

Drinking Water Quality Report for Crawley Supply Zone ZSW0101

Areas covered by Report:	Crawley
Report Period:	01 January 2018 to 31 December 2018
Upstream Zone:	Southern Water Turners Hill WSZ (ZS524)
Population:	895
Notices:	n/a

Commentary on Water Quality

The water supplied to the Crawley Zone originates from a mixed 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 2018.

IWNL recieved 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	Maximum	Average	Prescribed Concentration or Value
Coliform Bacteria (Indicator)	No. 100/ml	12	0	0	0	0
E.coli (faecal coliforms Confirmed)	No. 100/ml	12	0	0	0	0
Enterococci (Confirmed)	No. 100/ml	4	0	0	0	0
Sulphite-reducing Clostridia (Confirmed)	No. 100/ml	5	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 NH ₄	5	0.004	0.097	0.028	0.5
Boron	mg/l B	4	0.02	0.05	0.03	1
Bromate	ug/l BrO ₃	4	0.1	0.6	0.35	10
Chloride	mg/l	5	34.4	47.4	39.48	250
Colour	mg/l Pt/Co	5	1	1.8	1.38	20
Cyanide (Total)	ug/l CN	4	0.7	0.7	0.7	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	5	393	431	409.8	2500	
Fluoride (Total)	mg/l F	4	0.07	0.1	0.083	1.5	
Free Residual Chlorine	mg/l	13	0.22	0.57	0.458	No Specific PCV	
Hydrogen ion	pH value	4	7.28	7.8	7.450	6.5-9.5	
Nitrate (Total)	mg/l NO3	4	20.4	29.7	24.03	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	0.59	0.480	1	
Sodium	mg/l Na	4	17	25.1	21.15	200	
Sulphate	mg/l SO4	5	25.7	71.6	38.05	250	
Total Residual Chlorine	mg/l	13	0.28	0.88	0.575	No Specific PCV	
Turbidity (CT)	FTU	5	0.12	0.24	0.170	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	0.04	0.040	0.1	
1 2-Dichloroethane (Total)	ug/l	4	0.07	0.07	0.070	3	
Benzene (Total)	ug/l	4	0.02	0.02	0.020	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	9.16	18.13	13.888	60	
ChloroDibromomethane (Total)	ug/l	4	9.33	15.7	12.633	100	
Indeno[1 2 3-cd]Pyrene (Total)	ug/l	4	0.00048	0.00048	0.00048	The sum of PAHs must be <0.1 ug/l	
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	ug/l	4	0.007	0.01	0.0083	0.1	
Tetrachloroethene (Total)	ug/l	4	0.05	0.05	0.050	10	
Tetrachloromethane (Total)	ug/l	4	0.02	0.02	0.020	3	
Total Organic Carbon	mg/l C	5	1.2	1.9	1.500	NO ABNORMAL CHANGE	
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	4	0	0	0	100	

Hydrocarbons / Organics continued						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Tribromomethane-Bromoform (Total)	ug/l	4	1.81	4.92	3.180	100
Trichloroethene (Total)	ug/l	4	0.05	0.05	0.050	10
Trichloromethane-Chloroform (Total)	ug/l	4	9.32	25.6	17.008	300
Trihalomethanes (Total by Calculation)	ug/l	4	33.03	58.85	46.700	100
Metals						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	4	7.22	14.5	10.135	200
Antimony	ug/l Sb	4	0.08	0.301	0.1378	5
Arsenic (Total)	ug/l As	4	0.31	0.43	0.3775	10
Cadmium (Total)	ug/l Cd	4	0.009	0.03	0.01625	5
Chromium (Total)	ug/l Cr	3	0.32	0.52	0.386666667	50
Copper (Total)	mg/l Cu	4	0.0029	0.0639	0.02215	2
Iron (Total)	ug/l Fe	4	2.86	8.64	4.91	200
Lead (10)	ug/l Pb	4	0.03	0.32	0.1175	10
Manganese (Total)	ug/l Mn	4	0.4	2.04	0.84	50
Mercury (Total)	ug/l Hg	4	0.02	0.05	0.030	1
Nickel (Total)	ug/l Ni	4	1.94	3	2.45	20
Selenium (Total)	ug/l Se	4	0.22	0.78	0.41	10
Organoleptic Parameters						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	6	0	0	0	0
Taste(Quantitative)	Dilution Number	5	0	0	0	0

Radioactivity Parameters

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Gross Alpha	Bq/l	6	0.017	0.031	0.0248	0.1
Gross Beta	Bq/l	6	0.09	0.108	0.0956	1

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