Report

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Project
Reference

Analysis of drinking water

Your ID **R-18-654-1/M-1**

LabID O10985811

Analysis	Results	Uncertainty (±)	Unit	Method	Issuer	Sign
Ca	**6.22**	0.49	mg/l	1	R	VITA
Fe	**0.0247**	0.0021	mg/l	1	R	VITA
K	**<0.4**		mg/l	1	R	VITA
Mg	**0.596**	0.041	mg/l	1	R	VITA
Na	**10.8**	0.7	mg/l	1	R	VITA
Si	**7.28**	0.48	mg/l	1	R	VITA
Al	**12.4**	2.3	µg/l	1	H	VITA
As	**0.0912**	0.0261	µg/l	1	H	VITA
Ba	**<0.01**		µg/l	1	H	VITA
Cd	**<0.002**		µg/l	1	H	VITA
Co	**0.00565**	0.00564	µg/l	1	H	VITA
Cr	**1.05**	0.19	µg/l	1	H	VITA
Cu	**<0.1**		µg/l	1	H	VITA
Hg	**<0.002**		µg/l	1	F	VITA
Mn	**0.374**	0.083	µg/l	1	H	VITA
Mo	**0.0955**	0.0190	µg/l	1	H	VITA
Ni	**<0.05**		µg/l	1	H	VITA
P	**33.7**	6.6	µg/l	1	H	VITA
Pb	**<0.01**		µg/l	1	H	VITA
Sr	**2.11**	0.25	µg/l	1	R	VITA
Zn	**0.289**	0.139	µg/l	1	H	VITA
V	**15.2**	2.8	µg/l	1	H	VITA
Sb	**<0.01**		µg/l	2	H	VITA
B	**<10**		µg/l	2	R	VITA
S	**0.698**	0.055	mg/l	2	R	VITA
Se	**<0.5**		µg/l	2	H	VITA
benzene	**<0.20**		µg/l	3	1	VITA
toluene	**<0.20**		µg/l	3	1	VITA
ethylbenzene	**<0.10**		µg/l	3	1	VITA
m,p-xylene	**<0.20**		µg/l	3	1	VITA
o-xylene	**<0.10**		µg/l	3	1	VITA
xylenes, sum*	**<0.15**		µg/l	3	1	VITA
dichloromethane	**<2.0**		µg/l	4	1	VITA
1,1-dichloroethane	**<0.10**		µg/l	4	1	VITA
1,2-dichloroethane	**<0.50**		µg/l	4	1	VITA
trans-1,2-dichloroethene	**<0.10**		µg/l	4	1	VITA
cis-1,2-dichloroethene	**<0.10**		µg/l	4	1	VITA
1,2-dichloropropane	**<1.0**		µg/l	4	1	VITA
tetrachloromethane	**<0.10**		µg/l	4	1	VITA
1,1,1-trichloroethane	**<0.10**		µg/l	4	1	VITA

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Your ID	**R-18-654-1/M-1**
LabID	O10985811

Analysis	Results	Uncertainty (±)	Unit	Method	Issuer	Sign
1,1,2-trichloroethane	**<0.20**		µg/l	4	1	VITA
trichloroethene	**<0.10**		µg/l	4	1	VITA
tetrachloroethene	**<0.20**		µg/l	4	1	VITA
vinylchloride	**<1.0**		µg/l	4	1	VITA
1,1-dichloroethene	**<0.10**		µg/l	4	1	VITA
trichloromethane	**<0.30**		µg/l	5	1	VITA
tribromomethane	**<0.20**		µg/l	5	1	VITA
dibromochloromethane	**<0.10**		µg/l	5	1	VITA
bromodichloromethane	**<0.10**		µg/l	5	1	VITA
trihalomethanes, sum*	**<0.35**		µg/l	5	1	VITA
naphthalene	**<0.20**		µg/l	6	1	VITA
acenaphthylene	**<0.10**		µg/l	6	1	VITA
acenaphthene	**<0.0070**		µg/l	6	1	VITA
fluorene	**<0.010**		µg/l	6	1	VITA
phenanthrene	**<0.040**		µg/l	6	1	VITA
anthracene	**<0.0050**		µg/l	6	1	VITA
fluoranthene	**<0.0050**		µg/l	6	1	VITA
pyrene	**<0.0050**		µg/l	6	1	VITA
benzo(a)anthracene	**<0.0030**		µg/l	6	1	VITA
chrysene	**<0.0070**		µg/l	6	1	VITA
benzo(b)fluoranthene	**<0.0040**		µg/l	6	1	VITA
benzo(k)fluoranthene	**<0.0020**		µg/l	6	1	VITA
benzo(a)pyrene	**<0.0020**		µg/l	6	1	VITA
dibenzo(ah)anthracene	**<0.0020**		µg/l	6	1	VITA
benzo(ghi)perylene	**<0.0030**		µg/l	6	1	VITA
indeno(123cd)pyrene	**<0.0030**		µg/l	6	1	VITA
PAH, sum 16*	**<0.20**		µg/l	6	1	VITA
PAH, sum carcinogenic*	**<0.012**		µg/l	6	1	VITA
PAH, sum non carcinogenic*	**<0.20**		µg/l	6	1	VITA
PAH, sum 4*	**<0.0060**		µg/l	6	1	VITA
PAH, sum L*	**<0.20**		µg/l	6	1	VITA
PAH, sum M*	**<0.033**		µg/l	6	1	VITA
PAH, sum H*	**<0.013**		µg/l	6	1	VITA
ammonium	**<0.026**		mg/l	7	1	VITA
ammonium nitrogen	**<0.020**		mg/l	7	1	VITA
chloride	**8.68**	1.30	mg/l	8	1	VITA
sulphate	**1.86**	0.280	mg/l	9	1	VITA
TOC	**<0.50**		mg/l	10	1	VITA
färg	**<2.0**		mgPt/l	11	1	VITA
nitrit	**<0.0050**		mg/l	12	1	VITA
nitrite nitrogen	**<0.0020**		mg/l	12	1	VITA
fluoride	**<0.200**		mg/l	13	1	VITA
CN total	**<0.005**		mg/l	14	1	VITA
nitrate	**0.336**	0.047	mg/l	15	2	STGR
nitrate nitrogen	**0.076**	0.012	mg/l	15	2	STGR

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* indicates unaccredited analysis.

	Method specification
1	Package V-2. Determination of metals without digestion. The measurement was carried out according to EPA-method 200.7(mod), SS EN ISO 11885(mod) (ICP-AES) and EPA-method 200.8(mod), SS EN ISO 17294-1,2(mod) (ICP-SFMS). Analysis of Hg with AFS according to SS-EN ISO 17852:2008. Special information for added metals to the package: W; the sample must not be acidified prior to analysis. S; the sample has been stabilized with H2O2. Rev 2015-06-25
2	Additional metals
3	Package OV-5. Determination of monocyclic aromatics (BTEX) according to method based on US EPA 624, US EPA 8260, EN ISO 10301, MADEP 2004, rev. 1.1. Measurement is performed with GC-FID and GC-MS. Rev 2013-09-19
4	Package OV-6. Determination of chlorinated aliphates including vinylchloride according to method based on US EPA 624, US EPA 8260, EN ISO 10301, MADEP 2004, rev.1.1.. The measurement is performed with GC-FID and GC-MS. Rev 2013-09-18
5	Package OV-10. Determination of trihalomethanes according to a method based on US EPA 624, US EPA 8260, EN ISO 10301, MADEP 2004, rev.1.1. The measurement is performed with GC-FID and GC-MS. Rev 2013-09-19
6	Package OV-1. Determination of polycyclic aromatic hydrocarbons, PAH (EPA-16) according to method based on US EPA 550 The measurement is performed by HPLC with flourescence and PDA detection. PAH carcinogenic are benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(ah)anthracene and indeno(1,2,3-c,d)pyrene. Sum 4 PAH: benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene and benzo(g,h,i)perylene Sum PAH L: naphtalene, acenaphtene and acenaphtylene. Sum PAH M: fluorene, phenanthrene, anthracene, fluoranthene and pyrene Sum PAH H: benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene and benzo(g,h,i)perylene) Rev 2013-09-24
7	Spectrophotometric determination of ammonium NH_4,low LOQ, according to method based on CSN EN ISO 11732, CSN EN ISO 13395, CSN EN 13370 and CSN EN 12506. The method includes filtration of turbid samples. Rev 2013-09-18
8	Determination of chloride using ion chromatography according to CSN EN ISO 10304-1.

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	Method specification
	The method includes filtration of turbid samples. Rev 2012-05-28
9	Determination of sulfate with low LOQ, using ion chromatography according to a method based on CSN ISO 10304-1&2. The method includes filtration of turbid samples. Rev 2013-03-14
10	Determination of TOC with IR detection according to method based on CSN EN 1484 and CSN EN 13370. The method includes filtration of turbid samples. Rev 2014-11-24
11	Spectrophotometric determination of colour after filtration according to method based on CSN EN ISO 7887. Rev 2013-09-26
12	Spectrophotometric determinataion of nitirite/nitrite nitrogen according to method based on CSN ISO 11732, CSN ISO 13395, CSN EN 13370 och CSN EN 12506. The method includes filtration of turbid samples. The time between sampling and analysis has exceeded 24 hours. Rev 2014-02-19
13	Determination of fluoride using ion chromatography according to CSN ISO 10304-1 and CSN EN 12506. The method includes filtration of turbid samples. Rev 2013-09-17
14	Spectrophotometric determination of total cyanide according to method based on TNV 757415. Rev 2013-09-19
15	Determination of nitrate, NO_3 according to SS-EN ISO 10304-1. The measurement is performed with ion chromatography. Rev 2014-03-03

	Approver
STGR	Sture Grägg
VITA	Viktoria Takacs

	Issuer[1]
F	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg.No. 2030).
H	The determination is performed using ICP-SFMS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg.No. 2030).

[1] The technical unit within ALS Scandinavia where the analysis was carried out, alternatively the subcontractor for the analysis.

	Issuer[1]
R	The determination is performed using ICP-AES The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg.No. 2030).
1	The analysis is provided by ALS Laboratory Group, Na Harfê 9/336, 190 00, Prag 9, Czech Rebublic, which is a testing laboratory, accredited by the Czech accreditation body CAI (Reg.No 1163). CAI is a signatory to a MLA within EA, the same LA to which the Swedish accreditation body SWEDAC is also a signatory. The laboratories are located in; Prague, Na Harfê 9/336, 190 00, Praha 9, Ceska Lipa, Bendlova 1687/7, 470 01 Ceska Lipa, Pardubice, V Raji 906, 530 02 Pardubice. Contact the laboratory for further information.
2	The analysis is provided by AK Lab AB, Getängsvägen 29, 504 68 Borås, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg.No. 1790).

The uncertainty is given as extended uncertainty (according to the definition in ”Guide to the Expression of Uncertainty in Measurement", JCGM 100:2008 Corrected version 2010) calculated with a coverage factor of 2, which gives a confidence level of approximately 95%.
Measurement of uncertainty is reported only for detected substances with levels above the reporting limits.

The uncertainty from subcontractors is often given as extended uncertainty calculated with a coverage factor of 2. Contact the laboratory for further information.

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