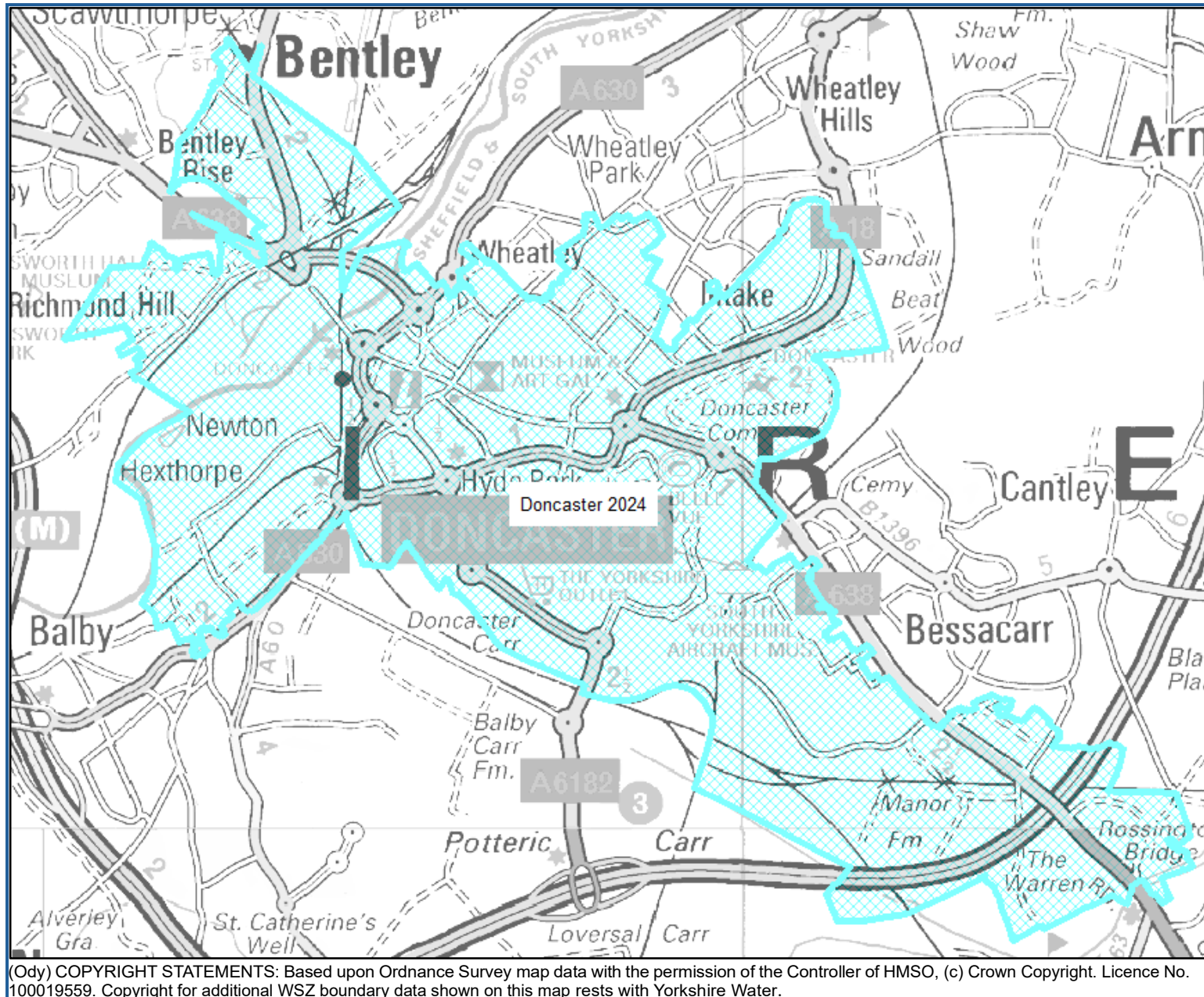


COMMENTARY ON WATER QUALITY

The water supplied to the zone is classified as being hard to very hard water, which is borehole/river derived. As we have a grid system in place whereby we can move water around the Yorkshire region as required, occasionally the hardness of your water may vary.

No fluoride is added to the water. Any fluoride that is there is naturally occurring.

The geographical area covered by this Water Supply Zone is show below:



ParameterName:	Std	Und Std	Units	No of Samples taken	No of Fails	% Fails	Population	% Fails (Und)	49536		
							No of Fails (Und)		Min	Mean	Max
Colony Counts After 3 Days At 22øc	-		no/ml	36	0	0.00%	0	0.00%	0	1.1	25
E. coli	0		no'/100 ml	120	0	0.00%	0	0.00%	0	0	0
Enterococci	0		no'/100 ml	8	0	0.00%	0	0.00%	0	0	0
Residual Disinfectant - Free	-		mg/l	120	0	0.00%	0	0.00%	0.01	0.08	0.47
Residual Disinfectant - Total	-		mg/l	120	0	0.00%	0	0.00%	0.04	0.25	0.56
Total coliforms(Indicator)	0		no'/100 ml	120	0	0.00%	0	0.00%	0	0	0
1,2 Dichloroethane	3		µg/l	8	0	0.00%	0	0.00% <	0.16 <	0.2 <	0.16
Aluminium	200		µg Al/l	36	0	0.00%	0	0.00% <	5 <	10.647 <	14.5
Ammonium(ammonia and ammonium ions)	0.5		mg NH4/l	36	0	0.00%	0	0.00% <	0.008 <	0.0461	0.091
Antimony	5		µg Sb/l	8	0	0.00%	0	0.00% <	0.06 <	0.0725	0.1
Arsenic	10		µg As/l	8	0	0.00%	0	0.00%	0.36	1.4488	1.82
Benzene	1		µg/l	8	0	0.00%	0	0.00% <	0.06 <	0.06 <	0.06
Benzo 3,4 pyrene	0.01		ug/l	8	0	0.00%	0	0.00% <	0.00042 <	0.0004 <	0.00042
Boron	1		mg B/l	8	0	0.00%	0	0.00% <	0.032 <	0.032 <	0.032
Bromate	10		µg BrO3/l	8	0	0.00%	0	0.00%	0.3	0.7625	1.7
Cadmium	5		µg Cd/l	8	0	0.00%	0	0.00% <	0.01 <	0.025 <	0.03
Chloride	250		mg Cl/l	8	0	0.00%	0	0.00%	34.6	41.3125	45.4
Chromium	50		µg Cr/l	8	0	0.00%	0	0.00% <	0.12 <	0.2037	0.28
Colour	20		mg/l Pt/Co scale	36	0	0.00%	0	0.00% <	3 <	3 <	3
Conductivity	2500		µS/cm	36	0	0.00%	0	0.00%	458	519.56	607
Copper	2		mg Cu/l	8	0	0.00%	0	0.00%	0.0015	0.0056	0.0104
Cyanide	50		µg CN/l	8	0	0.00%	0	0.00% <	1.2 <	1.2 <	1.2
Fluoride	1.5		mg F/l	8	0	0.00%	0	0.00%	0.07	0.073	0.08
Gross Alpha Activity	0.1		Bq/l	8	0	0.00%	0	0.00% <	0.022 <	0	0.065
Gross Beta Activity	1		Bq/l	8	0	0.00%	0	0.00%	0.065	0.1	0.124
Hydrogen Ion (pH)	6.5 - 9.5		pH value	36	0	0.00%	0	0.00%	7.1	7.63	7.87
Iron	200		µg Fe/l	36	0	0.00%	0	0.00% <	3.72 <	4.83	8.2
Lead	10		µg/l	8	0	0.00%	0	0.00%	0.06	0.635	2.69
Manganese	50		µg Mn/l	36	0	0.00%	0	0.00% <	0.3 <	0.65	1.18
Mercury	1		µg Hg/l	8	0	0.00%	0	0.00% <	0.04 <	0.05 <	0.06
Nickel	20		µg Ni/l	8	0	0.00%	0	0.00% <	0.17 <	0.756	1.96

ParameterName:	Std	Und Std	Units	No of Samples	No of Fails	% Fails	Population		Min	Mean	Max
							No of Fails	% Fails			
				taken			(Und)	(Und)			
Nitrate	50		mg NO3/l	36	0	0.00%	0	0.00%	19	26.2806	29.7
Nitrite - Consumer's Taps	0.5		mg/l NO2	36	0	0.00%	0	0.00% <	0.002 <	0.0044	0.027
Nitrite/ Nitrate formula	1		mg/l	36	0	0.00%	0	0.00%	0.38	0.5256	0.59
Odour	0		dilution number	36	0	0.00%	0	0.00%	0	0	0
Polycyclic Aromatic Hydrocarbons (PAHs)	0.1		µg/l	8	0	0.00%	0	0.00%	0	0.0002	0.002
Selenium	10		µg Se/l	8	0	0.00%	0	0.00% <	0.24 <	0.311	0.38
Sodium	200		mg Na/l	8	0	0.00%	0	0.00%	16	17.83	19.9
Sulphate	250		mg SO4/l	8	0	0.00%	0	0.00%	44.2	59.4	150
Taste	0		dilution number	36	0	0.00%	0	0.00%	0	0	0
Tetrachloroethene/Trichlorethene - Sum	10		µg/l	8	0	0.00%	0	0.00%	0	0	0
Tetrachloromethane	3		µg/l	8	0	0.00%	0	0.00% <	0.16 <	0.16 <	0.16
Total organic carbon	-		mg C/l	8	0	0.00%	0	0.00%	1	1.136	1.23
Total Trihalomethanes (THM's)	100		µg/l	8	0	0.00%	0	0.00%	3.26	7.965	24.83
Turbidity	4		NTU	36	0	0.00%	0	0.00% <	0.07 <	0.15	0.36
Calcium	-		mg Ca/l	8	0	0.00%	0	0.00%	61.8	69.375	109
Magnesium	-		mg Mg/l	8	0	0.00%	0	0.00%	8.94	24.105	29
Total Hardness	-		mg Ca/l	8	0	0.00%	0	0.00%	104	109.25	124
2,4,5-T	0.1		µg/l	8	0	0.00%	0	0.00% <	0.013 <	0.0138 <	0.015
2,4-D	0.1		µg/l	8	0	0.00%	0	0.00% <	0.01 <	0.0104 <	0.011
2,4-DB	0.1		µg/l	8	0	0.00%	0	0.00% <	0.01 <	0.0112 <	0.012
Aldrin	0.03		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008
Atrazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.0064 <	0.007
Azoxystrobin	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
Bentazone	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0075 <	0.009
Bixafen	0.1		µg/l	8	0	0.00%	0	0.00% <	0.012 <	0.012 <	0.012
Boscalid	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008
Bromacil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.011 <	0.011 <	0.011
Bromoxynil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.0081 <	0.01
Carbetamide	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Chlormequat	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008
Chlorpropham	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.008 <	0.009
Chlorpyrifos	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008

ParameterName:	Std	Und Std	Units	No of Samples taken	No of Fails	% Fails	Population		Min	Mean	Max
							No of Fails (Und)	% Fails (Und)			
Chlortoluron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Clomazone	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Clopyralid	0.1		µg/l	8	0	0.00%	0	0.00% <	0.011 <	0.0116 <	0.012
Cyanazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Cypermethrin	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008
Cyproconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
Diazinon	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Dicamba	0.1		µg/l	8	0	0.00%	0	0.00% <	0.011 <	0.0114 <	0.012
Dichlobenil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.004 <	0.004
Dichlorprop	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.0075 <	0.01
Dieldrin	0.03		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Difenconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Diflufenican	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Diuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Epoxiconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
EPTC	0.1		µg/l	8	0	0.00%	0	0.00% <	0.022 <	0.022 <	0.022
Flufenacet	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008
Fluroxypyr	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.0099 <	0.011
Flurtamone	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Flusilazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Flutriafol	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Fluxapyroxad	0.1		µg/l	8	0	0.00%	0	0.00% <	0.01 <	0.01 <	0.01
Gamma-HCH (Lindane)	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Heptachlor	0.03		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Heptachlor epoxide	0.03		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Imazapyr	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0052 <	0.006
Ioxynil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0044 <	0.005
Isoproturon	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Linuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
MCPA	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.0072 <	0.008
Mecoprop-P	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.0096 <	0.01
Mepiquat chloride	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008
Metaldehyde	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.0062	0.008
Metamitron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.008 <	0.008 <	0.008

ParameterName:	Std	Und Std	Units	No of Samples taken	No of Fails	% Fails	Population		Min	Mean	Max
							No of Fails (Und)	% Fails (Und)			
Metazachlor	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Metobromuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.01 <	0.01 <	0.01
Monuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
op'-DDD (TDE)	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
op'-DDE	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
op'-DDT	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.004 <	0.004
Oxadixyl	0.1		µg/l	8	0	0.00%	0	0.00% <	0.012 <	0.012 <	0.012
Pendimethalin	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Pesticides - Total Substances	0.5		µg/l	8	0	0.00%	0	0.00%	0	0.0106	0.016
pp'-DDD (TDE)	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
pp'-DDE	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
pp'-DDT	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.004 <	0.004
Propachlor	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Propamocarb	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0048 <	0.006
Propham	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Propiconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Propyzamide	0.1		µg/l	8	0	0.00%	0	0.00% <	0.009 <	0.009 <	0.009
Prosulfocarb	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
Prothioconazole-desthio	0.1		µg/l	8	0	0.00%	0	0.00% <	0.007 <	0.007 <	0.007
Quinmerac	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
Simazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005
Tebuconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
Tri-allate	0.1		µg/l	8	0	0.00%	0	0.00% <	0.006 <	0.006 <	0.006
Trichlopyr	0.1		µg/l	8	0	0.00%	0	0.00% <	0.016 <	0.0179 <	0.019
Trietazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.005 <	0.005 <	0.005

- Notes:**
- 1) Qualified values are taken at face value in all calculations.
 - 2) Any infringements of the regulatory standard are thoroughly investigated and are reported to the Drinking Water Inspectorate (DWI), with remedial actions put in place where necessary.
 - 3) Details of undertakings and notices (Improvement programmes) applicable can be obtained from the DWI website: [Yorkshire Water Improvement Programmes - Drinking Water Inspectorate](#)