



HSY  
Water treatment  
Laboratory



## Average water quality at Pitkääkoski and Vanhankaupunki water treatment plants 1.1. - 31.3.2019

Analysis	Unit	Method	Treated water		Quality recommendation/ requirement <sup>c)</sup> maximum concentration
			Pitkääkoski	Vanha- kaupunki	
Temperature	°C	Internal method	3,4	3,2	
Alkalinity	* mmol/l	SFS-EN ISO 9963-1:1996	0,73	0,72	
Ammonium nitrogen, NH <sub>4</sub> -N	* mg/l	ISO 7150-1:1984, modified	0,08	0,08	0,5
Total chlorine, Cl <sub>2</sub>	mg/l	Internal method	0,44	0,43	
Permanent hardness	* °dH	SFS 3003:1987	2,9	3,0	
Total organic carbon, TOC	* mg/l	SFS-EN 1484:1997	1,9	1,9	b)
KMnO <sub>4</sub> -index	* mg/l	SFS 3036:1981	3,5	3,8	
pH	*	SFS 3021:1979	8,3	8,4	6,5–9,5
Turbidity	* FNU	SFS-EN ISO 7027:2000	0,06	0,06	a)
Conductivity	* µS/cm	SFS-EN 27888:1994	148	149	2500
Chloride, Cl	* # mg/l	Internal method DA	4,7	4,8	250
Sulphate sulphur, SO <sub>4</sub> -S	# mg/l	Internal method DA	8,1	8,3	
Fluoride, F	* # mg/l	Internal method DA	0,1	<0,1	1,5
Calcium, Ca	* # mg/l	SFS-EN ISO 11885:2009	19	20	
Magnesium, Mg	* # mg/l	SFS-EN ISO 11885:2009	1,6	1,8	
Sodium, Na	* # mg/l	SFS-EN ISO 11885:2009	5,8	5,9	200
Potassium, K	* # mg/l	SFS-EN ISO 11885:2009	1,3	1,3	
Iron, Fe	* µg/l	SFS 3028:1976	35	<20	200
Manganese, Mn	* # µg/l	SFS-EN ISO 11885:2009	<3	<3	50
Aluminium, Al	* # µg/l	SFS-EN ISO 17294-2:2016	4	<3	200
Cadmium, Cd	* # µg/l	SFS-EN ISO 17294-2:2016	<0,02	<0,02	5,0
Chromium, Cr	* # µg/l	SFS-EN ISO 17294-2:2016	<0,05	<0,05	50
Copper, Cu	* # µg/l	SFS-EN ISO 17294-2:2016	0,0	0,0	2000
Lead, Pb	* # µg/l	SFS-EN ISO 17294-2:2016	<0,1	<0,1	10
Zinc, Zn	* # µg/l	SFS-EN ISO 11885:2009	<5	<5	
Heterotrophic plate count 22°C	* cfu/ml	SFS-EN ISO 6222:1999	<1	<1	
<i>Escherichia coli</i>	* mpn/100 ml	Internal method	<1	<1	0
Coliform bacteria	* mpn/100 ml	Internal method	<1	<1	0
Odour, dilution number 25°C		Internal method	0,4	0,0	a)
Flavour, dilution number		Internal method	0,3	0,1	a)

\* Sample analysed with accredited method

Measurement uncertainties are available on request

# Analysis subcontracted. The subcontractor Metropolilab laboratory is accredited by the Finnish Accreditation Service under registration number T058 for SFS-EN ISO/IEC 17025.

a) Acceptable to consumers, no abnormal changes

b) No abnormal changes

c) Decree of the Ministry of Social Affairs and Health Relating to the Quality and Monitoring of Water Intended for Human Consumption 1352/2015 and 683/2017