

## Drinking Water Quality Report for Bishop's Stortford Zone ZAF0201

<b>Areas covered by Report:</b>	Bishop's Stortford
<b>Report Period:</b>	01 January 2019 to 31 December 2019
<b>Upstream Zone:</b>	Affinity Water Bishops Stortford WSZ (2018)
<b>Population:</b>	251
<b>Notices:</b>	n/a

### Commentary on Water Quality

The water supplied to the Bishop's Stortford Zone originates from a ground water source that is chlorinated. The analysis results indicate the quality of the water supplied to this zone is very good.

IWNL had 1 compliance failure during 2019 for Coliforms which was attributed to Customer Tap Hygiene.

<b>Hardness Rating:</b>	The water supplied to this zone is classified as hard as it contains naturally elevated concentrations of calcium and magnesium.					
	Soft	Moderately Soft	Slightly Hard	Moderately Hard	Hard	Very Hard
CaCO3 mg/l	0-50	50-100	100-150	150-200	200-300	300+

### Microbiological Indicators

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Coliform Bacteria (Indicator)	No. 100/ml	12	0	13	1.0	0
E.coli (faecal coliforms Confirmed)	No. 100/ml	12	0	0	0.0	0
Enterococci (Confirmed)	No. 100/ml	4	0	0	0.0	0
Sulphite-reducing Clostridia (Confirmed)	No. 100/ml	4	0	0	0.0	0

### Physio-Chemical Parameters

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Ammonium (Total)	mg/l NH4	4	0.004	0.004	0.0040	0.5
Boron	mg/l B	4	0.03	0.03	0.029	1
Bromate	ug/l BrO3	4	0.1	0.5	0.20	10
Chloride	mg/l	4	24.9	25.5	25.30	250
Colour	mg/l Pt/Co	4	1	1	1.00	20
Cyanide (Total)	ug/l CN	4	0.7	1.7	0.95	50

Physio-Chemical Parameters continued						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Electrical Conductivity	uS/cm @ 20 C	4	621	639	634.0	2500
Fluoride (Total)	mg/l F	4	0.18	0.19	0.188	1.5
Free Residual Chlorine	mg/l	12	0.05	0.28	0.12	No Specific PCV
Hydrogen ion	pH value	4	7.06	7.29	7.178	6.5-9.5
Nitrate (Total)	mg/l NO3	4	20.7	22.9	21.98	50
Nitrite - Consumer's Taps	mg/l NO3	4	0.002	0.002	0.0020	0.5
Nitrite/Nitrate formula	No Units	4	0.41	0.46	0.440	1
Sodium	mg/l Na	4	27.2	28.7	27.75	200
Sulphate	mg/l SO4	4	0	0	0.00	250
Total Residual Chlorine	mg/l	4	0	0	0.000	No Specific PVC
Turbidity (CT)	FTU	12	0	14	1.167	4

Hydrocarbons / Organics						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
1 1 1-Trichloroethane (Total)	ug/l	4	0.04	0.1	0.070	0.1
1 2-Dichloroethane (Total)	ug/l	4	0.07	0.13	0.100	3
Benzene (Total)	ug/l	4	0.02	0.03	0.025	1
Benzo[a]Pyrene (Total)	ug/l	4	0.00022	0.00022	0.000220	0.01
Benzo[b]Fluoranthene (Total)	ug/l	4	0.00052	0.00052	0.000520	The sum of PAHs must be <0.1 ug/l
Benzo[ghi]Perylene (Total)	ug/l	4	0.0004	0.0004	0.000400	The sum of PAHs must be <0.1 ug/l
Benzo[k]Fluoranthene (Total)	ug/l	4	0.00047	0.00047	0.000470	The sum of PAHs must be <0.1 ug/l
Bromodichloromethane (Total)	ug/l	4	0.12	0.34	0.190	60
ChloroDibromomethane (Total)	ug/l	4	0.59	1.5	0.918	100
Indeno[1 2 3-cd]Pyrene (Total)	ug/l	4	0.00048	0.00048	0.000480	The sum of PAHs must be <0.1 ug/l
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	ug/l	4	0.72	0.96	0.840	0.1
Tetrachloroethene (Total)	ug/l	4	0.02	0.04	0.030	10
Tetrachloromethane (Total)	ug/l	4	0.4	0.7	0.525	3
Total Organic Carbon	mg/l C	12	0.09	0.31	0.18	NO ABNORMAL CHANGE
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	4	1.37	3.13	2.6	100

**Hydrocarbons / Organics continued**

Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Tribromomethane-Bromoform (Total)	ug/l	4	0.05	0.1	0.075	100
Trichloroethene (Total)	ug/l	4	0.1	0.3	0.200	10
Trichloromethane-Chloroform (Total)	ug/l	4	2.54	4.33	3.658	300
Trihalomethanes (Total by Calculation)	ug/l	4	5.6	5.6	5.600	100

**Metals**

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	4	3.21	7.22	6.218	200
Antimony	ug/l Sb	4	0.05	0.07	0.060	5
Arsenic (Total)	ug/l As	4	0.27	0.28	0.275	10
Cadmium (Total)	ug/l Cd	4	0.013	0.013	0.0130	5
Chromium (Total)	ug/l Cr	4	0.22	0.57	0.335	50
Copper (Total)	mg/l Cu	4	0.006	0.158	0.06415	2
Iron (Total)	ug/l Fe	4	0.7	1.98	1.278	200
Lead (10)	ug/l Pb	4	0.08	1.9	1.013	10
Manganese (Total)	ug/l Mn	4	0.14	0.23	0.203	50
Mercury (Total)	ug/l Hg	4	0.03	0.03	0.030	1
Nickel (Total)	ug/l Ni	4	1.03	1.95	1.445	20
Selenium (Total)	ug/l Se	4	12.3	12.5	12.45	10

**Organoleptic Parameters**

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	4	0	0	0.0	0
Taste(Quantitative)	Dilution Number	4	0.05	0.12	0.1	0

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**Notes**

1. For some parameters, monitoring occurs at the supplying Water Treatment Works rather than the Water Supply Zone.

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**Glossary of Terms**

<b>Term</b>	<b>Definition</b>
PCV	Prescribed Concentration or Value
mg/l	Milligrammes per Litre or parts per million
µg/l	Microgrammes per Litre or parts per billion
Pt/Co	Platinum/Cobalt
µS/cm	Micro Siemens per Centimetre
Bq/l	Becquerel per Litre
NTU	Nephelometric Turbidity Units

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