



## Compilação dos parâmetros pesquisados durante o 1º trimestre de 2019 no Município da Mealhada.

| Parâmetro (unidades)                           | Valor Paramétrico (VP) |                   | Valores obtidos   |                   | N.º Análises superiores VP | % Cumprimento do VP | N.º Análises (PCQA) |            | % Análises Realizadas |
|--|------------------------|-------------------|-------------------|-------------------|----------------------------|---------------------|---------------------|------------|-----------------------|
|  | VP                     | Unidade           | Mínimo            | Máximo            |                            |                     | Previstas           | Realizadas |                       |
| Escherichia Coli                               | 0                      | N/100ml           | 0                 | 0                 | 0                          | 100,0               | 21                  | 21         | 100%                  |
| Bactérias Coliformes                           | 0                      | N/100ml           | 0                 | 0                 | 0                          | 100,0               | 21                  | 21         | 100%                  |
| Desinfetante residual                          | ---                    | mg Cl2/L          | <0,05             | 0,95              | ---                        | ---                 | 21                  | 21         | 100%                  |
| Cheiro a 25 °C                                 | 3                      | Fator de diluição | <1                | <1                | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Sabor a 25 °C                                  | 3                      | Fator de diluição | <1                | <1                | 0                          | 100,0               | 8                   | 8          | 100%                  |
| pH   | ≥6,5 e ≤9,5            | E. Sorensen       | 5,7               | 7,6               | 2                          | 99,8                | 8                   | 8          | 100%                  |
| Condutividade                                  | 2500                   | µS/cm, a 20 °C    | 33,5              | 113               | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Cor  | 20                     | mg PtCo/L         | <5                | <5                | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Turvação                                       | 4                      | UNT               | <0,3              | 0,3               | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Enterococos fecais                             | 0                      | N/100ml           | 0                 | 0                 | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Número de colónias a 22 °C                     | s/ alter. anormal      | N/ml a 22°C       | N.D.              | N.D.              | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Número de colónias a 36 °C                     | s/ alter. anormal      | N/ml a 36°C       | N.D.              | 1                 | 0                          | 100,0               | 8                   | 8          | 100%                  |
| Clostridium perfringens                        | 0                      | N/100ml           | 0                 | 0                 | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Alumínio                                       | 200                    | µg Al/L           | <20               | <20               | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Amónio   | 0,50                   | mg NH4/L          | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Antimónio                                      | 5,0                    | µg/l Sb           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Arsénio  | 10                     | µg/l As           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Benzeno  | 1,0                    | µg/l              | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Benzo(a)pireno                                 | 0,010                  | µg/L              | <0,002            | <0,002            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Boro   | 1,0                    | mg/l B            | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Bromato  | 10                     | µg/l BrO3         | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Cádmio   | 5,0                    | µg/l Cd           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Cálcio   | ---                    | mg Ca/L           | 6,4               | 6,4               | ---                        | ---                 | 1                   | 1          | 100%                  |
| Carbono Orgânico Total (COT)                   | ---                    | mg/l C            | -                 | -                 | -                          | ---                 | 0                   | 0          | N.A.                  |
| Cianeto  | 50                     | µg/l CN           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Cloreto  | 250                    | mg/l Cl           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Clorito  | 0,7                    | mg/l ClO2         | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Clorato  | 0,7                    | mg/l ClO3         | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Chumbo   | 10                     | µg Pb/L           | <3                | <3                | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Cobre  | 2,0                    | mg Cu/L           | 0,023             | 0,023             | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Crómio   | 50                     | µg Cr/L           | <5                | <5                | 0                          | 100,0               | 1                   | 1          | 100%                  |
| 1,2-Dicloroetano                               | 3,0                    | µg/l              | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Dureza Total                                   | ---                    | mg CaCO3/L        | 26                | 26                | ---                        | ---                 | 1                   | 1          | 100%                  |
| Ferro  | 200                    | µg Fe/L           | 15                | 15                | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Fluoreto                                       | 1,5                    | mg/l F            | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Hidrocarbonetos Aromáticos Policíclicos (HAP): | 0,10                   | µg/L              | <0,005 (Maior LQ) | <0,005 (Maior LQ) | 0                          | 100,0               | 1                   | 1          | ---                   |
| Benzo(b)fluoranteno                            | ---                    | µg/L              | <0,005            | <0,005            | ---                        | ---                 | 1                   | 1          | 100%                  |
| Benzo(k)fluoranteno                            | ---                    | µg/L              | <0,002            | <0,002            | ---                        | ---                 | 1                   | 1          | 100%                  |
| Benzo(ghi)perileno                             | ---                    | µg/L              | <0,004            | <0,004            | ---                        | ---                 | 1                   | 1          | 100%                  |
| Indeno(1,2,3-cd)pireno                         | ---                    | µg/L              | <0,004            | <0,004            | ---                        | ---                 | 1                   | 1          | 100%                  |
| Magnésio                                       | ---                    | mg Mg/L           | 2,5               | 2,5               | ---                        | ---                 | 1                   | 1          | 100%                  |
| Manganês                                       | 50                     | µg Mn/L           | <10               | <10               | 0                          | 100,0               | 4                   | 4          | 100%                  |
| Nitrato  | 50                     | mg/l NO3          | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Nitrito  | 0,50                   | mg NO2/L          | <0,020            | <0,020            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Mercurio                                       | 1,0                    | µg/l Hg           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Níquel   | 20                     | µg Ni/L           | <5                | <5                | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Oxidabilidade                                  | 5,0                    | mg O2/L           | <2,0              | <2,0              | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Pesticidas Totais                              | 0,50                   | µg/L              | <0,050 (Maior LQ) | <0,050 (Maior LQ) | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Imidaclopride                                  | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| S-Metolacoloro                                 | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| MCPA   | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Oxadiazão                                      | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Ometoato                                       | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Alacoloro                                      | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Terbutilazina                                  | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Desetilterbutilazina                           | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Bentazona                                      | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Clorpirifos                                    | 0,10                   | µg/L              | <0,0500           | <0,0500           | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Dimetoato                                      | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Diurão   | 0,10                   | µg/L              | <0,050            | <0,050            | 0                          | 100,0               | 1                   | 1          | 100%                  |
| Selénio  | 10                     | µg/l Se           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Sódio  | 200                    | mg/l Na           | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Sulfato  | 250                    | mg/l SO4          | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Tetracloroetano e Tricloroetano:               | 10                     | µg/l              | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Tetracloroetano                                | ---                    | µg/l              | -                 | -                 | -                          | ---                 | 0                   | 0          | N.A.                  |
| Tricloroetano                                  | ---                    | µg/l              | -                 | -                 | -                          | ---                 | 0                   | 0          | N.A.                  |
| Trihalometanos - total (THM):                  | 100                    | µg/L              | 13                | 13                | 0                          | 100,0               | 1                   | 1          | ---                   |
| Clorofórmio                                    | ---                    | µg/L              | 6                 | 6                 | ---                        | ---                 | 1                   | 1          | 100%                  |
| Bromofórmio                                    | ---                    | µg/L              | <3                | <3                | ---                        | ---                 | 1                   | 1          | 100%                  |
| Bromodiorometano                               | ---                    | µg/L              | 4                 | 4                 | ---                        | ---                 | 1                   | 1          | 100%                  |
| Dibromoclorometano                             | ---                    | µg/L              | 3                 | 3                 | ---                        | ---                 | 1                   | 1          | 100%                  |
| Dose Indicativa                                | 0,10                   | mSv               | -                 | -                 | -                          | -                   | 0                   | 0          | N.A.                  |
| Alfa-total                                     | 0,10 (Nível de Alerta) | Bq/l              | -                 | -                 | -                          | ---                 | 0                   | 0          | ---                   |
| β-Total  | 1,0 (Nível de Alerta)  | Bq/l              | -                 | -                 | -                          | ---                 | 0                   | 0          | ---                   |
| Radão  | 500                    | Bq/L              | <10,0             | <10,0             | 0                          | 100,0               | 1                   | 1          | 100%                  |

### Notas:

- N. D. - Não Detectado.
- N.A. - Não aplicável. Parâmetro não determinado durante este trimestre.
- L.Q. - Limite de Quantificação

## RELATÓRIO DE QUALIDADE DA ÁGUA

Ponto de entrega: Câmara Municipal da Mealhada (1º Trimestre 2019)

Relatório n.º 2019-30

| Parâmetro                  | Unidades             | Análises  |                | Valor  |        |           | Cumprimento legislação (%) |
|----------------------------|----------------------|-----------|----------------|--------|--------|-----------|----------------------------|
|                            |                      | Previstas | Realizadas (%) | Mínimo | Máximo | VP        |                            |
| <b>Controlo rotina 1</b>   |                      |           |                |        |        |           |                            |
| Cloro Residual Livre       | mg/L Cl <sub>2</sub> | 4         | 100            | 0,48   | 0,70   | ---       | ---                        |
| Coliformes Totais          | N/100 mL             | 4         | 100            | 0      | 0      | 0         | 100                        |
| Escherichia coli           | N/100 mL             | 4         | 100            | 0      | 0      | 0         | 100                        |
| <b>Controlo rotina 2</b>   |                      |           |                |        |        |           |                            |
| Cheiro                     | TON                  | 1         | 100            | < 1    | < 1    | 3         | 100                        |
| Condutividade              | µS/cm a 20°C         | 1         | 100            | 99     | 99     | 2500      | 100                        |
| Cor                        | mg/L Pt-Co           | 1         | 100            | < 2,0  | < 2,0  | 20        | 100                        |
| Enterococos                | N/100 mL             | 1         | 100            | 0      | 0      | 0         | 100                        |
| Número de colónias a 22 °C | N/mL                 | 1         | 100            | N.D.   | N.D.   | ---       | ---                        |
| Número de colónias a 36 °C | N/mL                 | 1         | 100            | N.D.   | N.D.   | ---       | ---                        |
| pH                         | Esc. Sorensen        | 1         | 100            | 7,1    | 7,1    | 6,5 - 9,0 | 100                        |
| Sabor                      | TFN                  | 1         | 100            | < 1    | < 1    | 3         | 100                        |
| Turvação                   | NTU                  | 1         | 100            | < 0,5  | < 0,5  | 4         | 100                        |
| <b>Controlo inspeção</b>   |                      |           |                |        |        |           |                            |
| 1,2 - Dicloroetano         | ug/L C1CH2CH2Cl      | 0         | ---            | ---    | ---    | 3,0       | ---                        |
| Alacloro                   | ug/L                 | 0         | ---            | ---    | ---    | 0,10      | ---                        |
| Alfa total                 | Bq/L                 | 0         | ---            | ---    | ---    | 0,5       | ---                        |
| Alumínio                   | ug/L Al              | 0         | ---            | ---    | ---    | 200       | ---                        |
| Amónio                     | mg/L NH4             | 0         | ---            | ---    | ---    | 0,50      | ---                        |
| Antimónio                  | ug/L Sb              | 0         | ---            | ---    | ---    | 5,0       | ---                        |
| Arsénio                    | ug/L As              | 0         | ---            | ---    | ---    | 10        | ---                        |
| Bentazona                  | ug/L                 | 0         | ---            | ---    | ---    | 0,10      | ---                        |
| Benzeno                    | ug/L C6H6            | 0         | ---            | ---    | ---    | 1,0       | ---                        |
| Benzo(a)pireno             | ug/L                 | 0         | ---            | ---    | ---    | 0,010     | ---                        |
| Benzo(b)fluoranteno        | ug/L                 | 0         | ---            | ---    | ---    | ---       | ---                        |
| Benzo(ghi)perileno         | ug/L                 | 0         | ---            | ---    | ---    | ---       | ---                        |
| Benzo(k)fluoranteno        | ug/L                 | 0         | ---            | ---    | ---    | ---       | ---                        |
| Beta total                 | Bq/L                 | 0         | ---            | ---    | ---    | 1         | ---                        |
| Boro                       | mg/L B               | 0         | ---            | ---    | ---    | 1,0       | ---                        |
| Bromatos                   | ug/L BrO3            | 0         | ---            | ---    | ---    | 10        | ---                        |
| Bromodichlorometano        | ug/L CHBrCl2         | 0         | ---            | ---    | ---    | ---       | ---                        |
| Bromofórmio                | ug/L CHBr3           | 0         | ---            | ---    | ---    | ---       | ---                        |
| Cádmio                     | ug/L Cd              | 0         | ---            | ---    | ---    | 5,0       | ---                        |
| Cálcio                     | mg/L Ca              | 0         | ---            | ---    | ---    | ---       | ---                        |
| Chumbo                     | ug/L Pb              | 0         | ---            | ---    | ---    | 25        | ---                        |
| Cianetos                   | ug/L CN              | 0         | ---            | ---    | ---    | 50        | ---                        |
| Cloretos                   | mg/L Cl              | 0         | ---            | ---    | ---    | 250       | ---                        |
| Clorofórmio                | ug/L CHCl3           | 0         | ---            | ---    | ---    | ---       | ---                        |

SAA - Sem Alteração Anormal; VP - Valor Paramétrico (Dec. Lei 306/07)

O sinal "menor que" (<) indica um resultado abaixo do limite de quantificação (LQ) do método.

## RELATÓRIO DE QUALIDADE DA ÁGUA

Ponto de entrega: Câmara Municipal da Mealhada (1º Trimestre 2019)

Relatório n.º 2019-30

| Parâmetro                | Unidades       | Análises  |                | Valor  |        |      | Cumprimento legislação (%) |
|--------------------------|----------------|-----------|----------------|--------|--------|------|----------------------------|
|                          |                | Previstas | Realizadas (%) | Mínimo | Máximo | VP   |                            |
| <b>Controlo inspeção</b> |                |           |                |        |        |      |                            |
| Clorpirifos              | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Clostridium perfringens  | N/100 mL       | 0         | ---            | ---    | ---    | 0    | ---                        |
| CO Total                 | ug/L Cl2CCCCl2 | 0         | ---            | ---    | ---    | ---  | ---                        |
| Cobre                    | mg/L Cu        | 0         | ---            | ---    | ---    | 2,0  | ---                        |
| Crómio                   | ug/L Cr        | 0         | ---            | ---    | ---    | 50   | ---                        |
| Desetilterbutilazina     | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Dibromoclorometano       | ug/L CHClBr2   | 0         | ---            | ---    | ---    | ---  | ---                        |
| Dimetoato                | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Diurão                   | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Dureza total             | mg/L Ca CO3    | 0         | ---            | ---    | ---    | ---  | ---                        |
| Ferro                    | ug/L Fe        | 0         | ---            | ---    | ---    | 200  | ---                        |
| Fluoretos                | mg/L F         | 0         | ---            | ---    | ---    | 1,5  | ---                        |
| HPA total                | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Imidaclopride            | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Indeno(1,2,3-cd)pireno   | ug/L C22H12    | 0         | ---            | ---    | ---    | ---  | ---                        |
| Magnésio                 | mg/L Mg        | 0         | ---            | ---    | ---    | ---  | ---                        |
| Manganês                 | µg/L Mn        | 1         | 100            | < 10   | < 10   | 50   | 100                        |
| MCPA                     | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Mercurio                 | ug/L Hg        | 0         | ---            | ---    | ---    | 1    | ---                        |
| Metolacoloro             | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Níquel                   | ug/L Ni        | 0         | ---            | ---    | ---    | 20   | ---                        |
| Nitratos                 | mg/L NO3       | 0         | ---            | ---    | ---    | 50   | ---                        |
| Nitritos                 | mg/L NO2       | 0         | ---            | ---    | ---    | 0,5  | ---                        |
| Ometoato                 | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Oxadiazão                | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Oxidabilidade            | mg/L O2 O2     | 0         | ---            | ---    | ---    | 5    | ---                        |
| Pest. Total              | ug/L           | 0         | ---            | ---    | ---    | 0,50 | ---                        |
| Radão                    | Bq/L           | 0         | ---            | ---    | ---    | 500  | ---                        |
| Selénio                  | ug/L Se        | 0         | ---            | ---    | ---    | 10   | ---                        |
| Sódio                    | mg/L Na        | 0         | ---            | ---    | ---    | 200  | ---                        |
| Sulfatos                 | mg/L SO4       | 0         | ---            | ---    | ---    | 250  | ---                        |
| Terbutilazina            | ug/L           | 0         | ---            | ---    | ---    | 0,10 | ---                        |
| Tetracloroetano          | ug/L Cl2CCCCl2 | 0         | ---            | ---    | ---    | 10   | ---                        |
| THM total                | ug/L CHBrCl2   | 0         | ---            | ---    | ---    | 100  | ---                        |
| Tricloroetano            | ug/L Cl2CCHCl  | 0         | ---            | ---    | ---    | 10   | ---                        |

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