WATER QUALITY

FOR THE YEAR ENDED 31 DECEMBER 2003

Microbiological quality

Water leaving treatment works

Supply point & average daily volume distributed from Works (Ml/d)	No. of samples	% compliance with the Maximum Allowable Concentration (MAC)	
		Total coliforms	Faecal coliforms
Handois (10.2 Ml/d)	1037	100%	100%
Augrès (9.7 Ml/d)	365	100%	100%
Total (19.9 Ml/d)	**1402**	**100%**	**100%**

Water in service reservoirs

Capacity of Reservoirs (Ml)	No. of samples	% compliance with the Maximum Allowable Concentration (MAC)	
		Total coliforms	Faecal coliforms
Westmount 9 Ml	347	100%	100%

Water in distribution

Zone	No. of samples	% compliance with the Maximum Allowable Concentration (MAC)	
		Total coliforms	Faecal coliforms
Zone 1: East			
Random consumer taps	96	96.9%	99%
Fixed points	416	100%	100%
Total	**512**	**99.4%**	**99.8%**
Zone 2: West			
Random consumer taps	49	100%	100%
Fixed points	248	99.6%	100%
Total	**297**	**99.7%**	**100%**

Samples exceeding prescribed concentrations were immediately resampled for three consecutive days - recheck samples were clear.

WATER QUALITY CONTINUED

Physical and Chemical Quality

Water in Distribution

Parameter	Maximum Allowable Concentration (MAC)	Concentration or value			No. of samples taken	% compliance with MAC
		Minimum	Mean	Maximum		
pH Value	6.5 – 9.5	7.0	7.4	8.3	210*f*	100%
Conductivity	1500 µSm/cm at 200C	464	596	690	131	100%
Turbidity	4 N.T.U.	0.11	0.32	1.12	131	100%
Nitrate *	50 mg NO_3/l	21.0	39.8	55.0	50	84%
Nitrite **	0.1 mg NO_2/l	0.001	0.025	0.238	132	93.2%
Ammonia	0.5 mg NH_4/l	<0.01	0.09	0.16	131	100%
Iron	200 µg Fe/l	<10	31	140	74	100%
Aluminium	200 µg Al/l	<20	<20	138	259	100%
Manganese	50 µg Mn/l	<20	<20	34.2	132	100%
Colour	20 Hazen Units	<0.69	4.3	5.0	131*f*	100%
Copper	3000 µg Cu/l	<4	61	632	74	100%
Lead	50 µg Pb/l	<1	5	36	74	100%
Zinc	5000 µg Zn/l	<6	30	152	74	100%
Chloride	400 mg Cl/l	50	72	110	131	100%
Dissolved Solids	1500 mg/l	270	409	483	131	100%
Oxidizability	5 mg O_2/l	0.10	0.37	0.71	127	100%
Total Hardness	mg $CaCO_3$/l no value	108	142	179	131	NA
Alkalinity	mg $CaCO_3$/l no value	44	60	86	131	NA
Residual Chlorine	mg Cl_2/l no value	<0.02	0.23	0.54	180*f*	NA

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 MAC.

*Nitrate: The MOU gives the Company a dispensation for nitrate of 33% of samples that can be over 50 mg/l, up to a limit of 70 mg/l.

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

WATER QUALITY CONTINUED

Pesticides detected results in µg/litre

Water in Distribution

Parameter	Maximum Allowable Concentration (MAC)	Concentration or value			No. of samples taken	% compliance with MAC
		Minimum	Mean	Maximum		
Atrazine µg/l	0.1	<0.01	<0.01	0.012	8	100%
Simazine µg/l	0.1	<0.01	<0.01	0.011	8	100%
Propazine µg/l	0.1	<0.01	<0.01	0.028	8	100%
Terbuthylazine µg/l	0.1	<0.01	<0.01	0.021	8	100%
Cyanazine µg/l	0.1	<0.01	0.025	0.092	52	100%
Mecoprop µg/l	0.1	<0.01	<0.01	0.013	52	100%
Triclopyr µg/l	0.1	<0.01	<0.01	0.017	52	100%
Linuron µg/l	0.1	<0.01	<0.01	0.035	52	100%
Diuron µg/l	0.1	<0.01	0.010	0.074	52	100%
Carbetamide µg/l	0.1	<0.01	<0.01	0.018	52	100%
Dalapon µg/l	0.1	<0.01	0.013	0.047	9	100%

µg/l = micrograms per litre

< = indicates the concentration is below the detection level of the test.

UK = United Kingdom advisory limits quoted in "Water Quality Regulations 1989".

*UK = "likely advisory value", has been calculated by the Company consultants using a formula given in the "Water Regulations 1989". The calculations confirm the low toxicity of these particular pesticides.

WHO = advisory limits quoted in "World Health Organisation Quality Guidelines 1993".

NB In addition to the above parameters, examinations were carried out for a further seventy one types of pesticides, the results of which were below the detection level of the tests.