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6ZWHPWS8AZ



Date received 2017-09-21
Issued 2017-10-04

Matís ohf
Hrólur Sigurdsson
Food Research, inn. and safety
Vinlandsleid 12
IS-113 Reykjavík
Iceland

Project
Reference

Analysis of drinking water

Your ID	R17-2510-1/AS-1 þorlákshöfn, Norðurbýggð 22b					
LabID	O10924888					
Analysis	Results	Uncertainty (±)	Unit	Method	Issuer	Sign
Ca	6.17	0.47	mg/l	1	R	ERJA
Fe	0.000470	0.000464	mg/l	1	H	ERJA
K	0.786	0.059	mg/l	1	R	ERJA
Mg	2.59	0.17	mg/l	1	R	ERJA
Na	11.1	0.8	mg/l	1	R	ERJA
Si	8.39	0.52	mg/l	1	R	ERJA
Al	11.1	2.0	µg/l	1	H	ERJA
As	0.0700	0.0174	µg/l	1	H	ERJA
Ba	0.154	0.029	µg/l	1	H	ERJA
Cd	0.00358	0.00133	µg/l	1	H	ERJA
Co	<0.005		µg/l	1	H	ERJA
Cr	0.338	0.066	µg/l	1	H	ERJA
Cu	0.171	0.052	µg/l	1	H	ERJA
Hg	<0.002		µg/l	1	F	ERJA
Mn	0.177	0.058	µg/l	1	H	ERJA
Mo	0.126	0.024	µg/l	1	H	ERJA
Ni	<0.05		µg/l	1	H	ERJA
P	20.0	4.3	µg/l	1	H	ERJA
Pb	<0.01		µg/l	1	H	ERJA
Sr	8.63	0.87	µg/l	1	R	ERJA
Zn	0.261	0.121	µg/l	1	H	ERJA
V	9.47	1.72	µg/l	1	H	ERJA
Sb	<0.01		µg/l	2	H	ERJA
B	<10		µg/l	2	R	ERJA
S	1.35	0.09	mg/l	2	R	ERJA
Se	<0.5		µg/l	2	H	ERJA
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	R17-2510-1/AS-1 þorlákshöfn, Norðurbyggð 22b					
LabID	O10924888					
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	13.0	1.94	mg/l	8	1	VITA
sulphate	3.32	0.498	mg/l	9	1	VITA
TOC	<0.50		mg/l	10	1	VITA
nitrate	0.0974	0.014	mg/l	11	2	STGR
nitrate nitrogen	0.022	0.00352	mg/l	11	2	STGR
nitrite	<0.01		mg/l	12	3	JEME
colour	<5		mgPt/l	13	J	JEME
CN total	<0.005		mg/l	14	1	VITA
fluoride	<0.200		mg/l	15	1	VITA

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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 H ₂ O ₂ . 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 fluorescence 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 acenaphthylene. 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	Determination of nitrate, NO ₃ according to SS-EN ISO 10304-1. The measurement is performed with ion chromatography. Rev 2014-03-03
12	Determination of nitrite nitrogen according to SS-EN ISO 13395-1 (FIA). Filtration through 0.45 µm filter is included in the method. Sample for the determination of nitrite nitrogen should arrive to the laboratory as soon as possible after sampling, because this parameter is time-sensitive. The determination should be done within 24 hours after sampling according to SS-EN ISO 5667-3. Uncertainty (k=2) Clean water: ±11% at 0.01 mg N/l ±9% at 0.05 mg N/l and ±13% at 0.2 mg N/l Waste water: ±12% at 0.01 mg N/l and ±10% at 0.05 mg N/l and ±13% at 0.2 mg N/l Rev 2017-03-01
13	Determination of colour according to SS-EN ISO 7887 edition 2, method C. Photometric determination at 410 nm after filtration. Uncertainty (k=2): ±16% at 20 mg Pt/l and ±14% at 100 mg Pt/l Rev 2017-03-20
14	Spectrophotometric determination of total cyanide according to method based on TNV 757415. Rev 2013-09-19
15	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

Approver	
ERJA	Erika Jansson
JEME	Jenny Melkersson
STGR	Sture Grägg
VITA	Viktoria Takacs

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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).
J	The analysis is provided by ALS Scandinavia AB, Box 700, 182 17 Danderyd, which is accredited by the Swedish accreditation body SWEDAC (Reg.No. 2030).
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 Harfě 9/336, 190 00, Praha 9, Czech Republic, 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 Harfě 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).
3	The analysis is provided by ALS Scandinavia AB, Box 700, 182 17 Danderyd, which is accredited by the Swedish accreditation body SWEDAC (Reg.No. 2030).

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