



## Bulletin d'analyse des échantillons: BG07488 - BG07497

Référence du Laboratoire: 2019-11-20-018-ES

Adresse destinataire

Requérant: **M. Claude NEUBERG**

Reçu le: **20/11/2019**

Début de l'analyse: **20/11/2019**

Objet de l'analyse: **contr. affluents**

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Ce rapport comporte **52** pages et ne peut être reproduit partiellement sans accord explicite du Laboratoire.

Les résultats ne se rapportent qu'aux objets soumis à l'analyse.

Le laboratoire n'est pas responsable pour les informations fournies par le client. Celles-ci peuvent affecter la validité des résultats.

Dans le cas où le laboratoire n'a pas été chargé de l'étape d'échantillonnage, les résultats s'appliquent à l'échantillon tel qu'il a été reçu.

### Lexique:

|      |                                                       |
|------|-------------------------------------------------------|
| #    | méthode sous accréditation                            |
| §    | valeur-guide                                          |
| S    | paramètre mesuré en sous-traitance                    |
| n.d. | paramètre non déterminé suite à un problème technique |
| v.c. | voir commentaire                                      |



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112010A03-7</b>   | <b>SURE - pont Misère - Feschleeder</b>      |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07488</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>11:05</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>35</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.4</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.5</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>166</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.9</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>98</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>2.1</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>4.6</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.09</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.05</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.02</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>23</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>20</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>11</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>4.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.4</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>13</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.03</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.3</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>4.8</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.9</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>4.8</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.039     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0004    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.015     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.008     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00097   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.112     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.038     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0027    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.18      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0004    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.277       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.018       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.008       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0007      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.001       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.38        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.047       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0032      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.91      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0007    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 74   | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 28   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112013A01</b>     | <b>DIRBECH - amont Grondmillen</b>           |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07489</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:30</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>27</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.5</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.5</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>198</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>12.2</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.3</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.5</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.4</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.02</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.02</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.02</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>16</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>51</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>15</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>15</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.9</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>11</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.03</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.1</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>13</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.1</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.5</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.014     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.019     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.011     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00039   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.004     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0019    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.04      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.231       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.022       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0005      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.24        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.015       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0024      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |





métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.94      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0005    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.004     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

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|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxypop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxypop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 294  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | 98   | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 32   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                                          |
|-------------------------|-----------------------|----------------------------------------------------------|
| Votre référence         | <b>L112014A02</b>     | <b>NINGSERBAACH - Schéimelzerbesch - aval Neunhausen</b> |
| Nature de l'échantillon | <b>eau de surface</b> |                                                          |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                                         |
| N° échantillon          | <b>BG07490</b>        | <b>échant. hors accréditation - ponctuel</b>             |
|                         |                       | date de début des analyses <b>20/11/2019</b>             |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:00</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>-1</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>22</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.1</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.5</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>209</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>12.4</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>101</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.3</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.4</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.1</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.04</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.04</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.03</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>21</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>49</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>14</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.1</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>12</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.03</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.0</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>13</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.2</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.4</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.015     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.017     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.011     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00055   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.016     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.007     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.002     | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.94      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.004     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.158       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.019       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.011       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.163       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.013       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0025      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.42      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0004    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | 34   | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

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|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxypop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxypop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 216  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | 64   | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 27   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB





|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112020A01</b>     | <b>SCHWAERZERBAACH - amont emb. SURE</b>     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07491</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:00</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>80</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.6</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>141</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>12.2</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>101</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.3</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.5</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>4.5</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.06</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.04</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.01</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>13</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>28</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>9.8</b>      | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>4.9</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.1</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>8.4</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.04</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.4</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>7.0</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.5</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>4.6</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.023     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.006     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.009     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00074   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.024     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.007     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0009    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.00      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.006     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.541       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.011       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0013      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.004       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.57        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.038       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0019      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0012      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.45      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0009    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.018     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

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|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 106  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112021A01</b>     | <b>BILDREFERBAACH - Neimillen</b>            |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07492</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:30</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>34</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>7.1</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>217</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.7</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.9</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.1</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.12</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.10</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.08</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>14</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>55</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>18</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>18</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.3</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>5.9</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>9.8</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.10</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.0</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>14</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.5</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.8</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0004    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.014     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.015     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00082   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.008     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.002     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0015    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.00      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.005     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.094       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.016       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.015       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.101       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.008       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0017      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.49      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0004    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.008     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | 55   | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

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|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 65   | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | 28   | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | 79         | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | 13         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112022A01</b>     | <b>BAUSCHELBAACH - amont embouchure SURE</b> |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07493</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:50</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>-1</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>30</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>7.7</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.4</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>223</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.5</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.8</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.6</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.09</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.12</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.07</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>18</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>45</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>25</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>16</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.3</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.3</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>15</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.11</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.1</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>12</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.2</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.8</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.021     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0004    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.011     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.016     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00118   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.019     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.009     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0016    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.40      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0006    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.009     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.358       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.014       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.017       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0009      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.002       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.354       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.023       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0022      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.29      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.001     | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.013     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | 58   | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 85   | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 64   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | 11   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | 11         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112029A01</b>     | <b>BURBICH - Arsdorf</b>                     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07494</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:39</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>27</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.7</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.3</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>251</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.9</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.3</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.7</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.2</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.02</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.02</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.02</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>27</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>58</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>16</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>17</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.2</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.2</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>17</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.8</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>15</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.4</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.7</b>      | mg/l   |                     |





## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.024     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.013     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00066   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.02      | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.011     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0024    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.68      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.192       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.027       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.014       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.209       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.019       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0029      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.18      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0005    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | 86   | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxypop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxypop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 363  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | 80   | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 46   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112030A01</b>     | <b>MECHELBAACH - Neunhausen</b>              |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07495</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:45</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>-1</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>37</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.9</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.1</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>197</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>12.0</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.3</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.3</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.3</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.02</b> | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.01</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>15</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>55</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>15</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>15</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.2</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.6</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>9.7</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.9</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>14</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>1.9</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.3</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.017     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.024     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.01      | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00049   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.011     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.006     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0025    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.80      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.265       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.026       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.011       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0005      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.254       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.016       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0031      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.48      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0005    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | 41   | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 309  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | 130  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 34   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |





|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112038A01</b>     | <b>FENSTERBAACH – amont dépôt P&amp;CH</b>   |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07496</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité     | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|-----------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |           |                     |
| Heure du prélèvement                            |      |                       | <b>08:10</b>    | hh:mm     |                     |
| Météo                                           |      |                       | <b>variable</b> |           |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C        |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |           |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |           |                     |
| Turbidité                                       |      | ISO 7027              | <b>4.5</b>      | FNU       |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>6.7</b>      | °C        |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>      |           |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>165</b>      | µS/cm     |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.7</b>     | mg/l      |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>      | %         |                     |
| <b>Microbiologie</b>                            |      |                       |                 |           |                     |
| Escherichia coli NPP                            | #    | ISO 9308-3            | <b>30</b>       | NPP/100ml |                     |
| Entérocoques intestinaux NPP                    | #    | ISO 7899-1            | <b>&lt;15</b>   | NPP/100ml |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |           |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.2</b>      | mval/l    |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.1</b>      | d°fr      |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.6</b>      | d°fr      |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.02</b> | mg/l      |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b> | mg/l      |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l      |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>&lt;5</b>    | mg/l      |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>56</b>       | mg/l      |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>19</b>       | mg/l      |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>       | mg/l      |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.5</b>      | mg/l      |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>&lt;2</b>    | mg/l      |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>3.8</b>      | mg/l      |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l      |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.9</b>      | mg/l      |                     |



|             |   |              |     |      |
|-------------|---|--------------|-----|------|
| Azote total | # | DIN EN 12260 | 15  | mg/l |
| DOC         | # | ISO 8245     | 1.4 | mg/l |
| TOC         | # | ISO 8245     | 1.5 | mg/l |

#### Métaux Dissous

|                           |   |               |           |      |
|---------------------------|---|---------------|-----------|------|
| métaux dissous par ICP-MS | # |               |           |      |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.005    | mg/l |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0001   | mg/l |
| Baryum dissous            | # | ISO 17294-1/2 | 0.005     | mg/l |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l |
| Bore dissous              | # | ISO 17294-1/2 | 0.009     | mg/l |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.00025  | mg/l |
| Fer dissous               | # | ISO 17294-1/2 | <0.005    | mg/l |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.001     | mg/l |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0019    | mg/l |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l |
| Silicium dissous          | # | ISO 17294-1/2 | 3.31      | mg/l |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium dissous          | # | ISO 17294-1/2 | <0.0001   | mg/l |
| Zinc dissous              | # | ISO 17294-1/2 | 0.002     | mg/l |

#### Métaux Totaux

|                          |   |               |             |      |
|--------------------------|---|---------------|-------------|------|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l |
| métaux totaux par ICP-MS | # |               |             |      |
| Aluminium                | # | ISO 17294-1/2 | 0.069       | mg/l |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l |
| Baryum                   | # | ISO 17294-1/2 | 0.007       | mg/l |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l |
| Chrome                   | # | ISO 17294-1/2 | <0.0005     | mg/l |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l |
| Fer                      | # | ISO 17294-1/2 | 0.059       | mg/l |
| Manganèse                | # | ISO 17294-1/2 | 0.004       | mg/l |



| métaux totaux par ICP-MS |   |               |           |      |
|--------------------------|---|---------------|-----------|------|
|                          | # |               |           |      |
| Nickel                   | # | ISO 17294-1/2 | 0.0022    | mg/l |
| Plomb                    | # | ISO 17294-1/2 | <0.0005   | mg/l |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005   | mg/l |
| Silicium                 | # | ISO 17294-1/2 | 4.24      | mg/l |
| Uranium                  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium                 | # | ISO 17294-1/2 | 0.0001    | mg/l |
| Zinc                     | # | ISO 17294-1/2 | 0.003     | mg/l |

## Organique

| PESTICIDES            |   |              |      |      |
|-----------------------|---|--------------|------|------|
| par LCMSMS            |   |              |      |      |
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |



|                      |   |              |      |      |
|----------------------|---|--------------|------|------|
| Flusilazole          |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron        |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate          | # | ISO 16308    | <25  | ng/l |
| Glyphosate           | # | ISO 16308    | <25  | ng/l |
| Haloxyfop            |   | DIN 38407-35 | <25  | ng/l |
| Haloxyfop-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid         |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon          | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben             |   | DIN 38407-35 | <25  | ng/l |
| Linuron              |   | DIN 38407-35 | <25  | ng/l |
| MCPA                 |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop             |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor          | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA      |   | DIN 38407-35 | 824  | ng/l |
| Metazachlor-OXA      |   | DIN 38407-35 | 118  | ng/l |
| Methiocarb           |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl  |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor          | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA      |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA      |   | DIN 38407-35 | <25  | ng/l |
| Monuron              | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid |   | DIN 38407-35 | <25  | ng/l |
| Napropamide          |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon            |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid           | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz           |   | DIN 38407-35 | <25  | ng/l |
| Propachlor           |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb         |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac            | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen           |   | DIN 38407-35 | <25  | ng/l |
| Simazine             | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione          |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole         |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione          |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine       | # | DIN 38407-35 | <5   | ng/l |



|                        |   |              |     |      |
|------------------------|---|--------------|-----|------|
| Terbutylazine-desethyl | # | DIN 38407-35 | <25 | ng/l |
| Terbutryne             |   | DIN 38407-35 | <10 | ng/l |
| Thiacloprid            |   | DIN 38407-35 | <10 | ng/l |
| Thiametoxam            |   | DIN 38407-35 | <25 | ng/l |
| Triallate              |   | DIN 38407-35 | <25 | ng/l |
| MEDICAMENTS            |   | par LCMSMS   |     |      |
| Carbamazepin           |   | DIN 38407-35 | <25 | ng/l |
| Diclofenac (free acid) |   | DIN 38407-35 | <5  | ng/l |
| Ibuprofen              |   | DIN 38407-35 | <25 | ng/l |
| Ketoprofen             | # | DIN 38407-35 | <25 | ng/l |
| Lidocaine              |   | DIN 38407-35 | <25 | ng/l |

Observations : Néant

Résultats validés le 13/12/2019 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112010A04</b>     | <b>SÛRE - amont Esch/Sûre</b>                |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>20/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07497</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>20/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>07:45</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>-1</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>9.8</b>      | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>8.3</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>8.0</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>187</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.8</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>95</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.5</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>2.5</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>5.0</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.10</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.07</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.01</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>17</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>17</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>12</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>4.9</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.3</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>10</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.04</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.7</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>4.2</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.0</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.5</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.019     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0004    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.016     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.009     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00068   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.073     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.085     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0016    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.18      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.001     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.14        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.019       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.217       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.104       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0018      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |





métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 2.95      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0004    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.002     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxypop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxypop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 66   | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 02/12/2019 par MB



## Appréciation:

Néant.

Les résultats ne tiennent pas compte des incertitudes de mesure. Des renseignements supplémentaires sur les méthodes d'analyse et les incertitudes sont disponibles sur simple demande.

### Informations spécifiques concernant les eaux potables:

L'appréciation concernant une eau potable se rapporte au règlement grand-ducal modifié du 7 octobre 2002 relatif à la qualité des eaux destinées à la consommation humaine.

Les résultats bactériologiques sont à interpréter selon la norme ISO 8199:

|     |                                                                |
|-----|----------------------------------------------------------------|
| <1  | : organismes non-détectés dans le volume étudié                |
| 1-3 | : organismes présents dans le volume étudié                    |
| 4-9 | : nombre estimatif d'organismes présents dans le volume étudié |

### Informations spécifiques concernant les eaux de surface:

Les normes de qualité environnementale se basent sur le règlement grand-ducal du 15 janvier 2016 relatif à l'évaluation de l'état des masses d'eau de surface et sont exprimées en valeur moyenne annuelle.

Les normes suivantes sont appliquées aux échantillonnages sous accréditation:

|             |                                                                                          |
|-------------|------------------------------------------------------------------------------------------|
| ISO 19458   | : analyses microbiologiques                                                              |
| ISO 5667-1  | : techniques d'échantillonnage                                                           |
| ISO 5667-3  | : conservation et manipulation des échantillons                                          |
| ISO 5667-5  | : échantillonnage de l'eau potable des usines de traitement et du réseau de distribution |
| ISO 5667-6  | : rivières et cours d'eau                                                                |
| ISO 5667-10 | : eaux usées                                                                             |



## Bulletin d'analyse des échantillons: BG07524 - BG07533

Référence du Laboratoire: 2019-11-21-007-ES

Adresse destinataire

Requérant: **M. Claude NEUBERG**

Reçu le: **21/11/2019**

Début de l'analyse: **21/11/2019**

Objet de l'analyse: **contr. affluents**

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Ce rapport comporte **52** pages et ne peut être reproduit partiellement sans accord explicite du Laboratoire.

Les résultats ne se rapportent qu'aux objets soumis à l'analyse.

Le laboratoire n'est pas responsable pour les informations fournies par le client. Celles-ci peuvent affecter la validité des résultats.

Dans le cas où le laboratoire n'a pas été chargé de l'étape d'échantillonnage, les résultats s'appliquent à l'échantillon tel qu'il a été reçu.

### Lexique:

|      |                                                       |
|------|-------------------------------------------------------|
| #    | méthode sous accréditation                            |
| §    | valeur-guide                                          |
| S    | paramètre mesuré en sous-traitance                    |
| n.d. | paramètre non déterminé suite à un problème technique |
| v.c. | voir commentaire                                      |



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112018A01</b>     | <b>SYRBACH - aval Rommelerkräiz-LB177</b>    |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07524</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:40</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>30</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>6.3</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.5</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>148</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.8</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.9</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>5.1</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.04</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.04</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>12</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>27</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>12</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>5.0</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.1</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>7.7</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.8</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>6.9</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.3</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.7</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.027     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.008     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.01      | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00107   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.054     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.013     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0019    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.51      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.005     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.489       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.001       | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.008       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.61        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.042       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0032      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0008      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.38      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0009    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.009     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016





|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-méthyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 58   | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-méthyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 40   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112010A01</b>     | <b>SÛRE - Martelange</b>                     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07525</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:40</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>25</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.5</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.6</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>144</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.8</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.8</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>4.6</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.05</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.04</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.01</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>15</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>21</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>11</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>11</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>4.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.1</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>8.4</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.04</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.1</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>5.6</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.9</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.6</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.029     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.016     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.008     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00088   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.066     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.028     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0026    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.33      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.331       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.02        | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.008       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0009      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.003       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.453       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.048       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0037      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.44      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0007    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.006     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 121  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 37   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112015A01</b>     | <b>BÉIWENERBAACH - Bavigne</b>               |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07526</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:40</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>-1</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>moyen</b>    |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>19</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.6</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.6</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>153</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.9</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.5</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>2.4</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>5.2</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.04</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.04</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>13</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>28</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>11</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>11</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>5.9</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.0</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>8.9</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.4</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>7.2</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.0</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.6</b>      | mg/l   |                     |





## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.036     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.009     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.01      | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00075   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.079     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.017     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0022    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.43      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.002     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.318       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.011       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0007      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.001       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.41        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.042       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.003       | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.13      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0008    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.006     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxypop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxypop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                                  |
|-------------------------|-----------------------|--------------------------------------------------|
| Votre référence         | <b>L112019A01</b>     | <b>FROUMICHT - Mansgröndschén-amont emb.SURE</b> |
| Nature de l'échantillon | <b>eau de surface</b> |                                                  |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                                 |
| N° échantillon          | <b>BG07527</b>        | <b>échant. hors accréditation - ponctuel</b>     |
|                         |                       | date de début des analyses <b>21/11/2019</b>     |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:20</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>1</b>          | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>       |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>20</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>6.8</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>155</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.5</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.3</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.5</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>5.6</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.02</b>       | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.03</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.02</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>9.1</b>        | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>39</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>5.1</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.4</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>5.8</b>        | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.03</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.9</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>11</b>         | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.4</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.8</b>        | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.018     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.02      | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.01      | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00075   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.011     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.005     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0012    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.97      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.004     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.207       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.024       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0005      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.001       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.211       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.017       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0019      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.64      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0006    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.006     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

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|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 247  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | 37   | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |





|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                                      |
|-------------------------|-----------------------|------------------------------------------------------|
| Votre référence         | <b>L112023A01</b>     | <b>HAMICHTERBAACH - Fuussekaul - amont emb. SURE</b> |
| Nature de l'échantillon | <b>eau de surface</b> |                                                      |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                                     |
| N° échantillon          | <b>BG07528</b>        | <b>échant. hors accréditation - ponctuel</b>         |
|                         |                       | date de début des analyses <b>21/11/2019</b>         |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:10</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>1</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>moyen</b>    |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>29</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>6.4</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.8</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>199</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.8</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.8</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.1</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.03</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.02</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>18</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>42</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>17</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>&lt;2</b>    | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>14</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.9</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>11</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.1</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.7</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.015     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.004     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.01      | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00042   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.015     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.003     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0008    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.31      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.002     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.268       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.006       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.01        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.262       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.015       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0014      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.03      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0005    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.004     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

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|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxypop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxypop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 32   | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 36   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112024A01</b>     | <b>BEMICHT - Huuscht, près de Liefrange</b>  |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07529</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:20</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>          | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>       |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>29</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.7</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>209</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.9</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>        | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.8</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>4.1</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.8</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.06</b>       | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.05</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b>   | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>23</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>23</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>14</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.9</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.2</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>16</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b>   | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.0</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>5.8</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>4.7</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>5.5</b>        | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.04      | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.014     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00138   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.118     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.02      | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0028    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.58      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | 0.000036  | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.002     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.51        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.015       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.013       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0011      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.002       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.648       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.044       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0039      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0005      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |





métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.26      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.001     | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005     | mg/l |

**Organique**

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |

cc: SYND-SEBES

longnew20151016



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                |                                             |                                       |
|-------------------------|----------------|---------------------------------------------|---------------------------------------|
| Votre référence         | L112025A01     | LAANGEGRONN - Haardschleedchen-aval Bavigne |                                       |
| Nature de l'échantillon | eau de surface |                                             |                                       |
| prélevé le              | 21/11/2019     | par SEBES                                   | échant. hors accréditation - ponctuel |
| N° échantillon          | BG07530        | date de début des analyses 21/11/2019       |                                       |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:30</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>          | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>       |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>30</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.4</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.6</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>173</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.8</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>98</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.7</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>3.6</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.7</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.04</b>       | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.05</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b>   | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>9.6</b>        | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>32</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>13</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.5</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.6</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>7.0</b>        | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b>   | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.1</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>8.2</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>4.6</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>5.0</b>        | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.039     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00113   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.116     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.015     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0027    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.28      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.443       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.015       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0008      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.002       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.546       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.035       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0037      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.11      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0008    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.006     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | 36   | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH





|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112027A01</b>     | <b>BELLERBAACH - Bauscheltermillen</b>       |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07531</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:50</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>1</b>          | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>       |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>22</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>7.3</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.9</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>262</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.6</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>        | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.8</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>4.0</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>9.0</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.06</b>       | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.20</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.23</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>13</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>46</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>32</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>25</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.6</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>7.7</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>13</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.24</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.0</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>12</b>         | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.7</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.9</b>        | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.017     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0013    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.01      | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.028     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00133   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.017     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.004     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0012    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 4.35      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | 0.000073  | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0013    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.007     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercuré                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.179       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0013      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.03        | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0007      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.002       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.216       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.021       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0017      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |          |      |
|----------|---|---------------|----------|------|
| Silicium | # | ISO 17294-1/2 | 5.05     | mg/l |
| Uranium  | # | ISO 17294-1/2 | 0.000068 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0015   | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.01     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | 208  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 129  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | 20   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | 202        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | 41         | ng/l |
| Ibuprofen              | DIN 38407-35   | 103        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112010A02</b>     | <b>SÛRE - Moulin de Bigonville</b>           |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07532</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:00</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>1</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>27</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>5.7</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.6</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>150</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>12.0</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.8</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>4.9</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.05</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.05</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.02</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>15</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>24</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>12</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>4.6</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.2</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>8.8</b>      | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.0</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>5.9</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.0</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>3.4</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.027     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.016     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.009     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00086   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.058     | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.017     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.0021    | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.58      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0003    | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.003     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.387       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.018       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.008       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.0009      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.004       | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.513       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.047       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0033      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 4.09      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0008    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.007     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |





|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-methyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 102  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-methyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 35   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112039A01</b>     | <b>MANDELBAACH – Kaundorf</b>                |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>21/11/2019</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BG07533</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>21/11/2019</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:00</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>variable</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>0</b>        | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>fort</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>12</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>8.3</b>      | °C     |                     |
| pH                                              |      | ISO 10523             | <b>8.0</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>257</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>11.2</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>101</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.2</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>1.0</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.2</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.02</b> | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b> | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>27</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>74</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>15</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.5</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.7</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>20</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>&lt;0.03</b> | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.8</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>20</b>       | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>1.8</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.1</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |           |      |   |
|---------------------------|---|---------------|-----------|------|---|
| métaux dissous par ICP-MS | # |               |           |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | 0.008     | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001    | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0001    | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.013     | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.012     | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.0005   | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.00054   | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.005    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.002     | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | 0.007     | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.00025  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.41      | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.000025 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | <0.0001   | mg/l | : |
| Zinc dissous              | # | ISO 17294-1/2 | 0.004     | mg/l | : |

## Métaux Totaux

|                          |   |               |             |      |   |
|--------------------------|---|---------------|-------------|------|---|
| Type de minéralisation   | # | ISO 15587-2   | sys. ouvert |      |   |
| Mercure                  | # | ISO 17852     | <0.020      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.162       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.015       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.000025   | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.0005     | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.16        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | 0.0088      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0005      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |           |      |
|----------|---|---------------|-----------|------|
| Silicium | # | ISO 17294-1/2 | 3.89      | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.000025 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0003    | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005     | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| Acetamiprid           |   | DIN 38407-35 | <25  | ng/l |
| Alachlore             |   | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | <25  | ng/l |
| Atrazine              | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-2-hydroxy    | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desethyl     | # | DIN 38407-35 | <25  | ng/l |
| Atrazine-desisopropyl |   | DIN 38407-35 | <25  | ng/l |
| Azoxystrobin          |   | DIN 38407-35 | <25  | ng/l |
| Bentazone             |   | DIN 38407-35 | <25  | ng/l |
| Bromacil              |   | DIN 38407-35 | <25  | ng/l |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Chlorpyrifos-ethyl    |   | DIN 38407-35 | <10  | ng/l |
| Clothianidin          |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Cybutryne             |   | DIN 38407-35 | <5   | ng/l |
| Dichlorvos            |   | DIN 38407-35 | <5   | ng/l |
| Diflufenican          |   | DIN 38407-35 | <2.5 | ng/l |
| Dimethenamid          | # | DIN 38407-35 | <25  | ng/l |
| Dimethoate            |   | DIN 38407-35 | <25  | ng/l |
| Diuron                |   | DIN 38407-35 | <25  | ng/l |
| Epoxyconazole         |   | DIN 38407-35 | <25  | ng/l |
| Fluazifop-P           |   | DIN 38407-35 | <25  | ng/l |
| Flufenacet            |   | DIN 38407-35 | <10  | ng/l |
| Flurtamone            | # | DIN 38407-35 | <25  | ng/l |
| Flusilazole           |   | DIN 38407-35 | <25  | ng/l |
| Foramsulfuron         |   | DIN 38407-35 | <25  | ng/l |
| Glufosinate           | # | ISO 16308    | <25  | ng/l |



|                         |   |              |      |      |
|-------------------------|---|--------------|------|------|
| Glyphosate              | # | ISO 16308    | <25  | ng/l |
| Haloxifop               |   | DIN 38407-35 | <25  | ng/l |
| Haloxifop-méthyl        |   | DIN 38407-35 | <25  | ng/l |
| Imidacloprid            |   | DIN 38407-35 | <2.5 | ng/l |
| Isoproturon             | # | DIN 38407-35 | <25  | ng/l |
| Isoxaben                |   | DIN 38407-35 | <25  | ng/l |
| Linuron                 |   | DIN 38407-35 | <25  | ng/l |
| MCPA                    |   | DIN 38407-35 | <25  | ng/l |
| Mecoprop                |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor             | # | DIN 38407-35 | <5   | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25  | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Methiocarb              |   | DIN 38407-35 | <2.5 | ng/l |
| Methsulfuron-méthyl     |   | DIN 38407-35 | <25  | ng/l |
| Metolachlor             | # | DIN 38407-35 | <25  | ng/l |
| Metolachlor-ESA         |   | DIN 38407-35 | 72   | ng/l |
| Metolachlor-OXA         |   | DIN 38407-35 | <25  | ng/l |
| Monuron                 | # | DIN 38407-35 | <25  | ng/l |
| N,N-Dimethylsulfamid    |   | DIN 38407-35 | <25  | ng/l |
| Napropamide             |   | DIN 38407-35 | <25  | ng/l |
| Nicosulfuron            |   | DIN 38407-35 | <25  | ng/l |
| Oxadiazon               |   | DIN 38407-35 | <25  | ng/l |
| Pethoxamid              | # | DIN 38407-35 | <25  | ng/l |
| Prochloraz              |   | DIN 38407-35 | <25  | ng/l |
| Propachlor              |   | DIN 38407-35 | <25  | ng/l |
| Prosulfocarb            |   | DIN 38407-35 | <25  | ng/l |
| Quinmerac               | # | DIN 38407-35 | <25  | ng/l |
| Quinoxifen              |   | DIN 38407-35 | <25  | ng/l |
| Simazine                | # | DIN 38407-35 | <25  | ng/l |
| Sulcotrione             |   | DIN 38407-35 | <25  | ng/l |
| Tebuconazole            |   | DIN 38407-35 | <25  | ng/l |
| Tembotrione             |   | DIN 38407-35 | <25  | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <5   | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25  | ng/l |
| Terbutryne              |   | DIN 38407-35 | <10  | ng/l |
| Thiacloprid             |   | DIN 38407-35 | <10  | ng/l |



|                        |                |            |      |
|------------------------|----------------|------------|------|
| Thiametoxam            | DIN 38407-35   | <25        | ng/l |
| Triallate              | DIN 38407-35   | <25        | ng/l |
| MEDICAMENTS            |                | par LCMSMS |      |
| Carbamazepin           | DIN 38407-35   | <25        | ng/l |
| Diclofenac (free acid) | DIN 38407-35   | <5         | ng/l |
| Ibuprofen              | DIN 38407-35   | <25        | ng/l |
| Ketoprofen             | # DIN 38407-35 | <25        | ng/l |
| Lidocaine              | DIN 38407-35   | <25        | ng/l |

Observations : Néant

Résultats validés le 03/12/2019 par JH



## Appréciation:

Néant

Les résultats ne tiennent pas compte des incertitudes de mesure. Des renseignements supplémentaires sur les méthodes d'analyse et les incertitudes sont disponibles sur simple demande.

### Informations spécifiques concernant les eaux potables:

L'appréciation concernant une eau potable se rapporte au règlement grand-ducal modifié du 7 octobre 2002 relatif à la qualité des eaux destinées à la consommation humaine.

Les résultats bactériologiques sont à interpréter selon la norme ISO 8199:

|     |                                                                |
|-----|----------------------------------------------------------------|
| <1  | : organismes non-détectés dans le volume étudié                |
| 1-3 | : organismes présents dans le volume étudié                    |
| 4-9 | : nombre estimatif d'organismes présents dans le volume étudié |

### Informations spécifiques concernant les eaux de surface:

Les normes de qualité environnementale se basent sur le règlement grand-ducal du 15 janvier 2016 relatif à l'évaluation de l'état des masses d'eau de surface et sont exprimées en valeur moyenne annuelle.

Les normes suivantes sont appliquées aux échantillonnages sous accréditation:

|             |                                                                                          |
|-------------|------------------------------------------------------------------------------------------|
| ISO 19458   | : analyses microbiologiques                                                              |
| ISO 5667-1  | : techniques d'échantillonnage                                                           |
| ISO 5667-3  | : conservation et manipulation des échantillons                                          |
| ISO 5667-5  | : échantillonnage de l'eau potable des usines de traitement et du réseau de distribution |
| ISO 5667-6  | : rivières et cours d'eau                                                                |
| ISO 5667-10 | : eaux usées                                                                             |