**ANALYSIS ORDER**

TO BE FILLED OUT BY THE CLIENT

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| **Client:** |  |
| **Invoice details:** |  |
| **Contact:** |  |
| **Sample delivery method: In person** □ **Shipment** □ | |
| FORM OF DELIVERY OF THE REPORT (number of copies .............):  □ Personal collection, □ By registered mail, □ By e-mail, □ By fax | |
| **Aim of analyses:**  □ Technological sample, □ The fulfillment of legal requirements, □ Other …….………………………… | |
| **Scope of performed tests (Attachment on page 3)** | |
| Price of the test in accordance with the current price list or price offer. | |

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| 1. The size of the sample depends on the type and scope of research. 2. Client has the right to participate in the research as an observer. 3. Statement of compliance with the specifications and requirements:   □ Without compliance  □ Confirmation of compliance of the obtained results with the specification or requirements\*……………………………………………………….  The principle of making decisions  □ Simple acceptance - The uncertainty of measurements is taken into evaluating results account in accordance with ILAC-G8: 09/2019 point 4.2.1. The statement of compliance is taken into account at the 95% confidence level and the coverage factor k = 2.  □ Acceptance principle with guard band according ILAC-G8: 09/2019 "Guidelines for demonstrating compliance with the specifications" Measurement uncertainty is taken into account when assessing results. If the measurement result plus measurement uncertainty is below the limit specified in the specification or requirement, compliance with the requirement is confirmed. If the measurement result minus the measurement uncertainty is above the limit specified in the specification or requirement, compliance with the requirement is confirmed. If the measurement result plus or minus the measurement uncertainty falls on the limit specified in the specification or requirement, it is not possible to confirm compliance or non-compliance with the requirement.   1. Measurement uncertainty is given every time. 2. Client has the right to submit a written complaint. 3. I accept the research methods used in the Laboratory - given in the attachment to the order. (p. 3) 4. In the event of a deviation from this order, client will be informed about it before continuing the examination. In this case, the Client decides to accept the derogation. 5. Laboratory guarantees full impartiality of performed tests. 6. Laboratory guarantees that the tests are carried out in accordance with applicable standards. 7. Laboratory ensures confidentiality of all information related to tests. |

\* provide specification number or requirement

Signature and date CustomerSignature and date (Laboratory)

**SAMPLE IDENTIFICATION\*** (TO BE FILLED OUT BY THE CLIENT)

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| **No.** | **Sample marking by the client** | **Sample type  *(e.g.: water, residue)*** | **Sample collection location** | **Sample collection date** | **Test code (Annex No1 )** | **Acidified sample**  **YES/NO** | **Notes\*\*** |
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\* provide specification number or requirement

*\*\* To be completed in case of analysis parameters are not listed in Annex No 1*

ANNEX No 1. List of tested parameters, test codes

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| **Test parameters** | **Test code** | **Analysis no.** | **Analysis parameters** | **Status method** |
| **Basic water parameters** | **PW** | **1** | **Conductivity** Range: 25 – 10 000 µS/ cm  Conductivity method; PN – EN 27888:1999 | **A** |
| **2** | **Total hardness** Range: 3,5 – 20 °dH  Spectrophotometric method, HACH LCK Nr 327, edition 1 07/2019 | **A** |
| **Total hardness** Range: 2,8 – 3,5 °dH  Spectrophotometric method, HACH LCK Nr 327, edition 1 07/2019 | **Q** |
| **Residual hardness** Range: 0,02 – 0,6 °dH  Spectrophotometric method, HACH LCK Nr 427, edition 1 11/2021 | **Q** |
| **3** | **Chlorides** Range: 3 – 1000 mg/l Cl-  Spectrophotometric method HACH LCK Nr 311, edition 3 04/2022 | **A** |
| **Chlorides** Range: 1,0 – 1000 mg/l Cl-  Ion chromatography method with conductometric detection IC;  PN – EN ISO 10304 – 1: 2009 | **A** |
| **4** | **Silica** Range: 5 – 100 mg/l SiO2  Spectrophotometric method, HACH Nr 8185, edition 10 10/2023 | **A** |
| **5** | **Manganese** Range: 0,008 – 0,5 mg/l Mn  Spectrophotometric method, HACH LCW Nr 532, edition 1 03/2020 | **A** |
| **6** | **Iron** Range: 0,45 – 6,0 mg/l Fe2+/3+/tot.  Spectrophotometric method, HACH LCK Nr 320, edition 1 07/2019 | **A** |
| **Iron** Range: 0,35 – 0,45 mg/l Fe2+/3+/tot.  Spectrophotometric method, HACH LCK Nr 320, edition 1 07/2019 | **Q** |
| **Iron** Range: 0,005 – 0,250 mg/l Fe.  Spectrophotometric method, HACH LCK Nr 021, edition 3 03/2022 | **Q** |
| **7** | **Alkalinity P** Range: 10 – 500 mg/l CaCO3  Titration method, potentiometric titration PN – EN ISO 9963 – 1: 2001 | **Q** |
| **8** | **Alkalinity total (M)** Range 50 - 500 mg/l CaCO3  Titration method, potentiometric titration PN – EN ISO 9963 – 1: 2001 | **Q** |
| **9** | **Determination pH**  Range: 2.0 – 14.0  Potentiometric method PN – EN ISO 10523:2012 | **Q** |
| **10** | **Phosphate** Range: 1,0 – 100 mg/L PO₄3-  Ion chromatography method with conductometric detection IC;  PN – EN ISO 10304 – 1 : 2009 | **A** |
| **Phosphate** Range: 5 – 90 mg/L PO₄3-  Spectrophotometric method HACH LCK Nr 049, edition 1 03/ 2019 | **Q** |
| **11** | **Sulphate** Range: 0 – 200 mg/l SO4 2-  Ion chromatography method with conductometric detection IC;  PN – EN ISO 10304 – 1: 2009 | **A** |
| **Sulphate** Range: 0 – 200 mg/l SO4 2-  Photometric method, Palintest Nr 32, V1 – 10/05 | **Q** |
| **12** | **Nitrate** Range: 0,1 – 100 mg/l NO3-  Ion chromatography method with conductometric detection IC;  PN – EN ISO 10304 – 1: 2009 | **A** |
| **Nitrate** Range: 0,1 – 48 mg/l NO3-  Photometric method , PrimeLab Nr 34 | **Q** |
| **13** | **Nitrite** Range: 0,1 – 10 mg/l NO2-  Ion chromatography method with conductometric detection IC;  PN – EN ISO 10304 – 1: 2009 | **A** |
| **Nitrite** Range: 0,1 – 0,5 mg/l NO2-  Photometric method ,PrimeLab Nr 35 | **Q** |
| **14** | **Suspended solids** Range: 2 – 1 000 mg/l  Method: filtration / PN – EN 872:2007 | **Q** |
| **15** | **Magnesium** Range: 3 – 50 mg/l Mg  Spectrophotometric method, HACH LCK Nr 327, edition 1 07/2019 | **Q** |
| **16** | **Calcium** Range: 5 – 100 mg/l Ca  Spectrophotometric method, HACH LCK Nr 327, edition 1 07/2019 | **Q** |
| **17** | **Calcium hardness** Range: 0 – 500 mg/l CaCO3  Photometric method, Palintest Nr 12, V1 – 10/05 | **-** |
| **18** | **Sulphite** Range: 1 – 500 mg/l Na2SO3  Photometric method, Palintest Nr 34, V1 – 10/05 | **-** |
| **19** | **Chlorine dioxide** Range: 0,1 – 9,5 mg/lClO2  Photometric method Palintest Nr 7,3, V4 – 12/11 | **-** |
| **20** | **Free Chlorine** Range: 0,02 – 5,0 mg/l  Photometric method Palintest Nr 7, V1 – 10/05 | **-** |
| **21** | **Polyacrylates** Range: 1 – 30 mg/l  Photometric method PrimeLab Nr 85, | **-** |

A - accredited method, Q - method covered by the management system,

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| **Test parameters** | **Test code** | **Analysis no.** | **Analysis parameters** | **Status method** |
| **Basic water parameters** | **PW** | **22** | **Organophosphonate** Range: 0 – 20 mg/l PO4  Photometric method, Palintest Nr 44, V1 – 1 0/05 | **-** |
| **23** | **Molybdate** Range: 0 – 100 mg/l MoO4  Photometric method, Palintest Nr 22,V1 – 10 /05 | **-** |
| **24** | **Turbidity** Range 0,02 – 1000 NTU  Photometric method PrimeLab Nr 112 | **-** |
| **25** | **Colour** Range 10 – 500 mg/l Pt  Photometric method Palintest Nr 47 V1 – 1 0/05 | **-** |
| **26** | **Ammonium ion** Range: 0,1 – 1 mg/lNH4+  Photometric method , Primelab No2 | **-** |
| **Analysis of elements in industrial and raw water** | **IW** | | **Element concentration**  Range:  Ag, Al, Ba, Cr, Mn, Ni, Pb, Zn (0,1 – 50) mg/l  Fe, Mg, P (0,1 – 1000) mg/l  Ca (0,2 – 1500) mg/l  Cd (0,2 – 50) mg/l  Cu (0,1 – 2500) mg/l  K (1 – 1000) mg/l  Na (1 – 1500) mg/l  S (1 – 100 ) mg/l  Si (0,2 – 1000 ) mg/l  Inductively Coupled Plasma -Optical Emission Spectrometry Method (ICP-OES) PN – EN ISO 11885: 2009 | **A** |
| Range:  K (0,2 – 1) mg/l  Na (0,5 – 1) mg/l  S (0,5 – 1 ) mg/l  Inductively Coupled Plasma -Optical Emission Spectrometry Method (ICP-OES) PN – EN ISO 11885: 2009 | **Q** |
| **Analysis of TOC for industrial and raw water** | **TW** | | **Content Total Organic Carbon** **(TOC)**  Range: (2 – 1000) mg/l C  Infrared spectroscopy method PN - EN 1484:1997 | **A** |
| **Analysis of TOC in deposit boiler scale** | **TO** | | **Content Total Organic Carbon (TOC)**  Range: (0,50 – 50) %  Infrared spectroscopy method PN – EN 15936 :2022 | **Q** |
| **Analysis of elements in deposit boiler scale** | **IO** | | **Element concentration**  Range:  Al, Ba, Pb (50 – 1500) mg/kg  Cr, Cu, Mn (50– 3500) mg/kg  Ca (30 – 400 000 ) mg/kg  Cd (50 – 200) mg/kg  Fe (210 – 650 000) mg/kg  K (70 – 35 000) mg/kg  Mg (50 – 200 000) mg/kg  Na (80 – 400 000) mg/kg  Ni (50 – 2500) mg/kg  P (50 – 110 000 ) mg/kg  S (100 – 150 000) mg/kg  Si (100 – 10 000) mg/kg  Zn (50 – 10 000) mg/kg  Inductively Coupled Plasma -Optical Emission Spectrometry Method (ICP-OES)  PN – EN ISO PN – EN ISO 22036:2024 | **A** |
| **Element concentration**  Range:  Al (1500 – 250000) mg/kg  Al (30 – 50) mg/kg  Ca (20 – 100) mg/kg  Ba, Cr, Cd, Cu, K, Mg, Mn, Ni, Pb, Zn (10 – 50 ) mg/kg  Fe (70 – 210 ) mg/kg  Na (30 – 80 ) mg/kg  P (20 – 50 ) mg/kg  S, Si (30 – 100) mg/kg  Inductively Coupled Plasma -Optical Emission Spectrometry Method (ICP-OES)  PN – EN ISO PN – EN ISO 22036:2024 | **Q** |

A - accredited method, Q - method covered by the management system

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| **Test parameters** | **Test code** | **Analysis no.** | **Analysis parameters** | **Status method** |
| **Resin** | **R** | | Iron ions in ion-exchange resins mg/l  **IRON EXCHANGE RESIN FOULING TEST KIT RTK 001** | **-** |
| **Analysis of volatile compounds** | **GC** | | Gas chromatography method GC - BID | **-** |