
Organoleptic Taste	A004	Dilution no. 3 at 25°C	1678	1	0	0	1
Sodium	A009	200 mg Na/l	373	0	13	81.56	0
Tetrachloromethane	D008	3 µg/l	373	0	<0.11	<0.11	0
Turbidity	A002	4 NTUs	1678	0	<0.07	0.41	0
<b>TOTAL</b>	-	-	<b>14027</b>	<b>3</b>	-	-	-

**Table ESK 10: 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	1678	0	<0.019	0.18
Chloride	D002A	250 mg Cl/l	373	0	29.74	140
<i>Clostridium perfringens</i>	C004A	0 number/100 ml	1625	3	0	0
Coliform Bacteria	C001A	0 number/100 ml	4528	36	0	0
Colony Counts After 3 Days At 22°C	C007	No abnormal change	1678	n/a	0	>300
Colony Counts After 48 Hours At 37°C	C013	No abnormal change	1678	n/a	0	120
Conductivity	D001	2500 µS/cm	1678	0	620	1100
Hydrogen ion (pH)	A006A	9.5 pH Value	1678	0	7.07	8.13
Radioactivity - Gross Alpha	F004	0.1 Bq/l	145	0	<0.04	<0.04
Radioactivity - Gross Beta	F005	1 Bq/l	145	0	<0.07	0.73
Radioactivity - Tritium	F006	100 Bq/l	145	0	<3.3	3.808
Residual Disinfectant - Total	C010	No abnormal change	4543	n/a	0.12	0.7
Sulphate	A007	250 mg SO <sub>4</sub> /l	373	0	41	200
Total Organic Carbon (TOC)	A017	No abnormal change	145	n/a	1.1	3.954
<b>TOTAL</b>	-	-	<b>20412</b>	<b>39</b>	-	-