



## Bulletin d'analyse des échantillons: BF06075 - BF06082

Référence du Laboratoire: 2018-10-24-009-ES

Adresse destinataire

Requérant: **M. Claude NEUBERG**

Reçu le: **24/10/2018**

Début de l'analyse: **24/10/2018**

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

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Ce rapport comporte **26** pages et ne peut être reproduit partiellement sans accord explicite du Laboratoire.

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

### 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>24/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06075</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>24/10/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:33</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>10</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>9.6</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>6.2</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>222</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.9</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>92</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.1</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>5.7</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.7</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.02</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.07</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>25</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>9.8</b>        | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>18</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.8</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.2</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>15</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.09</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>2.4</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>4.4</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0005  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.009   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.020   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0011  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.09    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.011   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.39    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.10        | 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 | 0.010       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.018       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.28        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.016       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 2.86    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| AMPA                  | # | ISO 16308    | 227  | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | 61         | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112010A01</b>     | <b>SÛRE - Martelange</b>                     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>24/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06076</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>24/10/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:45</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>9</b>          | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>14</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>9.6</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.4</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>183</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.7</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>98</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.0</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>5.1</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.3</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</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>22</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>      | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>10</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>15</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.1</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.8</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>11</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.05</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>2.0</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.1</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>4.7</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.030   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.014   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.09    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.026   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 1.50    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.16        | 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 | 0.039       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.014       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.37        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.081       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 2.30    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| AMPA                  | # | ISO 16308    | 30   | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 | 102  | ng/l |

cc: SYND-SEBES

longnew20151016





|                         |   |              |            |      |
|-------------------------|---|--------------|------------|------|
| Mecoprop                |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor             | # | DIN 38407-35 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112015A01</b>     | <b>BÉIWENERBAACH - Bavigne</b>               |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>24/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06077</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>24/10/2018</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>pluvieux</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>8.2</b>      | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>10.1</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>6.5</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>225</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.9</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>87</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.5</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>7.3</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>8.3</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.22</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.07</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.07</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>24</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>    | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>11</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>17</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>9.8</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.5</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>1.6</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.2</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>6.8</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>6.9</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |         |      |   |
|---------------------------|---|---------------|---------|------|---|
| métaux dissous par ICP-MS | # |               |         |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.010   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.019   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0001  | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0014  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.16    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.046   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.02    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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 |      |   |
| Mercuré                  | # | ISO 17852     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.08        | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.018       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.36        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.065       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 3.62    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| AMPA                  | # | ISO 16308    | 91   | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | 39         | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | ng/l |
| Ibuprofen               |   | DIN 38407-35 | 37         | ng/l |
| Ketoprofen              | # | DIN 38407-35 | <25        | ng/l |
| Lidocaine               |   | DIN 38407-35 | <25        | ng/l |

Observations : Néant

Résultats validés le 14/11/2018 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>24/10/2018</b>     | <b>par SEBES</b>                                 |
| N° échantillon          | <b>BF06078</b>        | <b>échant. hors accréditation - ponctuel</b>     |
|                         |                       | date de début des analyses <b>24/10/2018</b>     |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:28</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>6.0</b>        | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>10.2</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.4</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>256</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.4</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>94</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.0</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>4.9</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.8</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.01</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.07</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>37</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>14</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>15</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>19</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.4</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.3</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>20</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>1.5</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>3.4</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.6</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0006  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.024   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.022   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0010  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.009   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.32    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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 |      |   |
| Mercure                  | # | ISO 17852     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.06        | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.022       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.10        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.014       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 2.85    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| AMPA                  | # | ISO 16308    | 151  | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | 40         | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 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>24/10/2018</b>     | <b>par SEBES</b>                                     |
| N° échantillon          | <b>BF06079</b>        | <b>échant. hors accréditation - ponctuel</b>         |
|                         |                       | date de début des analyses <b>24/10/2018</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>pluvieux</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>15</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>9.8</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>6.7</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>216</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.8</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>99</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.1</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>5.5</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>8.3</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b>   | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.04</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>24</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>      | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>20</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>19</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.6</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.8</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>11</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.05</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.77</b>       | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.1</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.4</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.6</b>        | mg/l   |                     |



## Métaux Dissous

|                           |   |               |         |      |   |
|---------------------------|---|---------------|---------|------|---|
| métaux dissous par ICP-MS | # |               |         |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.012   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.019   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.008   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.68    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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 |      |   |
| Mercuré                  | # | ISO 17852     | <0.005      | 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 | 0.013       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.019       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.18        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.025       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 4.22    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112027A01</b>     | <b>BELLERBAACH - Bauscheltermillen</b>       |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>24/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06082</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>24/10/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:56</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b>   |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>0.68</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>9.7</b>        | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.2</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>424</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.0</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>90</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.8</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>8.9</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>10.6</b>       | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b>   | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.48</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>60</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>37</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>28</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.7</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>10</b>         | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>43</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.51</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.62</b>       | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>8.9</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.3</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0017  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.012   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.047   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0001  | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0021  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | 0.0010  | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 4.26    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0013  | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | <0.05       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0014      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.050       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0023      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | <0.05       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.005       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 4.84    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | 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 |
| AMPA                  | # | ISO 16308    | 168  | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA        |   | DIN 38407-35 | 26         | ng/l |
| Metazachlor-OXA        |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron           |   | 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 | n.d.       | ng/l |
| Terbutylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbutylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS            |   |              | par LCMSMS |      |
| Carbamazepin           |   | DIN 38407-35 | 929        | ng/l |
| Diclofenac (free acid) |   | DIN 38407-35 | n.d.       | 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 14/11/2018 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                                                                             |



## Bulletin d'analyse des échantillons: BF06120 - BF06127

Référence du Laboratoire: 2018-10-25-014-ES

Adresse destinataire

Requérant: **M. Claude NEUBERG**

Reçu le: **25/10/2018**

Début de l'analyse: **25/10/2018**

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

**Admin. de la Gestion de l'Eau**  
**c/o M. Claude NEUBERG**  
**1, avenue du Rock'n'Roll**  
**L-4361 Esch/Alzette**

**Tel : 24556-1 Fax : 24556-7362**

Ce rapport comporte **30** pages et ne peut être reproduit partiellement sans accord explicite du Laboratoire.

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

### 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>25/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06120</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>25/10/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>11:00</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>couvert</b>  |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>18</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>12.7</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>214</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.4</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>101</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.1</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>5.5</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.0</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.11</b>     | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.06</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b> | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>26</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>    | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>14</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>17</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.6</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.6</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>15</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.09</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                |      | ISO 5815-1/2          | <b>6.2</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.3</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>5.6</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>5.8</b>      | mg/l   |                     |



## Métaux Dissous

|                           |   |               |         |      |   |
|---------------------------|---|---------------|---------|------|---|
| métaux dissous par ICP-MS | # |               |         |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0006  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.021   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.016   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0003  | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0012  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.16    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.192   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | <0.5    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0002  | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.09        | 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 | 0.034       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.016       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | 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 | 0.0012      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.78        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.559       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 0.77    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.012   | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |      |      |
|-----------------------|---|--------------|------|------|
| 2,4-D                 |   | DIN 38407-35 | <25  | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | 67   | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 |

cc: SYND-SEBES

longnew20151016



|                         |   |              |            |      |
|-------------------------|---|--------------|------------|------|
| Mecoprop                |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor             | # | DIN 38407-35 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | 26         | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | ng/l |
| Ibuprofen               |   | DIN 38407-35 | <25        | ng/l |
| Ketoprofen              | # | DIN 38407-35 | <25        | ng/l |
| Lidocaine               |   | DIN 38407-35 | <25        | ng/l |

Observations :

Résultats validés le 14/11/2018 par JH

Lors de l'interprétation du résultat de la DBO-5, veuillez noter que l'échantillon a été congelé avant l'analyse.



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112013A01</b>     | <b>DIRBECH - amont Grondmillen</b>           |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>25/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06121</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>25/10/2018</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>couvert</b>    |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>2.5</b>        | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>11.3</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.2</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>210</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.6</b>        | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>90</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.7</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>3.5</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.5</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b>   | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.03</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>31</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>8.6</b>        | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>17</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>15</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.6</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.9</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>16</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>0.83</b>       | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>2.1</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>1.5</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>1.5</b>        | mg/l   |                     |





## Métaux Dissous

|                           |   |               |         |      |   |
|---------------------------|---|---------------|---------|------|---|
| métaux dissous par ICP-MS | # |               |         |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.015   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.018   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.10    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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 |      |   |
| Mercuré                  | # | ISO 17852     | 0.012       | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | <0.05       | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.018       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | <0.05       | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 3.66    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 |

cc: SYND-SEBES

longnew20151016



|                         |   |              |            |      |
|-------------------------|---|--------------|------------|------|
| Mecoprop                |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor             | # | DIN 38407-35 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                                          |
|-------------------------|-----------------------|----------------------------------------------------------|
| Votre référence         | <b>L112014A02</b>     | <b>NINGSERBAACH - Schéimelzerbesch - aval Neunhausen</b> |
| Nature de l'échantillon | <b>eau de surface</b> |                                                          |
| prélevé le              | <b>25/10/2018</b>     | <b>par SEBES</b>                                         |
| N° échantillon          | <b>BF06122</b>        | <b>échant. hors accréditation - ponctuel</b>             |
|                         |                       | date de début des analyses <b>25/10/2018</b>             |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:15</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>couvert</b>  |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>12</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>10.8</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.4</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>200</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.9</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>91</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>6.0</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</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>34</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>    | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>13</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>13</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.6</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.7</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>16</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.02</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.2</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>&lt;1.0</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.014   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.016   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.007   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 2.01    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.09        | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.016       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.30        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.018       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 2.48    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| AMPA                  | # | ISO 16308    | 30   | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 30         | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112020A01</b>     | <b>SCHWAERZERBAACH - amont emb. SURE</b>     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>25/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06123</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>25/10/2018</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>couvert</b>  |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>17</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>10.0</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.5</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>152</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.6</b>     | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>98</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>6.0</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</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>14</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>    | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>18</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>13</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.6</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>&lt;2</b>    | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>7.5</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>2.6</b>      | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>&lt;1.0</b>  | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.6</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>4.3</b>      | mg/l   |                     |





## Métaux Dissous

|                           |   |               |         |      |   |
|---------------------------|---|---------------|---------|------|---|
| métaux dissous par ICP-MS | # |               |         |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.007   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.010   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.014   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.23    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0001  | 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     | 0.008       | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.44        | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.010       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.52        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.118       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 4.16    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0002  | 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 |
| 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | n.d. | 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 |

cc: SYND-SEBES

longnew20151016



|                         |   |              |            |      |
|-------------------------|---|--------------|------------|------|
| Mecoprop                |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor             | # | DIN 38407-35 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112021A01</b>     | <b>BILDREFERBAACH - Neimillen</b>            |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>25/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06124</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>25/10/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:14</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>couvert</b>    |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>4.4</b>        | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>10.2</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.5</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>335</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.5</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>96</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.9</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>4.6</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>9.8</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b>   | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.18</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>46</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>28</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>34</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>25</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.7</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>7.7</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>27</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.20</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>6.7</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.9</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0009  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.018   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.029   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0014  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.011   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.60    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0005  | 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     | <0.005      | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.031       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0014      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.18        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.026       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 4.25    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0001  | 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 |
| AMPA                  | # | ISO 16308    | 36   | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | 855        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                |                                       |                                       |  |
|-------------------------|----------------|---------------------------------------|---------------------------------------|--|
| Votre référence         | L112022A01     |                                       | BAUSCHELBAACH - amont embouchure SURE |  |
| Nature de l'échantillon | eau de surface |                                       |                                       |  |
| prélevé le              | 25/10/2018     | par SEBES                             | échant. hors accréditation - ponctuel |  |
| N° échantillon          | BF06125        | date de début des analyses 25/10/2018 |                                       |  |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:37</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>couvert</b>    |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>11</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>11.0</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.6</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>322</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.5</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>98</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.4</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>7.2</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>8.8</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>&lt;0.01</b>   | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.47</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>41</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>30</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>9.9</b>        | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>21</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.6</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>8.3</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>31</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.51</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>7.5</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.4</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0017  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.012   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.028   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | 0.0001  | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0015  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.014   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 4.00    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0008  | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | <0.05       | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0012      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.013       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.030       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0011      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.06        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.017       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 4.66    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | 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 | <25  | ng/l |
| AMPA                  | # | ISO 16308    | 322  | 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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    | 37   | ng/l |
| Haloxypop             |   | DIN 38407-35 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 36         | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112030A01</b>     | <b>MECHELBAACH - Neunhausen</b>              |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>25/10/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF06127</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>25/10/2018</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>couvert</b>    |        |                     |
| Température-air                                 |      | SOP 022               | <b>10</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>10</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>10.4</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.2</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>172</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.8</b>        | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>92</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>6.4</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</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>20</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>5.2</b>        | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>14</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>13</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.6</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.4</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>9.7</b>        | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.02</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>1.5</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.1</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 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.018   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.013   | mg/l | : |
| Cadmium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Chrome dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Cobalt dissous            | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.011   | mg/l | : |
| Nickel dissous            | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Plomb dissous             | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Sélénium dissous          | # | ISO 17294-1/2 | <0.0005 | mg/l | : |
| Silicium dissous          | # | ISO 17294-1/2 | 3.12    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0001  | 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     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.10        | 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 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.012       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | <0.001      | 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 | 0.14        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.065       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | 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 | 3.53    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | <0.0001 | 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 |
| 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 |
| Chloridazon           |   | DIN 38407-35 | <25  | ng/l |
| Chlorotoluron         |   | DIN 38407-35 | <25  | ng/l |
| Cyanazine             | # | DIN 38407-35 | <25  | ng/l |
| Diflufenican          |   | DIN 38407-35 | <25  | 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 | <25  | 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 | n.d. | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | n.d. | 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 |

cc: SYND-SEBES

longnew20151016



|                         |   |              |            |      |
|-------------------------|---|--------------|------------|------|
| Mecoprop                |   | DIN 38407-35 | <25        | ng/l |
| Metazachlor             | # | DIN 38407-35 | <25        | ng/l |
| Metazachlor-ESA         |   | DIN 38407-35 | 28         | ng/l |
| Metazachlor-OXA         |   | DIN 38407-35 | <25        | 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 |
| Nicosulfuron            |   | 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 | n.d.       | ng/l |
| Terbuthylazine          | # | DIN 38407-35 | <25        | ng/l |
| Terbuthylazine-desethyl | # | DIN 38407-35 | <25        | ng/l |
| MEDICAMENTS             |   |              | par LCMSMS |      |
| Carbamazepin            |   | DIN 38407-35 | <25        | ng/l |
| Diclofenac (free acid)  |   | DIN 38407-35 | n.d.       | 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 14/11/2018 par JH



## Appréciation:

Néant

Remarque concernant l'échantillon BF06120: Veuillez noter que l'échantillon a été congelé avant l'analyse de la DBO-5. En même temps, suite à un problème technique, le résultat du paramètre DBO5 est fourni à titre indicatif (hors accréditation).

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                                                                             |