CERTIFICATE OF ANALYSIS

Work Order	: **ST2316080**	Page	: 1 of 9
Client	: **Matís ohf**	Project	: ----
Contact	: Hrólfur Sigurdsson	Purchase Number	: ST2316080
Address	: Food Research, inn. and safety Vinlandsleid 12 -113 Reykjavik Iceland	Sampler Site Date Samples Received	: ---- : ---- : 2023-05-11 10:00
E-mail	: hrolfur@matis.is	Date Analysis Commenced	: 2023-05-12
Telephone	: 3544225000	Issue Date	: 2023-05-26 11:37
C-O-C number	: ----	No. of samples received	: 3
Quote number	: HL2020SE-MAT-OHF0001 (OF191270)	No. of samples analysed	: 3

General Comments

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Workorder Comments

Should a sample contain sediment it is decanted prior to volatile compounds determination.

Signatories	*Position*
Niels-Kristian Terkildsen	Laboratory Manager

Ackred. nr 2030
Provning
ISO/IEC 17025

Laboratory	: ALS Scandinavia AB Danderyd	Webpage	: www.alsglobal.se
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Analytical Results

Sub-Matrix: DRINKING WATER	Client sample ID	R23-981-1					
	Laboratory sample ID	ST2316080-001					
	Client sampling date / time	Not specified					
Parameter	Result	MU	Unit	LOR	Package	Method	Issuer
Halogenated Volatile Organic Compounds							
Chloroform	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Bromoform	<0.20	----	µg/L	0.20	OV-10	W-VOCGMS01	PR
Dibromochloromethane	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Bromodichloromethane	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Sum of 4 Trihalomethanes (M1)	<0.250	----	µg/L	0.250	OV-10	W-VOCGMS01	PR
Sample Pre-Preparation							
Stabilisation	Yes *	----	-	-	V-2-S	W-PPV-S	LE
Total Metals/Major Cations							
Aluminum	21.3	± 3.2	µg/L	0.2	V-2	W-SFMS-5A	LE
Arsenic	0.0521	± 0.0131	µg/L	0.05	V-2	W-SFMS-5A	LE
Barium	0.138	± 0.021	µg/L	0.01	V-2	W-SFMS-5A	LE
Cadmium	<0.002	----	µg/L	0.002	V-2	W-SFMS-5A	LE
Calcium	5.08	± 0.64	mg/L	0.1	V-2	W-AES-1A	LE
Chromium	0.960	± 0.144	µg/L	0.01	V-2	W-SFMS-5A	LE
Cobalt	<0.005	----	µg/L	0.005	V-2	W-SFMS-5A	LE
Copper	<0.1	----	µg/L	0.1	V-2	W-SFMS-5A	LE
Iron	0.00130	± 0.00048	mg/L	0.0004	V-2	W-SFMS-5A	LE
Lead	<0.01	----	µg/L	0.01	V-2	W-SFMS-5A	LE
Magnesium	0.884	± 0.104	mg/L	0.09	V-2	W-AES-1A	LE
Manganese	0.0398	± 0.0154	µg/L	0.03	V-2	W-SFMS-5A	LE
Mercury	<0.002	----	µg/L	0.002	V-2	W-AFS-17V2	LE
Molybdenum	0.0906	± 0.0141	µg/L	0.05	V-2	W-SFMS-5A	LE
Nickel	0.615	± 0.093	µg/L	0.05	V-2	W-SFMS-5A	LE
Phosphorus	23.0	± 3.8	µg/L	1	V-2	W-SFMS-5A	LE
Potassium	0.448	± 0.055	mg/L	0.4	V-2	W-AES-1A	LE
Silicon	6.58	± 0.77	mg/L	0.03	V-2	W-AES-1A	LE
Sodium	9.70	± 1.16	mg/L	0.1	V-2	W-AES-1A	LE
Strontium	3.08	± 0.45	µg/L	2	V-2	W-AES-1A	LE
Vanadium	18.2	± 2.7	µg/L	0.005	V-2	W-SFMS-5A	LE
Zinc	0.886	± 0.180	µg/L	0.2	V-2	W-SFMS-5A	LE
Antimony	<0.01	----	µg/L	0.01	V-2-ADD	W-SFMS-5A	LE
Boron	<10	----	µg/L	10	V-2-ADD	W-AES-1A	LE
Selenium	<0.3	----	µg/L	0.3	V-2-ADD	W-SFMS-5A	LE
Lithium	0.188 *	----	µg/L	0.050	V-2-Bas-ADD	W-SFMS-5A	LE
Sulfur	0.710	± 0.083	mg/L	0.2	V-2-S	W-AES-1A	LE
BTEX							
Benzene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Toluene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Ethylbenzene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Sum of Xylenes	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Polycyclic Aromatics Hydrocarbons (PAHs)							
Naphthalene	<0.0070	----	µg/L	0.0070	GRV-PAH	W-PAHGMS04	PR
Acenaphthylene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Acenaphthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Fluorene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Phenanthrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Anthracene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Pyrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benz(a)anthracene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR

Parameter	Result	MU	Unit	LOR	Package	Method	Issuer
Polycyclic Aromatics Hydrocarbons (PAHs) - Continued							
Chrysene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(b)fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(k)fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(a)pyrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Indeno(1.2.3.cd)pyrene	<0.00030	----	µg/L	0.00030	GRV-PAH	W-PAHGMS04	PR
Benzo(g.h.i)perylene	<0.00030	----	µg/L	0.00030	GRV-PAH	W-PAHGMS04	PR
Dibenz(a.h)anthracene	<0.00060	----	µg/L	0.00060	GRV-PAH	W-PAHGMS04	PR
Sum of carcinogenic PAH (M1)	<0.00295	----	µg/L	0.00295	GRV-PAH	W-PAHGMS04	PR
Sum of PAH L (M1)	<0.00450	----	µg/L	0.00450	GRV-PAH	W-PAHGMS04	PR
Sum of PAH M (M1)	<0.00250	----	µg/L	0.00250	GRV-PAH	W-PAHGMS04	PR
Sum of PAH H (M1)	<0.00310	----	µg/L	0.00310	GRV-PAH	W-PAHGMS04	PR
Sum of 16 PAH (M1)	<0.0101	----	µg/L	0.101	GRV-PAH	W-PAHGMS04	PR
Sum of other PAH (M1)	<0.00715	----	µg/L	0.00715	GRV-PAH	W-PAHGMS04	PR
Nonmetallic Inorganic Parameters							
Ammonia and ammonium ions as NH4	<0.050	----	mg/L	0.050	Ammonium i vatten	W-NH4-SPC	PR
Ammonia and ammonium ions as N	<0.040	----	mg/L	0.040	Ammonium i vatten	W-NH4-SPC	PR
Total Cyanide	<0.0010	----	mg/L	0.001	Cyanid (total) i vatten	Cyanid_7937,10	HU
Fluoride	<0.200	----	mg/L	0.200	Fluorid i vatten	W-F-IC	PR
Chloride	9.64	± 1.44	mg/L	1.00	Klorid i vatten	W-CL-IC	PR
Nitrate as N	0.054 *	----	mg/L	0.005	Nitrat i vatten(0,02 mg	W-IC-1/AKL	AK
Nitrate	0.239 *	----	mg/L	0.005	Nitrat i vatten(0,02 mg	W-IC-1/AKL	AK
Nitrites	<0.0050	----	mg/L	0.0050	Nitrit i vatten (SPC)	W-NO2-SPC	PR
Nitrite as N	<0.0020	----	mg/L	0.0020	Nitrit i vatten (SPC)	W-NO2-SPC	PR
Sulphate as SO4 2-	<5.00	----	mg/L	5.00	Sulfat i vatten (IC)	W-SO4-IC	PR
Halogenated Volatile Organic Compounds							
Dichloromethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1-Dichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.2-Dichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
trans-1.2-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
cis-1.2-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.2-Dichloropropane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Chloroform	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Tetrachloromethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1.1-Trichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1.2-Trichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Trichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Tetrachloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Vinyl chloride	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Physical Parameters							
Colour (True)	<5.0	----	mgPt/l	5.0	Färg	W-COL-SPC	PR
Other							
Total Organic Carbon	<0.50	----	mg/L	0.50	TOC	W-TOC-IR	PR

Sub-Matrix: DRINKING WATER	Client sample ID	R23-981-2					
	Laboratory sample ID	ST2316080-002					
	Client sampling date / time	Not specified					
Parameter	**Result**	MU	*Unit*	*LOR*	*Package*	*Method*	*Issuer*
Halogenated Volatile Organic Compounds							
Chloroform	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Bromoform	<0.20	----	µg/L	0.20	OV-10	W-VOCGMS01	PR
Dibromochloromethane	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Bromodichloromethane	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Sum of 4 Trihalomethanes (M1)	<0.250	----	µg/L	0.250	OV-10	W-VOCGMS01	PR
Sample Pre-Preparation							
Stabilisation	Yes *	----	-	-	V-2-S	W-PPV-S	LE
Total Metals/Major Cations							
Aluminum	11.3	± 1.7	µg/L	0.2	V-2	W-SFMS-5A	LE
Arsenic	0.0679	± 0.0141	µg/L	0.05	V-2	W-SFMS-5A	LE
Barium	0.0327	± 0.0063	µg/L	0.01	V-2	W-SFMS-5A	LE
Cadmium	<0.002	----	µg/L	0.002	V-2	W-SFMS-5A	LE
Calcium	4.95	± 0.62	mg/L	0.1	V-2	W-AES-1A	LE
Chromium	0.988	± 0.148	µg/L	0.01	V-2	W-SFMS-5A	LE
Cobalt	<0.005	----	µg/L	0.005	V-2	W-SFMS-5A	LE
Copper	<0.1	----	µg/L	0.1	V-2	W-SFMS-5A	LE
Iron	0.000535	± 0.000448	mg/L	0.0004	V-2	W-SFMS-5A	LE
Lead	<0.01	----	µg/L	0.01	V-2	W-SFMS-5A	LE
Magnesium	0.580	± 0.069	mg/L	0.09	V-2	W-AES-1A	LE
Manganese	<0.03	----	µg/L	0.03	V-2	W-SFMS-5A	LE
Mercury	<0.002	----	µg/L	0.002	V-2	W-AFS-17V2	LE
Molybdenum	0.0698	± 0.0112	µg/L	0.05	V-2	W-SFMS-5A	LE
Nickel	<0.05	----	µg/L	0.05	V-2	W-SFMS-5A	LE
Phosphorus	16.8	± 2.8	µg/L	1	V-2	W-SFMS-5A	LE
Potassium	<0.4	----	mg/L	0.4	V-2	W-AES-1A	LE
Silicon	6.22	± 0.72	mg/L	0.03	V-2	W-AES-1A	LE
Sodium	12.7	± 1.5	mg/L	0.1	V-2	W-AES-1A	LE
Strontium	<2	----	µg/L	2	V-2	W-AES-1A	LE
Vanadium	14.9	± 2.2	µg/L	0.005	V-2	W-SFMS-5A	LE
Zinc	<0.2	----	µg/L	0.2	V-2	W-SFMS-5A	LE
Antimony	<0.01	----	µg/L	0.01	V-2-ADD	W-SFMS-5A	LE
Boron	<10	----	µg/L	10	V-2-ADD	W-AES-1A	LE
Selenium	<0.3	----	µg/L	0.3	V-2-ADD	W-SFMS-5A	LE
Lithium	0.118 *	----	µg/L	0.050	V-2-Bas-ADD	W-SFMS-5A	LE
Sulfur	0.724	± 0.085	mg/L	0.2	V-2-S	W-AES-1A	LE
BTEX							
Benzene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Toluene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Ethylbenzene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Sum of Xylenes	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Polycyclic Aromatics Hydrocarbons (PAHs)							
Naphthalene	<0.0070	----	µg/L	0.0070	GRV-PAH	W-PAHGMS04	PR
Acenaphthylene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Acenaphthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Fluorene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Phenanthrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Anthracene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Pyrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benz(a)anthracene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Chrysene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(b)fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(k)fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR

Parameter	Result	MU	Unit	LOR	Package	Method	Issuer
Polycyclic Aromatics Hydrocarbons (PAHs) - Continued							
Benzo(a)pyrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Indeno(1.2.3.cd)pyrene	<0.00030	----	µg/L	0.00030	GRV-PAH	W-PAHGMS04	PR
Benzo(g.h.i)perylene	<0.00030	----	µg/L	0.00030	GRV-PAH	W-PAHGMS04	PR
Dibenz(a.h)anthracene	<0.00060	----	µg/L	0.00060	GRV-PAH	W-PAHGMS04	PR
Sum of carcinogenic PAH (M1)	<0.00295	----	µg/L	0.00295	GRV-PAH	W-PAHGMS04	PR
Sum of PAH L (M1)	<0.00450	----	µg/L	0.00450	GRV-PAH	W-PAHGMS04	PR
Sum of PAH M (M1)	<0.00250	----	µg/L	0.00250	GRV-PAH	W-PAHGMS04	PR
Sum of PAH H (M1)	<0.00310	----	µg/L	0.00310	GRV-PAH	W-PAHGMS04	PR
Sum of 16 PAH (M1)	<0.0101	----	µg/L	0.101	GRV-PAH	W-PAHGMS04	PR
Sum of other PAH (M1)	<0.00715	----	µg/L	0.00715	GRV-PAH	W-PAHGMS04	PR
Nonmetallic Inorganic Parameters							
Ammonia and ammonium ions as NH4	<0.050	----	mg/L	0.050	Ammonium i vatten	W-NH4-SPC	PR
Ammonia and ammonium ions as N	<0.040	----	mg/L	0.040	Ammonium i vatten	W-NH4-SPC	PR
Total Cyanide	<0.0010	----	mg/L	0.001	Cyanid (total) i vatten	Cyanid_7937,10	HU
Fluoride	<0.200	----	mg/L	0.200	Fluorid i vatten	W-F-IC	PR
Chloride	10.4	± 1.57	mg/L	1.00	Klorid i vatten	W-CL-IC	PR
Nitrate as N	0.060 *	----	mg/L	0.005	Nitrat i vatten(0,02 mg	W-IC-1/AKL	AK
Nitrate	0.266 *	----	mg/L	0.005	Nitrat i vatten(0,02 mg	W-IC-1/AKL	AK
Nitrites	<0.0050	----	mg/L	0.0050	Nitrit i vatten (SPC)	W-NO2-SPC	PR
Nitrite as N	<0.0020	----	mg/L	0.0020	Nitrit i vatten (SPC)	W-NO2-SPC	PR
Sulphate as SO4 2-	<5.00	----	mg/L	5.00	Sulfat i vatten (IC)	W-SO4-IC	PR
Halogenated Volatile Organic Compounds							
Dichloromethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1-Dichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.2-Dichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
trans-1.2-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
cis-1.2-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.2-Dichloropropane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Chloroform	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Tetrachloromethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1.1-Trichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1.2-Trichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Trichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Tetrachloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Vinyl chloride	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Physical Parameters							
Colour (True)	<5.0	----	mgPt/l	5.0	Färg	W-COL-SPC	PR
Other							
Total Organic Carbon	0.70	± 0.14	mg/L	0.50	TOC	W-TOC-IR	PR

Sub-Matrix: **DRINKING WATER**	*Client sample ID*	**R23-981-3**					
	Laboratory sample ID	*ST2316080-003*					
	Client sampling date / time	*Not specified*					
Parameter	**Result**	MU	*Unit*	*LOR*	*Package*	*Method*	*Issuer*
Halogenated Volatile Organic Compounds							
Chloroform	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Bromoform	<0.20	----	µg/L	0.20	OV-10	W-VOCGMS01	PR
Dibromochloromethane	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Bromodichloromethane	<0.10	----	µg/L	0.10	OV-10	W-VOCGMS01	PR
Sum of 4 Trihalomethanes (M1)	<0.250	----	µg/L	0.250	OV-10	W-VOCGMS01	PR
Sample Pre-Preparation							
Stabilisation	Yes *	----	-	-	V-2-S	W-PPV-S	LE
Total Metals/Major Cations							
Aluminum	22.4	± 3.3	µg/L	0.2	V-2	W-SFMS-5A	LE
Arsenic	0.0750	± 0.0147	µg/L	0.05	V-2	W-SFMS-5A	LE
Barium	0.0268	± 0.0057	µg/L	0.01	V-2	W-SFMS-5A	LE
Cadmium	<0.002	----	µg/L	0.002	V-2	W-SFMS-5A	LE
Calcium	4.58	± 0.57	mg/L	0.1	V-2	W-AES-1A	LE
Chromium	1.06	± 0.16	µg/L	0.01	V-2	W-SFMS-5A	LE
Cobalt	<0.005	----	µg/L	0.005	V-2	W-SFMS-5A	LE
Copper	<0.1	----	µg/L	0.1	V-2	W-SFMS-5A	LE
Iron	<0.0004	----	mg/L	0.0004	V-2	W-SFMS-5A	LE
Lead	0.0199	± 0.0035	µg/L	0.01	V-2	W-SFMS-5A	LE
Magnesium	0.767	± 0.091	mg/L	0.09	V-2	W-AES-1A	LE
Manganese	0.0432	± 0.0155	µg/L	0.03	V-2	W-SFMS-5A	LE
Mercury	<0.002	----	µg/L	0.002	V-2	W-AFS-17V2	LE
Molybdenum	0.0773	± 0.0123	µg/L	0.05	V-2	W-SFMS-5A	LE
Nickel	<0.05	----	µg/L	0.05	V-2	W-SFMS-5A	LE
Phosphorus	16.8	± 2.7	µg/L	1	V-2	W-SFMS-5A	LE
Potassium	<0.4	----	mg/L	0.4	V-2	W-AES-1A	LE
Silicon	6.41	± 0.75	mg/L	0.03	V-2	W-AES-1A	LE
Sodium	12.9	± 1.6	mg/L	0.1	V-2	W-AES-1A	LE
Strontium	2.59	± 0.39	µg/L	2	V-2	W-AES-1A	LE
Vanadium	16.6	± 2.5	µg/L	0.005	V-2	W-SFMS-5A	LE
Zinc	0.798	± 0.168	µg/L	0.2	V-2	W-SFMS-5A	LE
Antimony	<0.01	----	µg/L	0.01	V-2-ADD	W-SFMS-5A	LE
Boron	<10	----	µg/L	10	V-2-ADD	W-AES-1A	LE
Selenium	<0.3	----	µg/L	0.3	V-2-ADD	W-SFMS-5A	LE
Lithium	0.155 *	----	µg/L	0.050	V-2-Bas-ADD	W-SFMS-5A	LE
Sulfur	0.748	± 0.087	mg/L	0.2	V-2-S	W-AES-1A	LE
BTEX							
Benzene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Toluene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Ethylbenzene	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Sum of Xylenes	<0.2	----	µg/L	0.2	OV-5A	HS-OV-21	ST
Polycyclic Aromatics Hydrocarbons (PAHs)							
Naphthalene	<0.0070	----	µg/L	0.0070	GRV-PAH	W-PAHGMS04	PR
Acenaphthylene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Acenaphthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Fluorene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Phenanthrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Anthracene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Pyrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benz(a)anthracene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Chrysene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(b)fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(k)fluoranthene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Benzo(a)pyrene	<0.0010	----	µg/L	0.0010	GRV-PAH	W-PAHGMS04	PR
Indeno(1.2.3.cd)pyrene	<0.00030	----	µg/L	0.00030	GRV-PAH	W-PAHGMS04	PR

Parameter	Result	MU	Unit	LOR	Package	Method	Issuer
Polycyclic Aromatics Hydrocarbons (PAHs) - Continued							
Benzo(g.h.i)perylene	<0.00030	----	µg/L	0.00030	GRV-PAH	W-PAHGMS04	PR
Dibenz(a.h)anthracene	<0.00060	----	µg/L	0.00060	GRV-PAH	W-PAHGMS04	PR
Sum of carcinogenic PAH (M1)	<0.00295	----	µg/L	0.00295	GRV-PAH	W-PAHGMS04	PR
Sum of PAH L (M1)	<0.00450	----	µg/L	0.00450	GRV-PAH	W-PAHGMS04	PR
Sum of PAH M (M1)	<0.00250	----	µg/L	0.00250	GRV-PAH	W-PAHGMS04	PR
Sum of PAH H (M1)	<0.00310	----	µg/L	0.00310	GRV-PAH	W-PAHGMS04	PR
Sum of 16 PAH (M1)	<0.0101	----	µg/L	0.101	GRV-PAH	W-PAHGMS04	PR
Sum of other PAH (M1)	<0.00715	----	µg/L	0.00715	GRV-PAH	W-PAHGMS04	PR
Nonmetallic Inorganic Parameters							
Ammonia and ammonium ions as NH4	<0.050	----	mg/L	0.050	Ammonium i vatten	W-NH4-SPC	PR
Ammonia and ammonium ions as N	<0.040	----	mg/L	0.040	Ammonium i vatten	W-NH4-SPC	PR
Total Cyanide	<0.0010	----	mg/L	0.001	Cyanid (total) i vatten	Cyanid_7937,10	HU
Fluoride	<0.200	----	mg/L	0.200	Fluorid i vatten	W-F-IC	PR
Chloride	11.2	± 1.68	mg/L	1.00	Klorid i vatten	W-CL-IC	PR
Nitrate as N	0.049 *	----	mg/L	0.005	Nitrat i vatten(0,02 mg	W-IC-1/AKL	AK
Nitrate	0.217 *	----	mg/L	0.005	Nitrat i vatten(0,02 mg	W-IC-1/AKL	AK
Nitrites	<0.0050	----	mg/L	0.0050	Nitrit i vatten (SPC)	W-NO2-SPC	PR
Nitrite as N	<0.0020	----	mg/L	0.0020	Nitrit i vatten (SPC)	W-NO2-SPC	PR
Sulphate as SO4 2-	<5.00	----	mg/L	5.00	Sulfat i vatten (IC)	W-SO4-IC	PR
Halogenated Volatile Organic Compounds							
Dichloromethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1-Dichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.2-Dichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
trans-1.2-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
cis-1.2-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.2-Dichloropropane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Chloroform	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Tetrachloromethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1.1-Trichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1.2-Trichloroethane	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Trichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Tetrachloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Vinyl chloride	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
1.1-Dichloroethene	<0.1	----	µg/L	0.1	OV-6B	HS-OV-6b	ST
Physical Parameters							
Colour (True)	<5.0	----	mgPt/l	5.0	Färg	W-COL-SPC	PR
Other							
Total Organic Carbon	0.83	± 0.17	mg/L	0.50	TOC	W-TOC-IR	PR

The end of result part of the certificate of analysis

Brief Method Summaries

Analytical Methods	Method Reference
W-AES-1A	Determination of metals in fresh water, pool and drinking water by ICP-AES according to SS-EN ISO 11885:2009 and US EPA Method 200.7:1994. Samples are acidified with 1 ml high purity nitric acid per 100 ml prior to analysis. No digestion.
W-AFS-17V2	Determination of mercury (Hg) in natural water by AFS according to SS-EN ISO 17852:2008. Samples are acidified with 1 ml high purity nitric acid per 100 ml prior to analysis. No digestion.
W-PPV-S*	Stabilisation with H2O2 prior to W-AES-1A (SE-SOP-0259).
W-SFMS-5A	Determination of metals in freshwater, pool and drinking water by ICP-SFMS according to SS-EN ISO 17294-2:2016 and US EPA Method 200.8:1994. Samples are acidified with 1 ml high purity nitric acid per 100 ml prior to analysis. No digestion.
Cyanid_7937,10	Determination of cyanid total according to DS/EN ISO 14403-2:2012.
W-IC-1/AKL	Determination of dissolved fluoride, chloride, nitrite, ortho-phosfhate, bromide, nitrate and sulphate ions using liquid chromatography according to SS-EN ISO 10 304-1:2009.
W-CL-IC	CZ_SOP_D06_02_068 (CSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-COL-SPC	CZ_SOP_D06_02_079 (CSN EN ISO 7887) Determination of colour by spectrophotometry.
W-F-IC	CZ_SOP_D06_02_068 (CSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-NH4-SPC	CZ_SOP_D06_02_019 (CSN EN ISO 11732, CSN EN ISO 13395, SM 4500-NO2-, SM 4500-NO3-) Determination of sum of ammonium and ammonium ions, nitrite and the sum of nitrite and nitrate ions by discrete spectrophotometry and calculation of nitrite, nitrate, ammonia, inorganic, organic, total nitrogen, free ammonia and dissociated ammonium ions from measured values including the calculation of total mineralization
W-NO2-SPC	CZ_SOP_D06_02_019 (ČSN EN ISO 11732, ČSN EN ISO 13395, SM 4500-NO2-, SM 4500-NO3-) Determination of nitrite sum and sum of nitrite and nitrate nitrogen by discrete spectrophotometry and calculation of nitrites and nitrates from measured values
W-PAHGMS04	CZ_SOP_D06_03_161 except for chap. 10.1.3 – 10.1.5 (US EPA 8270D, US EPA 8082A, CSN EN ISO 6468, US EPA 8000D). Determination of semi volatile organic compounds by gas chromatography method with MS or MS/MS detection and calculation of semi volatile organic compounds sums from measured values
W-SO4-IC	CZ_SOP_D06_02_068 (CSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-TOC-IR	CZ_SOP_D06_02_056 (CSN EN 1484, SM 5310) Determination of total organic carbon (TOC), dissolved organic carbon (DOC), total inorganic carbon (TIC) and total carbon (TC) by IR detection.
W-VOCGMS01	CZ_SOP_D06_03_155 except chap. 10.5, 10.6 (US EPA 624, US EPA 5021A, US EPA 8260, US EPA 8015, CSN EN ISO 10301, MADEP 2004, rev. 1.1, CSN ISO 11423, CSN EN ISO 15680) Determination of volatile organic compounds by gas chromatography method with FID and MS detection and calculation of volatile organic compounds sums from measured values.
HS-OV-21	Measurement performed with headspace GC-MS according to EPA method 5021a rev. 2 update V.
HS-OV-6b	Determination of Chlorinated aliphatics (Low LOQ) in water with HS-GC-MS according to SS-EN ISO 10301:1997

Key: **LOR** = Limit of reporting represents the standard LOR for the respective parameters in each method. Note that limits of reporting may be affected if, e.g. additional dilution was required because of matrix effects, or the sample quantity was limited.

MU = Measurement Uncertainty

* = Symbol succeding any result indicates laboratory or subcontractor non-accredited test.

Measurement Uncertainty:

The uncertainty is given as extended uncertainty (according to the definition in "Guide to the Expression of Measurement", JCGM 100:2008 Corrected version 2010) calculated with a coverage factor of 2, which give 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.

Issuing lab

	Issuer
AK	*The analysis is provided by* AK-lab AB, Getängsvägen 29D Borås Sweden 50468 Accredited by: SWEDAC Accreditation Number: 1790
HU	*The analysis is provided by* ALS Denmark A/S, Bakkegårdsvej 406A Humlebæk Denmark 3050 Accredited by: DANAK Accreditation Number: 361
LE	*The analysis is provided by* ALS Scandinavia AB Luleå, Aurorum 10 Luleå Sweden 977 75 Accredited by: SWEDAC Accreditation Number: 2030, ISO/IEC 17025
PR	*The analysis is provided by* ALS Czech Republic, s.r.o., Na Harfe 336/9 Prague 9 - Vysocany Czech Republic 190 00 Accredited by: CAI Accreditation Number: 1163, CSN EN ISO/IEC 17025:2018
ST	*The analysis is provided by* ALS Scandinavia AB Danderyd, Rinkebyvägen 19C Danderyd Sweden 182 36 Accredited by: SWEDAC Accreditation Number: 2030, ISO/IEC 17025