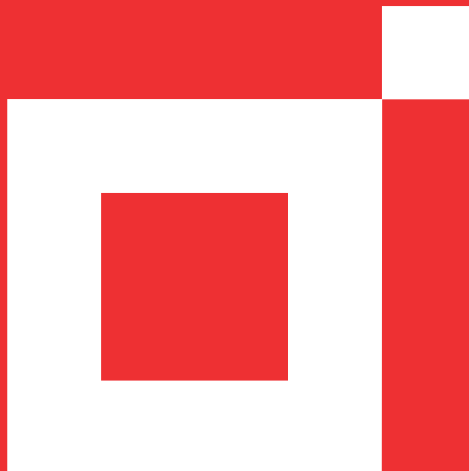




Potvrda o akreditaciji Accreditation Certificate

Ovime se utvrđuje da je
This is to recognize that

ZAVOD ZA JAVNO ZDRAVSTVO
Krapinsko-zagorske županije
Ulica Ivana Gorana Kovačića 1, HR-49250 Zlatar

Odjel za zdravstvenu ekologiju
Zivtov trg 3, HR-49210 Zabok

osposobljen prema zahtjevima norme
is competent according to
HRN EN ISO/IEC 17025:2017
(ISO/IEC 17025:2017;
EN ISO/IEC 17025:2017)
za/to carry out

Ispitivanje voda i hrane
Uzorkovanje voda
Testing of waters and food
Sampling of waters

u području opisanom u prilogu koji je sastavni dio ove potvrde o akreditaciji.
for the scope described in the annex which is the constituent part of this accreditation certificate.

Br./No.: 1154
Klasa/Ref.No.: 383-02/22-30/038
Urbroj/Id.No.: 569-03/5-23-39
Zagreb, 2023-04-24

Akreditacija istječe-Accreditation expiry: 2028-04-23
Prva akreditacija-Initial accreditation: 2008-07-18

HAA je potpisnica multilateralnog sporazuma s Europskom organizacijom za akreditaciju (EA)
HAA is a signatory of the European co-operation for Accreditation (EA) Multilateral Agreement

Ravnateljica:
Director General:
mr. sc. Mirela Zečević



HAA

Hrvatska akreditacijska agencija
Croatian Accreditation Agency



HAA

Hrvatska akreditacijska agencija
Croatian Accreditation Agency

PRILOG POTVRDI O AKREDITACIJI br: 1154

Annex to Accreditation Certificate Number:

Klasa/Ref. No.: 383-02/22-30/038

Urbroj/Id. No.: 569-02/11-24-31

Datum izdanja priloga /Annex Issued on: 2024-06-24

Zamjenjuje prilog/Replaces Annex:

Klasa/Ref. No.: 383-02/22-30/038

Urbroj/Id. No.: 569-03/5-23-37

Datum izdanja priloga /Annex Issued on: 2023-04-24

Norma: HRN EN ISO/IEC 17025:2017

Standard: (ISO/IEC 17025:2017; EN ISO/IEC 17025:2017)

Akreditacija istječe: 2028-04-23

Accreditation expiry:

Prva akreditacija: 2008-07-18

Initial accreditation:

Akreditirani laboratorij

Accredited Laboratory

ZAVOD ZA JAVNO ZDRAVSTVO

Krapinsko-zagorske županije

Ulica Ivana Gorana Kovačića 1, HR-49250 Zlatar

Odjel za zdravstvenu ekologiju

Zivtov trg 3, HR-49210, Zabok

Područje akreditacije:

Scope of Accreditation:

Ispitivanje voda i hrane

Uzorkovanje voda

Testing of waters and food

Sampling of waters

Važeće izdanje Priloga dostupno je na web adresi: www.akreditacija.hr /
Valid issue of the Annex is available at the web address: www.akreditacija.hr

Ravnateljica:

Director General:

mr. sc. Mirela Zečević

PODRUČJE AKREDITACIJE / SCOPE OF ACCREDITATION

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property <i>Raspon/Range</i>	Metoda ispitivanja Test method
1.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, bazenska, podzemna, površinska i otpadna voda <i>Water for human consumption, spring water, natural mineral water, table water, pool water, ground water, surface water and waste water</i>	Određivanje pH vrijednosti <i>Determination of pH</i> Od/from 2 do/to 12	HRN EN ISO 10523:2012 (ISO 10523:2008; EN ISO 10523:2012)
2.		Određivanje električne vodljivosti <i>Determination of electrical conductivity</i> Od/from 0,01 mS/cm do/to 1000 mS/cm	HRN EN 27888:2008 (ISO 7888:1985; EN 27888:1993)
3.		Određivanje mutnoće <i>Determination of turbidity</i> Od/from 0,10 NTU do/to 400 NTU	HRN EN ISO 7027-1:2016 (ISO 7027-1:2016; EN ISO 7027-1:2016)
4.		Određivanje otopljenih klorida, fluorida, nitrita, nitrata, fosfata, sulfata metodom ionske kromatografije <i>Determination of dissolved chloride, fluoride, nitrite, nitrate, phosphate, sulfate ions by ion chromatography</i> Granica kvantifikacije/ <i>Quantification limit</i> fosfati/phosphate: 0,20 mg/l, kloridi/chloride: 0,10 mg/l, fluoridi/fluoride: 0,10 mg/l, nitriti/nitrite: 0,10 mg/l, nitrati/nitrate: 0,10 mg/l, sulfati/sulfate: 0,10 mg/l	HRN EN ISO 10304-1:2009 (ISO 10304-1:2007; EN ISO 10304-1:2009)

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
5.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, bazenska, podzemna, površinska i otpadna voda Water for human consumption, spring water, natural mineral water, table water, pool water, ground water, surface water and waste water	Određivanje otopljenih Na^+ , K^+ , Ca^{2+} i Mg^{2+} , NH_4^+ ionskom kromatografijom Determination of dissolved Na^+ , K^+ , Ca^{2+} , Mg^{2+} , NH_4^+ using ion chromatography Granica kvantifikacije/ Quantification limit NH_4^+ : 0,10 mg/l, K^+ : 0,10 mg/l, Mg^{2+} : 0,10 mg/l, Na^+ : 0,50 mg/l, Ca^{2+} : 0,50 mg/l	HRN EN ISO 14911:2001 (ISO 14911 :1998; EN ISO 14911 :1999)
6.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, bazenska, podzemna, površinska i otpadna voda Water for human consumption, spring water, natural mineral water, table water, pool water, ground water, surface water and waste water	Određivanje permanganatnog indeksa Determination of peranganate indeks Granica kvantifikacije/ Quantification limit 0,5 mg/l O_2	HRN EN ISO 8467:2001 (ISO 8467:1993; EN ISO 8467:1995)
7.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, podzemna, površinska i otpadna voda Water for human consumption, spring water, natural mineral water, table water, ground water, surface water and waste water	Određivanje nitrita-Molekularna apsorpcijska spektrometrijska metoda Determination of nitrite - Molecular absorption spectrometric method Granica kvantifikacije/ Quantification limit 0,010 mg/l N	HRN EN 26777:1998 (ISO 6777:1984; EN 26777:1993)

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
8.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, bazenska, podzemna, površinska i otpadna voda Water for human consumption, spring water, natural mineral water, table water, pool water, ground water, surface water and waste water	Detekcija i brojenje ukupnih koliforma i <i>E. coli</i> Colilert metodom Detection and enumeration of total Coliforms and <i>E. coli</i> by Colilert method	HRN EN ISO 9308-2:2014 (ISO 9308-2:2012; EN ISO 9308-2:2014)
9.		Brojenje uzgojenih mikroorganizama – Broj kolonija naciepljivanjem na hranjivi agar Enumeration of culturable micro-organisms – Colony count by inoculation in a nutrient agar culture medium	HRN EN 6222:2000 (ISO 6222:1999; EN ISO 6222:1999)
10.	Voda za ljudsku potrošnju, podzemna i bazenska voda Water for human consumption, ground water and pool water	Određivanje lakohlapljivih halogeniranih ugljikovodika- Metoda plinske kromatografije Determination of highly volatile halogenated hydrocarbons – Gas-chromatographic methods Granica kvantifikacije/ Quantification limit Kloroform/ Chloroform: 2,0 µg/l, Trikloretilen/Trichloroethylen: 2,0 µg/l, Bromdiklormetan/ Bromodichloromethane: 2,0 µg/l, Dibromklormetan/ Dibromochloromethane: 2,0 µg/l, Tetrakloretilen/ Tetrachlorethylene: 2,0 µg/l, Bromoform/Bromoform: 2,0 µg/l	HRN EN ISO 10301:2002 (ISO 10301:1997; EN ISO 10301:1997)

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
11.	Površinska, podzemna i otpadna voda Surface water, ground water and waste water	Određivanje indeksa kemijske potrošnje kisika (KPK) –Metoda s malim zatvorenim epruvetama Determination of the chemical oxygen demand index (ST-COD) – Small-scale sealed-tube method Granica kvantifikacije/ Quantification limit 5 mg/l O ₂	HRN ISO 15705:2003 (ISO 15705:2002)
12.	Površinska, podzemna i otpadna voda Surface water, ground water and waste water	Određivanje adsorbilnih organski vezanih halogena (AOX) Determination of adsorbable organically bound halogens (AOX) Granica kvantifikacije/ Quantification limit 0,05 mg/l O ₂	Vlastita metoda In-house method RU-KV-017 Izdanje/Edition 01 2024-01-02
13.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, podzemna, površinska i otpadna voda Water for human consumption, spring water, natural mineral water, table water, ground water, surface water and waste water	Određivanje ortofosfata – Spektrometrijska metoda s amonijevim molibdatom Determination of orthophosphorus – Ammonium molybdate spectrometric method Granica kvantifikacije/ Quantification limit 0,05 mg/l P	HRN EN ISO 6878:2008 (ISO 6878:2004; EN ISO 6878:2004) Točke/Clauses: 4. i 7.
14.	Površinska, podzemna i otpadna voda Surface water, ground water and waste water	Određivanje ukupnog fosfora – Spektrometrijska metoda s amonijevim molibdatom Determination of total phosphorus – Ammonium molybdate spectrometric method Granica kvantifikacije/ Quantification limit 0,05 mg/l P	HRN EN ISO 6878:2008 (ISO 6878:2004; EN ISO 6878:2004) Točke/Clauses: 4. i 7.

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
15.	Voda za ljudsku potrošnju, površinska, bazenska, otpadna i podzemna voda Water for human consumption, surface water, pool water, waste water and ground water	Određivanje slobodnog i ukupnog klora-kolorimetrijskom metodom s N,N-dietil-1,4-fenilendiaminom u svrhu rutinske kontrole Determination of free and total chlorine – colorimetric method using N,N-diethyl-1,4-phenylenediamine for routine control purposes Od/from 0,05 mg/l Cl ₂ do/to 4,0 mg/l Cl ₂	HRN EN ISO 7393-2:2018 (ISO 7393-2:2017; EN ISO 7393-2:2018)
16.	Voda za ljudsku potrošnju, površinska, otpadna i podzemna voda Water for human consumption, surface water, waste water and ground water	Određivanje neionskih tenzida Determination of nonionic surfactants Granica kvantifikacije/ Quantification limit 0,1 mg/l	Vlastita metoda In-house method RU-KV-012 Izdanje/Edition 04 2023-12-18
17.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, podzemna, površinska, otpadna i bazenska voda Water for human consumption, spring water, natural mineral water, table water, ground water, surface water, waste water and pool water	Ispitivanje i određivanje boje Examination and determination of colour Granica kvantifikacije/ Quantification limit 3 mg/PtCo skale/scale	Standard Methods 24th Ed. 2023 2120C
18.	Voda za ljudsku potrošnju, površinska, otpadna, podzemna i bazenska voda Water for human consumption, surface water, waste water, ground water and pool water	Određivanje temperature Determination of temperature Od/from 0,0 °C do/to 50,0 °C	Standard Methods 24th Ed.2023 2550B

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
19.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna, stolna, podzemna, površinska i otpadna voda Water for human consumption, spring water, natural mineral water, table water, ground water, surface water and waste water	Određivanje praga mirisa (TON) Determination of the threshold odour number (TON)	HRN EN 1622:2008 (EN 1622:2006)
20.	Voda za ljudsku potrošnju, izvorska, prirodna mineralna i stolna voda Water for human consumption, spring water, natural mineral water and table water	Određivanje praga okusa (TFN) Determination of the threshold flavour number (TFN)	
21.	Voda za ljudsku potrošnju Water for human consumption	Uzorkovanje Sampling	HRN EN ISO 5667-5:2011 (ISO 5667-5:2006) HRN EN ISO 19458:2008 (ISO 19458:2006, EN ISO 19458:2006)
22.	Bazenska voda Pool water	Uzorkovanje Sampling	HRN EN ISO 19458:2008 (ISO 19458:2006, EN ISO 19458:2006)
23.	Otpadna voda Waste water	Uzorkovanje Sampling	HRN ISO 5667-10:2020 (ISO 5667-10:2020)

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
24.	Rijeke i potoci Rivers and streams	Uzorkovanje Sampling	HRN EN ISO 5667-6:2016 (ISO 5667-6:2014, EN ISO 5667-6:2016) HRN EN ISO 5667- 6:2016/A11:2020 (EN ISO 5667- 6:2016/A11:2020) HRN EN ISO 19458:2008 (ISO 19458:2006; EN ISO 19458:2006)
25.	Prirodna i umjetna jezera Natural and man made lakes	Uzorkovanje Sampling)	HRN ISO 5667-4:2016 (ISO 5667-4:2016) HRN EN ISO 19458:2008 (ISO 19458:2006; EN ISO 19458:2006)
26.	Podzemna voda Ground water	Uzorkovanje Sampling	HRN ISO 5667-11:2011 (ISO 5667-11:2009) HRN EN ISO 19458:2008 (ISO 19458:2006; EN ISO 19458:2006)
27.	Hrana Food	Horizontalna metoda za dokazivanje pristutnosti, određivanje broja i serotipizaciju Salmonella -- 1. dio: Dokazivanje prisutnosti Salmonella spp. Horizontal method for the detection, enumeration and serotyping of salmonella - Part 1:Detection of Salmonella spp.	HRN EN ISO 6579-1:2017 (ISO 6579-1:2017; EN ISO 6579-1:2017) HRN EN ISO 6579- 1:2017/A1:2020 (ISO 6579- 1:2017/Amd1:2020; EN ISO 6579- 1:2017/A1:2020)

Br. No.	Materijali/Proizvodi Materials/Products	Vrsta ispitivanja/Svojstvo Type of test/Property Raspon/Range	Metoda ispitivanja Test method
28.	Jaka alkoholna pića Strong alcoholic beverages	Određivanje alkoholne jakosti po volumenu pri 20 °C Determination of alcoholic strength by volume at 20°C	Vlastita metoda In-house method RU-KH-001 Izdanje/Edition 01 2023-12-28 Modificirana prema/ Modified according: Uredba Komisije (EZ) br 2870/2000, Prilog, Referentna analitička metoda I, Dodatak I i Dodatak II (Metoda A) Comission Regulation (EC) No 2870/2000, Annex, Analytical Reference Method I, Appendix I and Appendix II (Method A)