

Drinking Water Quality Report for Brough Supply Zone ZYW0101

Areas covered by Report:	Brough, Hull
Report Period:	01 January 2019 to 31 December 2019
Upstream Zone:	Yorkshire Water Hull West 2004 WSZ (Z2804703)
Population:	99
Notices:	n/a

Commentary on Water Quality

The water supplied to the Brough zone originates from a surface water source that is chlorinated. The analysis results indicate the quality of the water supplied to this zone is very good with no contraventions recorded or detected during 2019.
IWNL received 0 customer contacts during the period of this report.

Hardness Rating:	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
CaCO ₃ mg/l	0-50	50-100	100-150	150-200	200-300	300+

Microbiological Indicators

Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Coliform Bacteria (Indicator)	No. 100/ml	5	0	0	0.0	0
E.coli (faecal coliforms Confirmed)	No. 100/ml	5	0	0	0.0	0
Enterococci (Confirmed)	No. 100/ml	2	0	0	0.0	0
Sulphite-reducing Clostridia (Confirmed)	No. 100/ml	2	0	0	0.0	0

Physio-Chemical Parameters

Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Ammonium (Total)	mg/l NH ₄	2	0.004	0.004	0.0040	0.5
Boron	mg/l B	2	0.03	0.03	0.029	1
Bromate	ug/l BrO ₃	2	0.7	2.0	1.35	10
Chloride	mg/l	2	35.5	36.7	36.10	250
Colour	mg/l Pt/Co	2	1	1.1	1.05	20
Cyanide (Total)	ug/l CN	2	0.7	0.7	0.70	50

Physio-Chemical Parameters continued						
Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Electrical Conductivity	uS/cm @ 20 C	2	562	584	573.0	2500
Fluoride (Total)	mg/l F	2	0.08	0.09	0.085	1.5
Free Residual Chlorine	mg/l	5	0.03	0.23	0.10	No Specific PCV
Hydrogen ion	pH value	2	6.96	7.27	7.115	6.5-9.5
Nitrate (Total)	mg/l NO3	2	19.6	22.8	21.20	50
Nitrite - Consumer's Taps	mg/l NO3	2	0.002	0.002	0.0020	0.5
Nitrite/Nitrate formula	No Units	2	0.39	0.46	0.425	1
Sodium	mg/l Na	2	18.9	19.8	19.35	200
Sulphate	mg/l SO4	2	98.4	137	117.70	250
Total Residual Chlorine	mg/l	5	0.1	0.54	0.234	No Specific PVC
Turbidity (CT)	FTU	2	0.17	0.31	0.240	4

Hydrocarbons / Organics						
Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
1 1 1-Trichloroethane (Total)	ug/l	1	0.04	0.04	0.040	0.1
1 2-Dichloroethane (Total)	ug/l	1	0.07	0.07	0.070	3
Benzene (Total)	ug/l	1	0.02	0.02	0.020	1
Benzo[a]Pyrene (Total)	ug/l	2	0.00022	0.00022	0.000220	0.01
Benzo[b]Fluoranthene (Total)	ug/l	2	0.00052	0.00052	0.000520	The sum of PAHs must be <0.1 ug/l
Benzo[ghi]Perylene (Total)	ug/l	2	0.0004	0.0004	0.000400	The sum of PAHs must be <0.1 ug/l
Benzo[k]Fluoranthene (Total)	ug/l	2	0.00047	0.00047	0.000470	The sum of PAHs must be <0.1 ug/l
Bromodichloromethane (Total)	ug/l	1	8.96	8.96	8.960	60
ChloroDibromomethane (Total)	ug/l	1	11.78	11.78	11.780	100
Indeno[1 2 3-cd]Pyrene (Total)	ug/l	2	0.00048	0.00048	0.000480	The sum of PAHs must be <0.1 ug/l
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	ug/l	2	0	0.17	0.085	0.1
Tetrachloroethene (Total)	ug/l	1	0.05	0.05	0.050	10
Tetrachloromethane (Total)	ug/l	1	0.02	0.02	0.020	3
Total Organic Carbon	mg/l C	2	1.8	2	1.90	NO ABNORMAL CHANGE
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	1	0	0	0.0	100

Hydrocarbons / Organics continued

Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Tribromomethane-Bromoform (Total)	ug/l	1	4.1	4.1	4.100	100
Trichloroethene (Total)	ug/l	1	0.05	0.05	0.050	10
Trichloromethane-Chloroform (Total)	ug/l	1	5.9	5.9	5.900	300
Trihalomethanes (Total by Calculation)	ug/l	1	30.74	30.74	30.740	100

Metals

Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	2	7.22	7.22	7.220	200
Antimony	ug/l Sb	2	0.08	0.12	0.100	5
Arsenic (Total)	ug/l As	2	0.18	0.29	0.235	10
Cadmium (Total)	ug/l Cd	2	0.013	0.014	0.0135	5
Chromium (Total)	ug/l Cr	2	0.24	0.42	0.330	50
Copper (Total)	mg/l Cu	2	0.21	0.419	0.31450	2
Iron (Total)	ug/l Fe	2	4.37	17.3	10.835	200
Lead (10)	ug/l Pb	2	0.23	0.26	0.245	10
Manganese (Total)	ug/l Mn	2	0.83	1.16	0.995	50
Mercury (Total)	ug/l Hg	2	0.03	0.03	0.030	1
Nickel (Total)	ug/l Ni	2	3	3.44	3.220	20
Selenium (Total)	ug/l Se	2	0.16	0.28	0.22	10

Organoleptic Parameters

Parameter	units of measurement	Number of Samples	Minimum	Max	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	2	0	0	0.0	0
Taste(Quantitative)	Dilution Number	2	0	0	0.0	0

Notes

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

Glossary of Terms

Term	Definition
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
