

WATER QUALITY REPORT

FOR THE YEAR ENDED 31 DECEMBER 2002

Physical and chemical quality

Water in distribution

Parameter	Prescribed maximum concentration or value (PCV)	Concentration or value			No. of samples taken	No. of samples exceeding PCV
		Minimum	Mean	Maximum		
pH Value	6.5 - 9.5	7.3	7.4	8.0	227 ^f	0
Conductivity	1500 µSm/cm at 20°C	462	564	650	140	0
Turbidity	4 N.T.U.	0.11	0.30	2.08	141	0
Nitrate	50 mg NO ₃ /l	27	40	48	52	0
Nitrite ¹	0.1 mg NO ₂ /l	0.002	0.034	0.227	140	9 (6%)
Ammonia	0.5 mg NH ₄ /l	<0.01	0.08	0.37	141	0
Iron ²	200 µg Fe/l	<10	38	440	76	1 (1%)
Aluminium	200 µg Al/l	<20	<20	76	189	0
Manganese ³	50 µg Mn/l	<20	<20	51	143	1 (<1%)
Colour	20 Hazen Units	<0.69	4.3	5	141 ^f	0
Copper	3000 µg Cu/l	<4	71	963	76	0
Lead	50 µg Pb/l	<1	5	47	76	0
Zinc	5000 µg Zn/l	<6	49	434	76	0
Chloride	400 mg Cl/l	47	63	82	141	0
Dissolved Solids	1500 mg/l	226	393	469	140	0
Oxidizability	5 mg O ₂ /l	<0.1	0.40	1.08	136	0
Total Hardness	mg CaCO ₃ /l no value	116	143	189	140	-
Alkalinity	mg CaCO ₃ /l no value	42	59	81	140	-
Residual Chlorine	mg Cl ₂ /l no value	<0.02	0.21	0.52	200 ^f	-

mg/l = milligrams per litre
 µg/l = micrograms per litre
 < = indicates the concentration is below the detection level of the test
 f = in addition to the "compliance" chemical samples several hundred examinations were made for bacteriological and operational sampling purposes, all results were below the P.C.V.

1 Nitrite : provisional guideline of 3 mg NO₂/l set by World Health Organisation Quality Guidelines 1995.

2 Iron : provisional maximum tolerable daily intake (PMTDI) give a value of 2000 µg Fe/l given by the World Health Organisation Guideline 1993 - no health-based value for iron in drinking water is proposed.

3 Manganese : provisional health-based guideline of 500 µg Mn/l set by World Health Organisation Quality Guidelines 1999.