

## Sampling protocol and order for the monitoring according to the Drinking water ordinance 2001 (rev. 11.2011)

**Test certificate and invoice to:**

Customer number:  
 Name:  
 Street:  
 Post code / Town  
 Telephone:  
 Fax / E-mail:

**Copy to:**

Name:  
 Street:  
 Post code / Town

**Sampler**

Sampling date:  
 Signature customer:  
 Signature sampler:

**NIWADAB entry?** Yes:  No:

Responsible health authority:

Brief designation:

Facility type:

Sampling site:

Sampling site:

Type of sampling:  Sample taken immediately  or after approx. \_\_\_\_ litres running  or after approx. \_\_\_\_ minutes  
 run until temperature / conductivity was constant

Single sample:  Stagnation sample: S0  S1  S2  Composite from \_\_\_\_ single samples (with a volume of:  \_\_\_\_ l)

On site Parameters: Temperature: \_\_\_\_ °C vis. colouring: none  yes: weak  strong  which: \_\_\_\_\_ Impression: \_\_\_\_\_  
 vis. turbidity: none  yes  Taste: Intensity: \_\_\_\_\_ Impression: \_\_\_\_\_  
 pH-value: \_\_\_\_\_ Sediment: \_\_\_\_\_ Odour: Intensity: \_\_\_\_\_ Impression: \_\_\_\_\_  
 Conductivity: \_\_\_\_\_ µS (25°C) Retained sample at the customer: yes  no

Please tick

### Analysis packet

1	Escherichia coli (E. coli), enterococci	Parameter for Routine analysis (yearly repeated)
2	Aluminium, ammonium, iron, conductivity, colouration, odour, taste, turbidity, pH	
3	Coliform bacteria, colony count at 22°C and 36°C	
4	Legionella spec.	Further parameters for comprehensive analysis
5	Antimony, arsenic, lead, cadmium, chromium, copper, nickel, mercury, selenium, uranium	
6	Boron, manganese, sodium, calcium, potassium, magnesium	
7	Nitrate, nitrite, chloride, sulphate	
8	Bromate, cyanide, fluoride	
9	Oxydability, turbidity	
10	Benzol, 1,2 dichloroethane, tetrachloroethane, trichloroethane, trihalomethanes, PAH, Benzopyrene, plant treatment and pesticides	
11	Capacity to dissolve calcite (calculated from the m-value (carbonate hardness) and the parameters from packets 6 and 7)	
12	Clostridium perfringens (only on suspicion of influence from surface waters)	
13	Pseudomonas aeruginosa (only for supply in closed vessels)	
14	Acrylamide, vinyl chloride, epichlorohydrin (possible when using plastic piping)	

Please tick **Scope of testing according to Drinking water ordinance.**

<input type="checkbox"/>	Routine analysis to be repeated yearly (packet 1 to 3)	Price information can be received on: +49 (0)211 9871 -68 Admin. -33 Laboratory
<input type="checkbox"/>	Comprehensive examination (packets 1 to 11, if necessary supplemented by packets 12 to 14)	
<input type="checkbox"/>	Analyses for small installations <u>without</u> supply of drinking water to third parties containing of packets 1 to 3 and packets 6,7,9 and 11 must be repeated every 3 years.	
<input type="checkbox"/>	Additionally for small installations <u>with</u> supply of drinking water to third parties position 13 of the above mentioned packets (if necessary position 12 of the above mentioned packets)	
<input type="checkbox"/>	Official sampling (according to § 19 Abs. 2 TVO) by staff of LUFA Nord-West When sampling waste water concurrently, only one set of travel costs will be charged!	

Please tick	Individual parameters of the Drinking water ordinance	Threshold values	Note
Further information from the contracting party:			
Microbiological parameters			
<input type="checkbox"/>	<i>Escherichia coli</i> ( <i>E. coli</i> )	0/100 ml	Indicator parameters pointing towards faecal contamination. As enterococci are resilient, possibly a sign of older contamination. Colony count is an unspecific indicator for nearly all bacteria. →
<input type="checkbox"/>	Enterococci	0/100 ml	
<input type="checkbox"/>	Coliform bacteria	0/100 ml	
<input type="checkbox"/>	Colony count at 22°C	100/ml; 20/ml; 1000/ml	
<input type="checkbox"/>	Colony count at 36°C	100/ml; 20/ml	
<input type="checkbox"/>	<i>Legionella spec.</i>	100/100 ml techn. measure value	
<input type="checkbox"/>	<i>Clostridium perfringens</i> inc. spores	0/100 ml	
<input type="checkbox"/>	<i>Pseudomonas aeruginosa</i>	0/250 ml	Pus-forming bacterium
Physical parameters			
<input type="checkbox"/>	Colouring	0.5 m <sup>-1</sup>	Yellowish colouration, humins, Fe, Mn
<input type="checkbox"/>	Taste, odour	without abnormal findings	
<input type="checkbox"/>	Conductivity at 25°C	2790 µS/cm	Sign of overly salty water
<input type="checkbox"/>	pH	6.5 - 9.5	Water should not be corrosive
<input type="checkbox"/>	Turbidity	1 NTU	Sign of undissolved matter_____
Metals			
<input type="checkbox"/>	Aluminium	0.200 mg/l	Materials for water treatment
<input type="checkbox"/>	Antimony	0.0050 mg/l	Toxic heavy metal
<input type="checkbox"/>	Arsenic	0.010 mg/l	Carcinogenic
<input type="checkbox"/>	Lead	0.010 mg/l	Toxic heavy metal
<input type="checkbox"/>	Boron	1.0 mg/l	
<input type="checkbox"/>	Cadmium	0.0030 mg/l	Toxic heavy metal
<input type="checkbox"/>	Chromium	0.050 mg/l	Toxic heavy metal
<input type="checkbox"/>	Iron	0.200 mg/l	Taste, influences colour
<input type="checkbox"/>	Copper	2.0 mg/l	
<input type="checkbox"/>	Manganese	0.050 mg/l	Taste, influences colour
<input type="checkbox"/>	Sodium	200 mg/l	
<input type="checkbox"/>	Nickel	0.020 mg/l	Toxic heavy metal
<input type="checkbox"/>	Mercury	0.0010 mg/l	Toxic heavy metal
<input type="checkbox"/>	Selenium	0.010 mg/l	Toxic
<input type="checkbox"/>	Uranium	0.010 mg/l	Toxic heavy metal
Anions and cations			
<input type="checkbox"/>	Ammonium	0.50 mg/l	Sign for acute organic load, toxic
<input type="checkbox"/>	Bromate	0.010 mg/l	Carcinogenic
<input type="checkbox"/>	Chloride	250 mg/l	Influences colour
<input type="checkbox"/>	Cyanide	0.050 mg/l	Toxic
<input type="checkbox"/>	Fluoride	1.5 mg/l	Toxic
<input type="checkbox"/>	Sulphate	250 mg/l	Detrimental for concrete, laxative
<input type="checkbox"/>	Nitrate	50 mg/l	Sign for acute organic load
<input type="checkbox"/>	Nitrite	0.50 mg/l	Sign for acute organic load, toxic
Other parameters			
<input type="checkbox"/>	Capacity to dissolve calcite	5 mg/l; 10 mg/l	Dissolves or deposits lime
<input type="checkbox"/>	Oxydability	5.0 mg/l	Sign for acute organic load
<input type="checkbox"/>	Organically bound carbon (TOC)	without abnormal changes	
<input type="checkbox"/>	PAK	0.00010 mg/l	Carcinogenic, but very rarely found in drinking water as insoluble, particle bound
<input type="checkbox"/>	Benzopyrene	0.000010 mg/l	
<input type="checkbox"/>	Benzol	0.0010 mg/l	
<input type="checkbox"/>	Plant protective chemicals and biocides	0.00010 mg/l individual 0.00050 mg/l cumulative	Toxicological preventative value
<input type="checkbox"/>	1,2-Dichloroethane	0.0030 mg/l	Not acutely highly toxic but long term carcinogenic
<input type="checkbox"/>	Tetrachloroethene, trichloroethene	0.010 mg/l	
<input type="checkbox"/>	Trihalomethanes	0.050 mg/l	
<input type="checkbox"/>	Acrylamide	0.00010 mg/l	Residual monomers of the production of plastic pipes, carcinogenic
<input type="checkbox"/>	Epichlorohydrin	0.00010 mg/l	
<input type="checkbox"/>	Vinylchloride	0.00050 mg/l	

**Note:** For transfer of the results into the NIWADAB databank, official sampling is necessary carried out by an LUFA Nord-West employee.