



## Bulletin d'analyse des échantillons: BF04950 - BF04956

Référence du Laboratoire: 2018-08-29-007-ES

Adresse destinataire

Requérant: **M. Claude NEUBERG**

Reçu le: **29/08/2018**

Début de l'analyse: **29/08/2018**

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

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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>L112018A01</b>     | <b>SYRBACH - aval Rommelerkräiz-LB177</b>    |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>29/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04950</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>29/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:02</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>17</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>13</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>13.4</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>8.2</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>218</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.4</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>106</b>        | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.1</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>5.4</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.7</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>27</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>9.4</b>        | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>16</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.6</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.9</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>14</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>1.1</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>2.2</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>4.1</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>4.6</b>        | mg/l   |                     |



## Métaux Dissous

|                           |   |               |         |      |   |
|---------------------------|---|---------------|---------|------|---|
| métaux dissous par ICP-MS | # |               |         |      |   |
| Aluminium dissous         | # | ISO 17294-1/2 | <0.05   | mg/l | : |
| Argent dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Arsenic dissous           | # | ISO 17294-1/2 | 0.0007  | 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 | 0.014   | 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 | 0.0013  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.06    | 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 | 1.28    | 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 |      |   |
| Mercuré                  | # | ISO 17852     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.21        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0009      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.009       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.017       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0014      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.47        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.027       | 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 | 1.46    | 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    | 244 | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 | 91         | 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 :

NB: le flacon de la chimie n'a pas été rempli à ras bord !!

Résultats validés le 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112010A01</b>     | <b>SÛRE - Martelange</b>                     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>29/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04951</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>29/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>11:05</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>couvert</b>  |        |                     |
| Température-air                                 |      | SOP 022               | <b>20</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>     |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>15</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>16.0</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.8</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>175</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.5</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>101</b>      | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.8</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>4.2</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>5.8</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>0.03</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>22</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>7.2</b>      | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>9.4</b>      | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>5.7</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.3</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>11</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.07</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.81</b>     | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.9</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.6</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>4.1</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 | 0.0007  | 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 | 0.009   | 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 | 0.11    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.035   | 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 | 1.57    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0004  | 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 | 0.28        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0011      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.024       | 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 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0013      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.62        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.069       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |         |      |
|----------|---|---------------|---------|------|
| Silicium | # | ISO 17294-1/2 | 1.96    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0009  | 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    | 75  | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | 38         | 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 | n.d.       | 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 | 32         | ng/l |
| Ketoprofen              | # | DIN 38407-35 | <25        | ng/l |
| Lidocaine               |   | DIN 38407-35 | <25        | ng/l |

Observations :

NB: le flacon de la chimie n'a pas été rempli à ras bord !!

Résultats validés le 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112015A01</b>     | <b>BÉIWENERBAACH - Bavigne</b>               |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>29/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04952</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>29/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:57</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>11</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>très sale</b>  |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>8.9</b>        | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>13.7</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>303</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>5.7</b>        | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>57</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.5</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>7.4</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.4</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>0.40</b>       | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.18</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.10</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>23</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>      | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>8.6</b>        | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>16</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.2</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.1</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>14</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.16</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>1.3</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.3</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>6.0</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>6.2</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 | 0.0007  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.011   | 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 | 0.0002  | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | 0.0011  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.12    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.072   | 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 | 0.84    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0004  | 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 | 0.11        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0009      | 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 | 0.020       | 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 | 0.0013      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.41        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.109       | 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 | 1.06    | 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    | 219 | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 | 128        | ng/l |
| Ketoprofen              | # | DIN 38407-35 | 36         | ng/l |
| Lidocaine               |   | DIN 38407-35 | <25        | ng/l |

Observations :

NB: le flacon de la chimie n'a pas été rempli à ras bord !!

Résultats validés le 07/09/2018 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>29/08/2018</b>     | <b>par SEBES</b>                                 |
| N° échantillon          | <b>BF04953</b>        | <b>échant. hors accréditation - ponctuel</b>     |
|                         |                       | date de début des analyses <b>29/08/2018</b>     |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:25</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>15</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>12</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>12.3</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>8.0</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>222</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.6</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>103</b>        | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.2</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>6.0</b>        | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>8.4</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>0.06</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>20</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>19</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>8.9</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.6</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>10</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.07</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>&lt;0.50</b>   | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.1</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>2.0</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>2.2</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 | 0.011   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.017   | 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 | 3.60    | 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 | 0.22        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0006      | 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 | 0.021       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0010      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.28        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.020       | 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 | 3.68    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0005  | mg/l |
| Zinc     | # | ISO 17294-1/2 | <0.005  | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |     |      |
|-----------------------|---|--------------|-----|------|
| 2,4-D                 |   | DIN 38407-35 | <25 | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <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 | <25 | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 :

NB: le flacon de la chimie n'a pas été rempli à ras bord !!

Résultats validés le 07/09/2018 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>29/08/2018</b>     | <b>par SEBES</b>                                     |
| N° échantillon          | <b>BF04954</b>        | <b>échant. hors accréditation - ponctuel</b>         |
|                         |                       | date de début des analyses <b>29/08/2018</b>         |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:53</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>19</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>       |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>19</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>15.5</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.9</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>202</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.4</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>4.9</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>0.01</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.04</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>26</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>6.5</b>        | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>16</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.1</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.7</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>13</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.08</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.72</b>       | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.6</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.8</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>4.4</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 | 0.0007  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.022   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.011   | 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 | 0.0012  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.06    | mg/l | : |
| Manganèse dissous         | # | ISO 17294-1/2 | 0.031   | 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 | 1.04    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0004  | 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 | 0.19        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0009      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.024       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.013       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0013      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.37        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.056       | 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 | 1.26    | 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    | 150 | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 :

NB: le flacon de la chimie n'a pas été rempli à ras bord !!

Résultats validés le 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112024A01</b>     | <b>BEMICHT - Huuscht, près de Liefrange</b>  |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>29/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04955</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>29/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:27</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</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>20</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>11.2</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>8.0</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>393</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.9</b>        | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>93</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>2.2</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>11.2</b>       | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>10.9</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>0.05</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>48</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>5.7</b>        | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>9.6</b>        | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>19</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>15</b>         | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.1</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>28</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>0.50</b>       | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.4</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>3.1</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 | 0.012   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.017   | 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 | 0.012   | 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 | 3.72    | 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 | 0.33        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0008      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.016       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.021       | 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 | 0.0005      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0013      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.84        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.085       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |         |      |
|----------|---|---------------|---------|------|
| Silicium | # | ISO 17294-1/2 | 3.91    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0008  | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 :

(L112025A01 LAANGEGRONN - Haardschleedchen - en aval de Bavigne) à sec !

Résultats validés le 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112027A01</b>     | <b>BELLERBAACH - Bauscheltermillen</b>       |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>29/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04956</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>29/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:23</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>18</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>+/- propre</b> |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>     |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>19</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>13.1</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.8</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>377</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.4</b>        | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>94</b>         | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                   |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.5</b>        | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>7.6</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>0.53</b>       | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>52</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>28</b>         | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>18</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>22</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.7</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>9.2</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>36</b>         | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.66</b>       | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>&lt;0.50</b>   | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>6.8</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 | 0.0020  | 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 | 0.038   | 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 | 0.0026  | 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 | 4.40    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0014  | 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     | 0.012       | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 1.01        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0026      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.017       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.045       | mg/l | : |
| Cadmium                  | # | ISO 17294-1/2 | <0.0001     | mg/l | : |
| Chrome                   | # | ISO 17294-1/2 | 0.002       | mg/l | : |
| Cobalt                   | # | ISO 17294-1/2 | 0.0009      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0047      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 1.47        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.104       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0018      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |        |      |
|----------|---|---------------|--------|------|
| Silicium | # | ISO 17294-1/2 | 5.18   | mg/l |
| Uranium  | # | ISO 17294-1/2 | 0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0029 | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.016  | 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    | 204 | 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 | 31  | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | 35         | 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 | n.d.       | 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 | 748        | 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 :

NB: le flacon de la chimie n'a pas été rempli à ras bord !!

Résultats validés le 19/09/2018 par MB



## Appréciation:

Echantillons prélevés par vos soins.

Remarque concernant l'échantillonnage :

Lors de la remise des échantillons la bouteille physico-chimie n'était pas remplie à ras bord comme exigé par la norme ISO 5667-5. Par conséquent certains paramètres dosés sont susceptibles de se modifier.

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: BF04994 - BF05001

Référence du Laboratoire: 2018-08-30-008-ES

Adresse destinataire

Requérant: **M. Claude NEUBERG**

Reçu le: **30/08/2018**

Début de l'analyse: **30/08/2018**

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 **31** 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>30/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04994</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>30/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT          | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-------------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                   |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:44</b>      | hh:mm  |                     |
| Météo                                           |      |                       | <b>ensoleillé</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>16</b>         | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>sale</b>       |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>moyen</b>      |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>12</b>         | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>18.5</b>       | °C     |                     |
| pH                                              |      | ISO 10523             | <b>8.3</b>        |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>190</b>        | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>10.2</b>       | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>115</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>6.2</b>        | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b>   | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.05</b>       | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>&lt;0.01</b>   | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>24</b>         | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>      | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>         | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>15</b>         | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>5.9</b>        | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>4.5</b>        | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>12</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>5.3</b>        | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.0</b>        | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>5.4</b>        | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>7.0</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 | 0.0009  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.017   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.011   | 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 | 0.0002  | mg/l | : |
| Cuivre dissous            | # | ISO 17294-1/2 | <0.001  | mg/l | : |
| Fer dissous               | # | ISO 17294-1/2 | 0.20    | 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 | <0.5    | 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 | 0.09        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0013      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.023       | 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 | 0.0004      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0012      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.72        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.182       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |         |      |
|----------|---|---------------|---------|------|
| Silicium | # | ISO 17294-1/2 | <0.5    | 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    | 118 | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | 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 | <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 | n.d. | 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 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112013A01</b>     | <b>DIRBECH - amont Grondmillen</b>           |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>30/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04995</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>30/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:04</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>13</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>2.6</b>      | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>14.5</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.1</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>211</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>8.2</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>85</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.7</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>3.3</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.2</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>32</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>10</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>17</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>14</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.5</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>3.0</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>&lt;0.50</b> | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>2.5</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>1.5</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>1.6</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 | 0.013   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.015   | 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 | 3.36    | 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 | 0.11        | 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 | 0.020       | 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 | 0.010       | 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 | 3.56    | 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    | <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 | <25 | ng/l |
| Haloxypop-methyl      |   | DIN 38407-35 | <25 | 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 | 39         | 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 | n.d.       | 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 07/09/2018 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>30/08/2018</b>     | <b>par SEBES</b>                                         |
| N° échantillon          | <b>BF04996</b>        | <b>échant. hors accréditation - ponctuel</b>             |
|                         |                       | date de début des analyses <b>30/08/2018</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>14</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>15.0</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.3</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>174</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>8.3</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>84</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.8</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>3.9</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>5.5</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>0.02</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>12</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>12</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.0</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.3</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>13</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.03</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.92</b>     | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>&lt;1.0</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 | <0.0005 | 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 | 0.013   | 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 | 0.021   | 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 | 2.04    | 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 |      |   |
| Mercuré                  | # | ISO 17852     | <0.005      | ug/l | : |
| métaux totaux par ICP-MS | # |               |             |      |   |
| Aluminium                | # | ISO 17294-1/2 | 0.15        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0005      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.014       | mg/l | : |
| Béryllium                | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Bore                     | # | ISO 17294-1/2 | 0.017       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0012      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.27        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.039       | 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 | 2.17    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0005  | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.005   | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |     |      |
|-----------------------|---|--------------|-----|------|
| 2,4-D                 |   | DIN 38407-35 | <25 | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25 | ng/l |
| AMPA                  | # | ISO 16308    | 37  | 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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | 47         | 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 | n.d.       | 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 07/09/2018 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>30/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04997</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>30/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>09:36</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>13</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>23</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>14.0</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.8</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>135</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.8</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>100</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>5.1</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>0.02</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>12</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>&lt;5</b>    | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>15</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>11</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>5.6</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>&lt;2</b>    | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>6.6</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>0.80</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>4.8</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 | 0.006   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.007   | 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 | 2.89    | 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 | 0.38        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0006      | mg/l | : |
| Baryum                   | # | ISO 17294-1/2 | 0.008       | 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 | 0.0003      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0011      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.48        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.042       | mg/l | : |
| Nickel                   | # | ISO 17294-1/2 | <0.005      | mg/l | : |
| Plomb                    | # | ISO 17294-1/2 | 0.0007      | mg/l | : |
| Sélénium                 | # | ISO 17294-1/2 | <0.0005     | mg/l | : |



métaux totaux par ICP-MS

|          | # |               |         |      |
|----------|---|---------------|---------|------|
| Silicium | # | ISO 17294-1/2 | 3.28    | 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    | <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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112021A01</b>     | <b>BILDREFERBAACH - Neimillen</b>            |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>30/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF04998</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>30/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:08</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>14</b>       | °C     |                     |
| Aspect de l'échantillon                         |      |                       | <b>propre</b>   |        |                     |
| Débit de la rivière (visuel)                    |      |                       | <b>faible</b>   |        |                     |
| Turbidité                                       |      | ISO 7027              | <b>13</b>       | FNU    |                     |
| Température de l'eau                            |      | DIN 38404-C4          | <b>14.5</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.7</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>269</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.8</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>98</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>0.9</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>4.7</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.6</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b> | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.08</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.43</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>30</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>28</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>23</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>20</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>6.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>8.3</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>21</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.52</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>7.0</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>5.1</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>6.4</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 | 0.0014  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.013   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.025   | 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 | 0.0019  | 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 | 3.55    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0012  | 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 | 0.21        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0018      | 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 | 0.033       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0028      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.30        | 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 | 3.82    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0016  | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.007   | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |     |      |
|-----------------------|---|--------------|-----|------|
| 2,4-D                 |   | DIN 38407-35 | <25 | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25 | ng/l |
| AMPA                  | # | ISO 16308    | 427 | 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    | 246 | ng/l |
| Haloxyfop             |   | DIN 38407-35 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | n.d.       | 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 | 1105       | 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 19/09/2018 par MB



|                         |                |                                       |                                       |  |
|-------------------------|----------------|---------------------------------------|---------------------------------------|--|
| Votre référence         | L112022A01     |                                       | BAUSCHELBAACH - amont embouchure SURE |  |
| Nature de l'échantillon | eau de surface |                                       |                                       |  |
| prélevé le              | 30/08/2018     | par SEBES                             | échant. hors accréditation - ponctuel |  |
| N° échantillon          | BF04999        | date de début des analyses 30/08/2018 |                                       |  |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>10:31</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>15</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>14.0</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.6</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>286</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.6</b>      | mg/l   |                     |
| Saturation en oxygène                           |      | ISO 17289             | <b>97</b>       | %      |                     |
| <b>Physico-Chimie</b>                           |      |                       |                 |        |                     |
| Alcalinité                                      | #    | ISO 9963-1            | <b>1.4</b>      | mval/l |                     |
| Dureté carbonatée                               | #    | ISO 9963-1            | <b>6.8</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>7.5</b>      | d°fr   |                     |
| Ammonium-NH4                                    | #    | ISO 7150-1            | <b>&lt;0.05</b> | mg/l   |                     |
| Nitrites-NO2                                    | #    | ISO 6777              | <b>0.08</b>     | mg/l   |                     |
| o-Phosphate-P                                   | #    | ISO 6878              | <b>0.58</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>35</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>22</b>       | mg/l   |                     |
| Sulfates-SO4                                    | #    | ISO 10304-1           | <b>12</b>       | mg/l   |                     |
| Calcium-Ca                                      | #    | ISO 14911             | <b>18</b>       | mg/l   |                     |
| Magnésium-Mg                                    | #    | ISO 14911             | <b>7.4</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>8.1</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>26</b>       | mg/l   |                     |
| Phosph. total (digest. ISO15587-2)              | #    | ISO 17294-1/2         | <b>0.66</b>     | mg/l   |                     |
| Demande biochim. en oxy. (DBO-5)                | #    | ISO 5815-1/2          | <b>0.63</b>     | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>5.2</b>      | mg/l   |                     |
| DOC                                             | #    | ISO 8245              | <b>5.2</b>      | mg/l   |                     |
| TOC                                             | #    | ISO 8245              | <b>5.6</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 | 0.0019  | mg/l | : |
| Baryum dissous            | # | ISO 17294-1/2 | 0.011   | mg/l | : |
| Béryllium dissous         | # | ISO 17294-1/2 | <0.005  | mg/l | : |
| Bore dissous              | # | ISO 17294-1/2 | 0.026   | 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 | 0.0020  | 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 | 3.84    | mg/l | : |
| Uranium dissous           | # | ISO 17294-1/2 | <0.0001 | mg/l | : |
| Vanadium dissous          | # | ISO 17294-1/2 | 0.0012  | 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 | 0.20        | mg/l | : |
| Argent                   | # | ISO 17294-1/2 | <0.001      | mg/l | : |
| Arsenic                  | # | ISO 17294-1/2 | 0.0022      | 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 | 0.034       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0027      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.27        | 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 | 4.10    | mg/l |
| Uranium  | # | ISO 17294-1/2 | <0.0001 | mg/l |
| Vanadium | # | ISO 17294-1/2 | 0.0016  | mg/l |
| Zinc     | # | ISO 17294-1/2 | 0.008   | mg/l |

Organique

PESTICIDES

par LCMSMS

|                       |   |              |     |      |
|-----------------------|---|--------------|-----|------|
| 2,4-D                 |   | DIN 38407-35 | <25 | ng/l |
| 2,6-Dichlorobenzamide | # | DIN 38407-35 | <25 | ng/l |
| AMPA                  | # | ISO 16308    | 507 | 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    | 83  | ng/l |
| Haloxyfop             |   | DIN 38407-35 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | 65         | 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 | 41         | 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 | n.d.       | 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 | 60         | ng/l |
| Ketoprofen              | # | DIN 38407-35 | <25        | ng/l |
| Lidocaine               |   | DIN 38407-35 | <25        | ng/l |

Observations : Néant

Résultats validés le 07/09/2018 par JH



|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112029A01</b>     | <b>BURBICH - Arsdorf</b>                     |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>30/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF05000</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>30/08/2018</b> |

PARAMETRE

Note

Méthodes  
d'analyse

RESULTAT

Unité

Valeur paramétrique

Observations :

L112029A01 BURBICH - Arsdorf non prélevé (à sec)

Résultats validés le 31/08/2018 par SK





|                         |                       |                                              |
|-------------------------|-----------------------|----------------------------------------------|
| Votre référence         | <b>L112030A01</b>     | <b>MECHELBAACH - Neunhausen</b>              |
| Nature de l'échantillon | <b>eau de surface</b> |                                              |
| prélevé le              | <b>30/08/2018</b>     | <b>par SEBES</b>                             |
| N° échantillon          | <b>BF05001</b>        | <b>échant. hors accréditation - ponctuel</b> |
|                         |                       | date de début des analyses <b>30/08/2018</b> |

| PARAMETRE                                       | Note | Méthodes<br>d'analyse | RESULTAT        | Unité  | Valeur paramétrique |
|-------------------------------------------------|------|-----------------------|-----------------|--------|---------------------|
| <b>Caractéristiques mesurées sur le terrain</b> |      |                       |                 |        |                     |
| Heure du prélèvement                            |      |                       | <b>08:26</b>    | hh:mm  |                     |
| Météo                                           |      |                       | <b>pluvieux</b> |        |                     |
| Température-air                                 |      | SOP 022               | <b>13</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>13.9</b>     | °C     |                     |
| pH                                              |      | ISO 10523             | <b>7.8</b>      |        |                     |
| Conductibilité électrique 20°C                  |      | ISO 7888              | <b>169</b>      | µS/cm  |                     |
| Oxygène dissous                                 |      | ISO 17289             | <b>9.7</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>3.8</b>      | d°fr   |                     |
| Dureté totale                                   | #    | calc. (ISO14911)      | <b>6.2</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>0.02</b>     | mg/l   |                     |
| Chlorures-Cl                                    | #    | ISO 10304-1           | <b>20</b>       | mg/l   |                     |
| Nitrates-NO3                                    | #    | ISO 10304-1           | <b>7.5</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>7.2</b>      | mg/l   |                     |
| Potassium-K                                     | #    | ISO 14911             | <b>2.1</b>      | mg/l   |                     |
| Sodium-Na                                       | #    | ISO 14911             | <b>9.1</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>0.51</b>     | mg/l   |                     |
| Azote total                                     | #    | DIN EN 12260          | <b>1.9</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 | <0.0005 | 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 | 0.009   | 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 | 2.75    | 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 | 0.28        | 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 | 0.012       | 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 | 0.0002      | mg/l | : |
| Cuivre                   | # | ISO 17294-1/2 | 0.0010      | mg/l | : |
| Fer                      | # | ISO 17294-1/2 | 0.38        | mg/l | : |
| Manganèse                | # | ISO 17294-1/2 | 0.029       | 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 | 3.05    | 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    | <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 | <25 | ng/l |
| Haloxyfop-methyl      |   | DIN 38407-35 | <25 | 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 | 48         | 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 | n.d.       | 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 07/09/2018 par JH



## Appréciation:

Echantillons prélevés par vos soins.

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                                                                             |