

Eidsvoll kommune
Vann
Postboks 90
2080 EIDSVOLL
Att: Katarina Ottesen

Dato: 21.03.2022
Prøve ID: 2022-4828
ver 1

ANALYSERESULTATER

Prøvemottak: 02.03.22

Analyseperiode: 02.03.22 - 21.03.22

2022-4828-1 DR) Drikkevann (Hamar)

Gjelder: **Tisjøen Vannverk**

Merket: **B-pakke**

Tatt ut: 02.03.22 - 02.03.22

Sted: **RA2 Minnesund**

Parameter	Resultat	Enhet	Grenseverdi	Metode	Måleusikkerhet
1,2,-dikloretan	⁸³⁾ <0.5	µg/l	3,0	SS-EN ISO 10301 mod.	±0.10
Aluminium, Al	⁸³⁾ 30	µg/l	200	SS-EN ISO 17294-2:201	±4.5
Ammonium, NH4-N	⁸³⁾ <0.01	mg/l	0,4	ISO 15923-1:2013 B	±0.005
Antimon, Sb	⁸³⁾ <0.1	µg/l	5	SS-EN ISO 17294-2:201	±0.10
Arsen, As	⁸³⁾ 0.10	µg/l	10	SS-EN ISO 17294-2:201	±0.015
Benzen	⁸³⁾ <0.1	µg/l	1	SS-EN ISO 10301 mod.	±0.050
Benzo(a)pyren, PAH	⁸³⁾ <0.005	µg/l	0,01	GC-MS-NCI, egen metod	±0.0013
Bly, Pb	⁸³⁾ 0.16	µg/l	10	SS-EN ISO 17294-2:201	±0.024
Bor, B	⁸³⁾ <2.5	µg/l	1000	SS-EN ISO 17294-2:201	±0.75
Bromat-BrO3	⁸³⁾ <3	µg/l	10	SS-EN ISO 11206:2013	±0.60
Cyanid, total	⁸³⁾ <0.01	mg/l	0,05	SS-EN ISO 14403-2:201	±0.003
Fluorid	⁸³⁾ 0.10	mg/l	1,5	SS-EN ISO 10304-1:200	±0.10
Jern, Fe	⁸³⁾ 14	µg/l	200	SS-EN ISO 17294-2:201	±2.1
Kadmium, Cd	⁸³⁾ <0.01	µg/l	5	SS-EN ISO 17294-2:201	±0.003
Klorid	⁸³⁾ 1.7	mg/l	250	SS-EN ISO 10304-1:200	±0.90
Kobber, Cu	⁸³⁾ 3.5	µg/l	2000	SS-EN ISO 17294-2:201	±0.53
Krom, Cr	⁸³⁾ 0.076	µg/l	50	SS-EN ISO 17294-2:201	±0.015
Kvikksølv	⁸³⁾ <2	ng/l	1000	SS-EN ISO 17852 mod.	±1
Kalsium, Ca	⁸³⁾ 18	mg/l		SS-EN ISO 11885:2009	±2.7
Mangan, Mn	⁸³⁾ 1.4	µg/l	50	SS-EN ISO 17294-2:201	±0.21
Natrium, Na	⁸³⁾ 1.5	mg/l	200	SS-EN ISO 11885:2009	±0.23
Nikkel, Ni	⁸³⁾ 0.24	µg/l	20	SS-EN ISO 17294-2:201	±0.040
Nitrat, NO3-N	⁸³⁾ 0.13	mg/l	10	SS-EN ISO 10304-1:200	±0.045
Nitritt, NO2-N	⁸³⁾ <0.001	mg/l		ISO 15923-1:2013 D	±0.0009
Benzo(b+k)fluoranten, PAH	⁸³⁾ <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Benzo(ghi)perylene, PAH	⁸³⁾ <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Indeno(1,2,3-cd)pyren, PAH	⁸³⁾ <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Sum PAH ihht drikkevannsforskrift	⁸³⁾ <0.02	µg/l	0,1	Beräknad	
Selen, Se	⁸³⁾ <1	µg/l	10	SS-EN ISO 17294-2:201	±0.40
Sulfat	⁸³⁾ 2.1	mg/l	250	SS-EN ISO 10304-1:200	±0.90
Tetrakloreten	⁸³⁾ <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Trikloreten	⁸³⁾ <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Sum kloreter	⁸³⁾ <1	µg/l	10	Beräknad	
TOC, total organisk karbon	⁸³⁾ 3.6	mg/l		SS-EN 1484 utg 1	±0.54

Parameter	Resultat	Enhet	Grenseverdi	Metode	Måleusikkerhet
Kloroform	83) 17	µg/l		SS-EN ISO 10301 mod.	±3.4
Bromoform	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Dibromklormetan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Bromdiklormetan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Sum trihalometaner	83) 17	µg/l	100	Beräknad	

2022-4828-2 DR) Drikkevann (Hamar)

Gjelder: **Tisjøen Vannverk****Merket: B-pakke**

Tatt ut: 02.03.22 - 02.03.22

Sted: **Vannkiosk**

Parameter	Resultat	Enhet	Grenseverdi	Metode	Måleusikkerhet
1,2,-dikloretan	83) <0.5	µg/l	3,0	SS-EN ISO 10301 mod.	±0.10
Aluminium, Al	83) 31	µg/l	200	SS-EN ISO 17294-2:201	±4.6
Ammonium, NH4-N	83) <0.01	mg/l	0,4	ISO 15923-1:2013 B	±0.005
Antimon, Sb	83) <0.1	µg/l	5	SS-EN ISO 17294-2:201	±0.10
Arsen, As	83) 0.10	µg/l	10	SS-EN ISO 17294-2:201	±0.015
Benzen	83) <0.1	µg/l	1	SS-EN ISO 10301 mod.	±0.050
Benzo(a)pyren, PAH	83) <0.005	µg/l	0,01	GC-MS-NCI, egen metod	±0.0013
Bly, Pb	83) 0.24	µg/l	10	SS-EN ISO 17294-2:201	±0.036
Bor, B	83) <2.5	µg/l	1000	SS-EN ISO 17294-2:201	±0.75
Bromat-BrO3	83) <3	µg/l	10	SS-EN ISO 11206:2013	±0.60
Cyanid, total	83) <0.01	mg/l	0,05	SS-EN ISO 14403-2:201	±0.003
Fluorid	83) 0.10	mg/l	1,5	SS-EN ISO 10304-1:200	±0.10
Jern, Fe	83) 13	µg/l	200	SS-EN ISO 17294-2:201	±2.0
Kadmium, Cd	83) <0.01	µg/l	5	SS-EN ISO 17294-2:201	±0.003
Klorid	83) 1.7	mg/l	250	SS-EN ISO 10304-1:200	±0.90
Kobber, Cu	83) 3.8	µg/l	2000	SS-EN ISO 17294-2:201	±0.57
Krom, Cr	83) 0.075	µg/l	50	SS-EN ISO 17294-2:201	±0.015
Kvikksølv	83) <2	ng/l	1000	SS-EN ISO 17852 mod.	±1
Kalsium, Ca	83) 18	mg/l		SS-EN ISO 11885:2009	±2.7
Mangan, Mn	83) 1.6	µg/l	50	SS-EN ISO 17294-2:201	±0.24
Natrium, Na	83) 1.5	mg/l	200	SS-EN ISO 11885:2009	±0.23
Nikkel, Ni	83) 0.45	µg/l	20	SS-EN ISO 17294-2:201	±0.068
Nitrat, NO3-N	83) 0.14	mg/l	10	SS-EN ISO 10304-1:200	±0.045
Nitritt, NO2-N	83) <0.001	mg/l		ISO 15923-1:2013 D	±0.0009
Benzo(b+k)fluoranten, PAH	83) <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Benzo(ghi)perylene, PAH	83) <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Indeno(1,2,3-cd)pyren, PAH	83) <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Sum PAH ihht drikkevannsforskrift	83) <0.02	µg/l	0,1	Beräknad	
Selen, Se	83) <1	µg/l	10	SS-EN ISO 17294-2:201	±0.40
Sulfat	83) 2.1	mg/l	250	SS-EN ISO 10304-1:200	±0.90
Tetrakloreten	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Trikloretan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Sum kloreter	83) <1	µg/l	10	Beräknad	
TOC, total organisk karbon	83) 3.3	mg/l		SS-EN 1484 utg 1	±0.50
Kloroform	83) 17	µg/l		SS-EN ISO 10301 mod.	±3.4
Bromoform	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Dibromklormetan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Bromdiklormetan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Sum trihalometaner	83) 17	µg/l	100	Beräknad	

2022-4828-3 DR) Drikkevann (Hamar)

Gjelder: **Tisjøen Vannverk****Merket: B-pakke**

Tatt ut: 02.03.22 - 02.03.22

Sted: **Dal, P52**

Parameter	Resultat	Enhet	Grenseverdi	Metode	Måleusikkerhet
1,2,-dikloretan	83) <0.5	µg/l	3,0	SS-EN ISO 10301 mod.	±0.10
Aluminium, Al	83) 31	µg/l	200	SS-EN ISO 17294-2:201	±4.6
Ammonium, NH4-N	83) <0.01	mg/l	0,4	ISO 15923-1:2013 B	±0.005
Antimon, Sb	83) <0.1	µg/l	5	SS-EN ISO 17294-2:201	±0.10
Arsen, As	83) 0.10	µg/l	10	SS-EN ISO 17294-2:201	±0.015
Benzen	83) <0.1	µg/l	1	SS-EN ISO 10301 mod.	±0.050
Benzo(a)pyren, PAH	83) <0.005	µg/l	0,01	GC-MS-NCI, egen metod	±0.0013

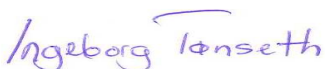
Parameter	Resultat	Enhet	Grenseverdi	Metode	Måleusikkerhet
Bly, Pb	83) 0.12	µg/l	10	SS-EN ISO 17294-2:201	±0.018
Bor, B	83) <2.5	µg/l	1000	SS-EN ISO 17294-2:201	±0.75
Bromat-BrO ₃	83) <3	µg/l	10	SS-EN ISO 11206:2013	±0.60
Cyanid, total	83) <0.01	mg/l	0,05	SS-EN ISO 14403-2:201	±0.003
Fluorid	83) 0.10	mg/l	1,5	SS-EN ISO 10304-1:200	±0.10
Jern, Fe	83) 9.2	µg/l	200	SS-EN ISO 17294-2:201	±1.4
Kadmium, Cd	83) <0.01	µg/l	5	SS-EN ISO 17294-2:201	±0.003
Klorid	83) 2.0	mg/l	250	SS-EN ISO 10304-1:200	±0.90
Kobber, Cu	83) 3.6	µg/l	2000	SS-EN ISO 17294-2:201	±0.54
Krom, Cr	83) 0.069	µg/l	50	SS-EN ISO 17294-2:201	±0.015
Kvikksølv	83) <2	ng/l	1000	SS-EN ISO 17852 mod.	±1
Kalsium, Ca	83) 19	mg/l		SS-EN ISO 11885:2009	±2.9
Mangan, Mn	83) 0.76	µg/l	50	SS-EN ISO 17294-2:201	±0.11
Natrium, Na	83) 1.6	mg/l	200	SS-EN ISO 11885:2009	±0.24
Nikkel, Ni	83) 0.29	µg/l	20	SS-EN ISO 17294-2:201	±0.044
Nitrat, NO ₃ -N	83) 0.16	mg/l	10	SS-EN ISO 10304-1:200	±0.045
Nitritt, NO ₂ -N	83) <0.001	mg/l		ISO 15923-1:2013 D	±0.0009
Benzo(b+k)fluoranten, PAH	83) <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Benzo(ghi)perylen, PAH	83) <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Indeno(1,2,3-cd)pyren, PAH	83) <0.01	µg/l		GC-MS-NCI, egen metod	±0.003
Sum PAH ihht drikkevannsforskrift	83) <0.02	µg/l	0,1	Beräknad	
Selen, Se	83) <1	µg/l	10	SS-EN ISO 17294-2:201	±0.40
Sulfat	83) 2.8	mg/l	250	SS-EN ISO 10304-1:200	±0.90
Tetrakloreten	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Trikloretan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Sum kloreten	83) <1	µg/l	10	Beräknad	
TOC, total organisk karbon	83) 2.9	mg/l		SS-EN 1484 utg 1	±0.50
Kloroform	83) 15	µg/l		SS-EN ISO 10301 mod.	±3.0
Bromoform	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Dibromklormetan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Bromdiklormetan	83) <1	µg/l		SS-EN ISO 10301 mod.	±0.20
Sum trihalometaner	83) 15	µg/l	100	Beräknad	

< betyr: Mindre enn

83) Levert av SGS - Linkøping ISO17025:2018 SWEDAC 1006

DR) Grenseverdier etter Drikkevannsforskriften

Med hilsen


Ingeborg Tønseth
Kunderådgiver

Kopi til

Jørn Erik Bakken Uhren (E-post)

Tom Villåsen (E-post)

Zainab Abel Hameed (E-post)

Arnfinn Hjell (E-post)

Ekaterina Christensen (E-post)

Mapgraph PDF (E-post)

Tommy Mikalsen (E-post)

Frode Hovind (E-post)

Hilde Jacobsen (E-post)

Angitt måleusikkerhet er beregnet med en dekningsfaktor k=2.

For opplysninger om måleusikkerheten for akkrediterte mikrobiologiske analyser av næringsmidler og før ta kontakt med laboratoriet.

Måleusikkerhet for kjemiske analyser fra undeleverandør oppgis ved forespørsel.

Resultatene gjelder kun de undersøkte prøvene slik mottatt. Rapporten må ikke offentliggjøres annet enn i sin helhet uten skriftlig tillatelse.

Informasjon om hvilken avdeling som har utført de enkelte analysene oppgis ved henvendelse til laboratoriet.