

Eurofins Umwelt Ost GmbH - Löbstedter Strasse 78 - D-07749 Jena

**Syni Laboratory Service  
Vikurhvarf 3  
IS 203 Kopavogur  
ICELAND**

Title : **Analytical Report for Order 62228120**

Test report number : **AR-22-JE-035881-01**

Project name : **Water analysis**

Number of samples : **10**

Sample type: **water**

Sample Taker: **not specified, sample(s) were delivered to lab**

Delivery was compliant: **Yes**

Sample reception date : **2022-10-04**

Sample processing time : **2022-10-04 - 2022-10-18**

The test results refer solely to the analysed test specimen. Unless the sampling was done by our laboratory or in our sub-order the responsibility for the correctness of the sampling is disclaimed. This analytical report is only valid with signature and may only be further published completely and unchanged. Extracts or changes require the authorisation of the EUROFINS UMWELT in each individual case.

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Accredited test laboratory according to DIN EN ISO/IEC 17025:2018 DAkkS notification under the DAkkS German Accreditation System for Testing. The laboratory is according (D-PL-14081-01-00) accredited.

#### Attachments

*XML\_Export\_AR-22-JE-035881-01.xml*

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Digitally signed 10/19/2022  
Nicole Remme  
Prüfleitung



|  |     |       |                                      | Description   | 10726     | 10727     | 10728     | 10729     | 10730              | 10731     | 10733     | 10734     | 10735     |          |
|--|-----|-------|--------------------------------------|---------------|-----------|-----------|-----------|-----------|--------------------|-----------|-----------|-----------|-----------|----------|
|  |     |       |                                      | Sample number | 622140089 | 622140090 | 622140091 | 622140092 | 622140093          | 622140094 | 622140095 | 622140096 | 622140097 |          |
| Parameter                                | Lab | Accr. | Method                               | LOQ           | Unit      |           |           |           |                    |           |           |           |           |          |
| <b>Physico-chemical parameters</b>       |     |       |                                      |               |           |           |           |           |                    |           |           |           |           |          |
| Colour                                   | FR  | F5    | DIN EN ISO 7887:<br>2012-04          | 2             | mg Pt/l   | < 2       | 3         | < 2       | n.u. <sup>2)</sup> | < 2       | < 2       | < 2       | 3         | < 2      |
| <b>Anions</b>                            |     |       |                                      |               |           |           |           |           |                    |           |           |           |           |          |
| Fluoride                                 | FR  | F5    | DIN 38405-4 (D4):<br>1985-07         | 0.050         | mg/l      | 0.091     | 0.077     | < 0.050   | 0.091              | 0.066     | 0.095     | 0.069     | 0.088     | 0.081    |
| Chloride (Cl)                            | FR  | F5    | DIN EN ISO 10304-1<br>(D20): 2009-07 | 1.0           | mg/l      | 8.7       | 7.2       | 10        | 9.0                | 7.1       | 2.6       | 10        | 5.0       | 6.6      |
| Nitrate (as NO3)                         | FR  | F5    | DIN EN ISO 10304-1<br>(D20): 2009-07 | 1.0           | mg/l      | < 1.0     | < 1.0     | < 1.0     | < 1.0              | < 1.0     | < 1.0     | < 1.0     | < 1.0     | < 1.0    |
| Nitrate nitrogen (N)                     | FR  | F5    | DIN EN ISO 10304-1<br>(D20): 2009-07 | 0.25          | mg/l      | < 0.25    | < 0.25    | < 0.25    | < 0.25             | < 0.25    | < 0.25    | < 0.25    | < 0.25    | < 0.25   |
| Nitrite (as NO2)                         | FR  | F5    | DIN EN ISO 13395 (D28):<br>1996-12   | 0.050         | mg/l      | < 0.050   | < 0.050   | < 0.050   | < 0.050            | < 0.050   | < 0.050   | < 0.050   | < 0.050   | < 0.050  |
| Nitrite (as N)                           | FR  | F5    | DIN EN ISO 13395 (D28):<br>1996-12   | 0.02          | mg/l      | < 0.02    | < 0.02    | < 0.02    | < 0.02             | < 0.02    | < 0.02    | < 0.02    | < 0.02    | < 0.02   |
| Sulphates                                | FR  | F5    | DIN EN ISO 10304-1<br>(D20): 2009-07 | 1.0           | mg/l      | 7.3       | 5.8       | 26        | 3.0                | 1.2       | < 1.0     | 2.0       | 1.5       | 3.0      |
| Cyanide, total                           | FR  | F5    | DIN EN ISO 14403:<br>2012-10         | 0.005         | mg/l      | < 0.005   | < 0.005   | < 0.005   | < 0.005            | < 0.005   | < 0.005   | < 0.005   | < 0.005   | < 0.005  |
| <b>Cations</b>                           |     |       |                                      |               |           |           |           |           |                    |           |           |           |           |          |
| Ammonium                                 | FR  | F5    | DIN EN ISO 11732 (E23):<br>2005-05   | 0.06          | mg/l      | < 0.06    | < 0.06    | < 0.06    | < 0.06             | < 0.06    | < 0.06    | < 0.06    | < 0.06    | < 0.06   |
| Ammonium (NH4-N)                         | FR  | F5    | DIN EN ISO 11732 (E23):<br>2005-05   | 0.05          | mg/l      | < 0.05    | < 0.05    | < 0.05    | < 0.05             | < 0.05    | < 0.05    | < 0.05    | < 0.05    | < 0.05   |
| <b>Elements from the original sample</b> |     |       |                                      |               |           |           |           |           |                    |           |           |           |           |          |
| Aluminium                                | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.01          | mg/l      | < 0.01    | < 0.01    | < 0.01    | < 0.01             | < 0.01    | < 0.01    | < 0.01    | < 0.01    | < 0.01   |
| Antimony (Sb)                            | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.001         | mg/l      | 0.002     | 0.002     | 0.002     | 0.002              | 0.002     | 0.002     | 0.002     | 0.002     | 0.002    |
| Arsenic (As)                             | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.001         | mg/l      | < 0.001   | < 0.001   | < 0.001   | < 0.001            | < 0.001   | < 0.001   | < 0.001   | < 0.001   | < 0.001  |
| Barium (Ba)                              | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.0005        | mg/l      | 0.0049    | 0.0030    | 0.0034    | < 0.0005           | 0.0021    | 0.0022    | 0.0027    | 0.0284    | 0.0018   |
| Lead (Pb)                                | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.001         | mg/l      | < 0.001   | < 0.001   | < 0.001   | < 0.001            | < 0.001   | < 0.001   | < 0.001   | < 0.001   | < 0.001  |
| Boron (B)                                | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.02          | mg/l      | < 0.02    | < 0.02    | < 0.02    | < 0.02             | < 0.02    | < 0.02    | < 0.02    | < 0.02    | < 0.02   |
| Cadmium (Cd)                             | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.0002        | mg/l      | < 0.0002  | < 0.0002  | < 0.0002  | < 0.0002           | < 0.0002  | < 0.0002  | < 0.0002  | < 0.0002  | < 0.0002 |
| Calcium (Ca)                             | FR  | F5    | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.02          | mg/l      | 13.7      | 9.12      | 28.1      | 12.9               | 4.12      | 5.36      | 8.90      | 8.08      | 7.07     |









|           |     |       |        | Description   |      | 10736     |
|-----------|-----|-------|--------|---------------|------|-----------|
|           |     |       |        | Sample number |      | 622140098 |
| Parameter | Lab | Accr. | Method | LOQ           | Unit |           |

**Physico-chemical parameters**

|        |    |    |                             |   |         |     |
|--------|----|----|-----------------------------|---|---------|-----|
| Colour | FR | F5 | DIN EN ISO 7887:<br>2012-04 | 2 | mg Pt/l | < 2 |
|--------|----|----|-----------------------------|---|---------|-----|

**Anions**

|                      |    |    |                                      |       |      |         |
|----------------------|----|----|--------------------------------------|-------|------|---------|
| Fluoride             | FR | F5 | DIN 38405-4 (D4):<br>1985-07         | 0.050 | mg/l | 0.067   |
| Chloride (Cl)        | FR | F5 | DIN EN ISO 10304-1<br>(D20): 2009-07 | 1.0   | mg/l | 7.1     |
| Nitrate (as NO3)     | FR | F5 | DIN EN ISO 10304-1<br>(D20): 2009-07 | 1.0   | mg/l | < 1.0   |
| Nitrate nitrogen (N) | FR | F5 | DIN EN ISO 10304-1<br>(D20): 2009-07 | 0.25  | mg/l | < 0.25  |
| Nitrite (as NO2)     | FR | F5 | DIN EN ISO 13395 (D28):<br>1996-12   | 0.050 | mg/l | < 0.050 |
| Nitrite (as N)       | FR | F5 | DIN EN ISO 13395 (D28):<br>1996-12   | 0.02  | mg/l | < 0.02  |
| Sulphates            | FR | F5 | DIN EN ISO 10304-1<br>(D20): 2009-07 | 1.0   | mg/l | 4.1     |
| Cyanide, total       | FR | F5 | DIN EN ISO 14403:<br>2012-10         | 0.005 | mg/l | < 0.005 |

**Cations**

|                  |    |    |                                    |      |      |        |
|------------------|----|----|------------------------------------|------|------|--------|
| Ammonium         | FR | F5 | DIN EN ISO 11732 (E23):<br>2005-05 | 0.06 | mg/l | < 0.06 |
| Ammonium (NH4-N) | FR | F5 | DIN EN ISO 11732 (E23):<br>2005-05 | 0.05 | mg/l | < 0.05 |

**Elements from the original sample**

|               |    |    |                                      |        |      |          |
|---------------|----|----|--------------------------------------|--------|------|----------|
| Aluminium     | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.01   | mg/l | 0.01     |
| Antimony (Sb) | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.001  | mg/l | 0.002    |
| Arsenic (As)  | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.001  | mg/l | < 0.001  |
| Barium (Ba)   | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.0005 | mg/l | 0.0020   |
| Lead (Pb)     | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.001  | mg/l | < 0.001  |
| Boron (B)     | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.02   | mg/l | < 0.02   |
| Cadmium (Cd)  | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.0002 | mg/l | < 0.0002 |
| Calcium (Ca)  | FR | F5 | DIN EN ISO 17294-2<br>(E29): 2017-01 | 0.02   | mg/l | 8.30     |

|                 |     |       |                                   | Description   |      | 10736     |
|-----------------|-----|-------|-----------------------------------|---------------|------|-----------|
|                 |     |       |                                   | Sample number |      | 622140098 |
| Parameter       | Lab | Accr. | Method                            | LOQ           | Unit |           |
| Chromium (Cr)   | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.001         | mg/l | < 0.001   |
| Cobalt (Co)     | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.0002        | mg/l | < 0.0002  |
| Iron (Fe)       | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.005         | mg/l | < 0.005   |
| Potassium (K)   | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.05          | mg/l | 0.11      |
| Copper (Cu)     | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.001         | mg/l | 0.001     |
| Lithium (Li)    | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.005         | mg/l | < 0.005   |
| Magnesium (Mg)  | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.02          | mg/l | 1.20      |
| Manganese (Mn)  | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.001         | mg/l | < 0.001   |
| Molybdenum (Mo) | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.001         | mg/l | < 0.001   |
| Sodium (Na)     | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.05          | mg/l | 6.22      |
| Nickel (Ni)     | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.001         | mg/l | < 0.001   |
| Phosphorus      | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.2           | mg/l | < 0.2     |
| Mercury (Hg)    | FR  | F5    | DIN EN ISO 12846 (E12): 2012-08   | 0.0001        | mg/l | < 0.0001  |
| Sulphur (S)     | FR  | F5    | DIN EN ISO 11885 (E22): 2009-09   | 0.1           | mg/l | 1.6       |
| Selenium (Se)   | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.001         | mg/l | < 0.001   |
| Silicon (Si)    | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.01          | mg/l | 5.94      |
| Strontium (Sr)  | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.002         | mg/l | 0.004     |
| Vanadium (V)    | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.002         | mg/l | 0.004     |
| Zinc (Zn)       | FR  | F5    | DIN EN ISO 17294-2 (E29): 2017-01 | 0.002         | mg/l | 0.035     |

**Organic sum parameters**

|                            |    |    |                               |     |          |       |
|----------------------------|----|----|-------------------------------|-----|----------|-------|
| TOC (total organic carbon) | FR | F5 | DIN EN 1484: 1997-08          | 1.0 | mg/l     | < 1.0 |
| Absorbance 436 nm          | FR | F5 | DIN EN ISO 7887 (C1): 2012-04 | 0.1 | 1 unit/m | < 0.1 |



|           |     |       |        | Description   |      | 10736     |
|-----------|-----|-------|--------|---------------|------|-----------|
|           |     |       |        | Sample number |      | 622140098 |
| Parameter | Lab | Accr. | Method | LOQ           | Unit |           |

**BTEX and aromatic hydrocarbons**

|              |    |    |                                |     |      |                       |
|--------------|----|----|--------------------------------|-----|------|-----------------------|
| Benzene      | FR | F5 | DIN 38407-9 (1): 1991-05 (MSD) | 0.5 | µg/l | < 0.5                 |
| Toluene      | FR | F5 | DIN 38407-9 (1): 1991-05 (MSD) | 1.0 | µg/l | < 1.0                 |
| Ethylbenzene | FR | F5 | DIN 38407-9 (1): 1991-05 (MSD) | 1.0 | µg/l | < 1.0                 |
| m-/p-Xylene  | FR | F5 | DIN 38407-9 (1): 1991-05 (MSD) | 1.0 | µg/l | < 1.0                 |
| o-Xylene     | FR | F5 | DIN 38407-9 (1): 1991-05 (MSD) | 1.0 | µg/l | < 1.0                 |
| BTEX (sum)   | FR | F5 | DIN 38407-9 (1): 1991-05 (MSD) |     | µg/l | (n. c.) <sup>1)</sup> |

**VHHC**

|                               |    |    |                                |     |      |       |
|-------------------------------|----|----|--------------------------------|-----|------|-------|
| Vinyl chloride                | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| Dichloromethane               | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 1.0 | µg/l | < 1.0 |
| trans-1,2-Dichloroethene      | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 1.0 | µg/l | < 1.0 |
| cis-1,2-Dichloroethene        | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 1.0 | µg/l | < 1.0 |
| Chloroform (Trichloromethane) | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| 1,1,1-Trichloroethane         | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| Tetrachloromethane            | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| Trichloroethene               | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| Tetrachloroethene             | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| 1,1-Dichloroethene            | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 1.0 | µg/l | < 1.0 |
| 1,2-Dichloroethane            | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 1.0 | µg/l | < 1.0 |
| 1,1-Dichloroethane            | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 1.0 | µg/l | < 1.0 |
| 1,1,2-Trichloroethane         | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 0.5 | µg/l | < 0.5 |
| 1,1,1,2-Tetrachloroethane     | FR | F5 | DIN EN ISO 10301 (F4): 1997-08 | 2.0 | µg/l | < 2.0 |

|                                  |     |       |                                   | Description   |      | 10736                 |
|----------------------------------|-----|-------|-----------------------------------|---------------|------|-----------------------|
|                                  |     |       |                                   | Sample number |      | 622140098             |
| Parameter                        | Lab | Accr. | Method                            | LOQ           | Unit |                       |
| 1,1,2,2-tetrachloroethane        | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 2.0           | µg/l | < 2.0                 |
| 1-chloroethane                   | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 5.0           | µg/l | < 5.0                 |
| Chloromethane                    | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 5.0           | µg/l | < 5.0                 |
| sum CHC (16 parameters)          | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 |               | µg/l | (n. c.) <sup>1)</sup> |
| sum HVOC (16) +<br>vinylchloride | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 |               | µg/l | (n. c.) <sup>1)</sup> |
| 1,2-Dichloropropane              | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 0.5           | µg/l | < 0.5                 |
| Bromodichloromethane             | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 0.5           | µg/l | < 0.5                 |
| Dibromochloromethane             | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 0.5           | µg/l | < 0.5                 |
| Tribromomethane                  | FR  | F5    | DIN EN ISO 10301 (F4):<br>1997-08 | 1.0           | µg/l | < 1.0                 |
| Sum of Trihalomethanes           | FR  | F5    | berechnet                         |               | µg/l | (n. c.) <sup>1)</sup> |

|                                |     |       |                                | Description   |      | 10736                 |
|--------------------------------|-----|-------|--------------------------------|---------------|------|-----------------------|
|                                |     |       |                                | Sample number |      | 622140098             |
| Parameter                      | Lab | Accr. | Method                         | LOQ           | Unit |                       |
| <b>PAH</b>                     |     |       |                                |               |      |                       |
| Naphthalene                    | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.05          | µg/l | < 0.05                |
| Acenaphthylene                 | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.05          | µg/l | < 0.05                |
| Acenaphthene                   | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.05          | µg/l | < 0.05                |
| Fluorene                       | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.05          | µg/l | < 0.05                |
| Phenanthrene                   | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.05          | µg/l | < 0.05                |
| Anthracene                     | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Fluoranthene                   | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Pyrene                         | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Benz(a)anthracene              | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Chrysene                       | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Benzo(b)fluoranthene           | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Benzo(k)fluoranthene           | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Benzo(a)pyrene                 | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Indeno(1,2,3-cd)pyrene         | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Dibenz(a,h)anthracene          | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Benzo(g,h,i)perylene           | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 | 0.01          | µg/l | < 0.01                |
| Total 16 EPA-PAH excl. LOQ     | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 |               | µg/l | (n. c.) <sup>1)</sup> |
| Sum 15 PAH without naphthalene | FR  | F5    | DIN 38407-39 (F39):<br>2011-09 |               | µg/l | (n. c.) <sup>1)</sup> |

## Explanations

LOQ - Limit of quantification

Lab - Abbreviation of the performing laboratory

Accr. - Abbreviation of the accreditation of the performing laboratory

Comments for results

<sup>1)</sup> not calculable

<sup>2)</sup> not analysed

The parameters identified by FR have been performed by the laboratory Eurofins Umwelt Ost GmbH (Lindenstraße 11, Gewerbegebiet Freiberg Ost, Bobritzsch-Hilbersdorf). The accreditation code F5 identifies the parameters accredited according to DIN EN ISO/IEC 17025:2018 DAkkS D-PL-14081-01-00 .