

| SERVIÇOS MUNICIPALIZADOS DE PENICHE                                                                                                                                                                                                                                                               |                                               | DADOS DO CONTROLO DA QUALIDADE DA ÁGUA PARA CONSUMO HUMANO NO CONCELHO DE: PENICHE |                        |                          |                 |                        |                               |                    |         | 3º Trimestre                 |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------|------------------------|--------------------------|-----------------|------------------------|-------------------------------|--------------------|---------|------------------------------|-------------------------------|
|                                                                                                                                                                                                                                                                                                   |                                               | Zona de Abastecimento: ZA2_TC_2023                                                 |                        |                          |                 |                        |                               |                    |         | 2023                         |                               |
| Em conformidade com o Decreto-Lei n.º 69/2023, de 21 de agosto, procedeu-se à verificação da qualidade da água da rede pública, através de análises periódicas na torneira do consumidor, segundo o Programa de Controlo da Qualidade da Água (PCQA) aprovado pela autoridade competente (ERSAR). |                                               |                                                                                    |                        |                          |                 |                        |                               |                    |         |                              |                               |
| Grupo                                                                                                                                                                                                                                                                                             | Parâmetro                                     | Nº Amostras PCQA                                                                   |                        |                          | Unidades        | Valor Paramétrico (VP) | Valor Recomendado (Indicador) | Resultados Obtidos |         | Nº amostras superiores ao VP | Análises que cumprem o VP (%) |
|                                                                                                                                                                                                                                                                                                   |                                               | Nº Análises Previstas                                                              | Nº Análises Realizadas | % de Análises Realizadas |                 |                        |                               | Máximos            | Mínimos |                              |                               |
| CR1                                                                                                                                                                                                                                                                                               | Bactérias coliformes                          | 9                                                                                  | 9                      | 100                      | UFC/100mL       | 0                      | ---                           | 0                  | 0       | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Cloro residual livre                          | 9                                                                                  | 9                      | 100                      | mg/L            | ---                    | ≥ 0,2 e ≤ 0,6                 | 0,7                | 0,2     | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | E. coli                                       | 9                                                                                  | 9                      | 100                      | UFC/100mL       | 0                      | ---                           | 0                  | 0       | 0                            | 100                           |
| CR2                                                                                                                                                                                                                                                                                               | Alumínio                                      | 3                                                                                  | 3                      | 100                      | µg/L            | 200                    | ---                           | 21,2               | 12,8    | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Chumbo                                        | 3                                                                                  | 3                      | 100                      | Factor diluição | 3                      | ---                           | <1                 | <1      | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Clostridium perfringens (incluindo esporos)   | 3                                                                                  | 3                      | 100                      | UFC/100mL       | 0                      | ---                           | 0                  | 0       | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Condutividade                                 | 3                                                                                  | 3                      | 100                      | µS/cm a 20ºC    | 2500                   | ---                           | 313                | 193     | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Cor                                           | 3                                                                                  | 3                      | 100                      | mg/L PtCo       | 20                     | ---                           | <3,0               | <3,0    | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Enterococos                                   | 3                                                                                  | 3                      | 100                      | UFC/100mL       | 0                      | ---                           | 0                  | 0       | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Nitratos                                      | 3                                                                                  | 3                      | 100                      | mg/L            | 50                     | 25                            | 2,9                | 1,6     | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Número total de Germes a 22°C                 | 3                                                                                  | 3                      | 100                      | UFC/mL          | SAA                    | 100                           | 0                  | 0       | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Número total de Germes a 37°C                 | 3                                                                                  | 3                      | 100                      | UFC/mL          | SAA                    | 20                            | 0                  | 0       | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | pH                                            | 3                                                                                  | 3                      | 100                      | Unidades de pH  | ≥ 6,5 e ≤ 9,5          | ---                           | 8,1                | 7,5     | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Sabor                                         | 3                                                                                  | 3                      | 100                      | Factor diluição | 3                      | ---                           | <1                 | <1      | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Turbidez                                      | 3                                                                                  | 3                      | 100                      | NTU             | ≤ 1                    | ---                           | <0,20              | <0,20   | 0                            | 100                           |
| C                                                                                                                                                                                                                                                                                                 | Amónio                                        | 0                                                                                  | 0                      | ---                      | mg/L            | 0,5                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Carbono orgânico total (COT)                  | 0                                                                                  | 0                      | ---                      | mg/L            | ---                    | SAA                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Ferro                                         | 0                                                                                  | 0                      | ---                      | µg/L            | 200                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Manganês                                      | 0                                                                                  | 0                      | ---                      | µg/L            | 50                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Nitritos                                      | 0                                                                                  | 0                      | ---                      | mg/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Oxidabilidade                                 | 0                                                                                  | 0                      | ---                      | mg/L            | 5                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Trihalometanos Total                          | 0                                                                                  | 0                      | ---                      | µg/L            | 100                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Bromofórmio                                   | 0                                                                                  | 0                      | ---                      | µg/L            | 100                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Clorofórmio                                   | 0                                                                                  | 0                      | ---                      | µg/L            | 100                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Dibromoclorometano                            | 0                                                                                  | 0                      | ---                      | µg/L            | 100                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Bromodichlorometano                           | 0                                                                                  | 0                      | ---                      | µg/L            | 100                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | 1,2-dicloroetano                              | 0                                                                                  | 0                      | ---                      | µg/L            | 3                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Alfa total                                    | 0                                                                                  | 0                      | ---                      | Bq/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Antimonio                                     | 0                                                                                  | 0                      | ---                      | µg/L            | 5                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Arsénio                                       | 0                                                                                  | 0                      | ---                      | µg/L            | 10                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Benzeno                                       | 0                                                                                  | 0                      | ---                      | µg/L            | 1                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Benzo(a)pireno                                | 0                                                                                  | 0                      | ---                      | µg/L            | 0,01                   | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Boro                                          | 0                                                                                  | 0                      | ---                      | mg/L            | 1                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Bromatos                                      | 0                                                                                  | 0                      | ---                      | µg/L            | 10                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Cádmio                                        | 0                                                                                  | 0                      | ---                      | µg/L            | 5                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Cálcio                                        | 0                                                                                  | 0                      | ---                      | mg/L            | ---                    | <100                          | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Chumbo                                        | 0                                                                                  | 0                      | ---                      | µg/L            | 10                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Cianetos                                      | 0                                                                                  | 0                      | ---                      | µg/L            | 50                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Cloretos                                      | 0                                                                                  | 0                      | ---                      | mg/L            | 250                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Cobre                                         | 0                                                                                  | 0                      | ---                      | mg/L            | 2,0                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Crómio                                        | 0                                                                                  | 0                      | ---                      | µg/L            | 50                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Dose Indicativa total                         | 0                                                                                  | 0                      | ---                      | mSv/ano         | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Dureza total                                  | 0                                                                                  | 0                      | ---                      | mg/L            | ---                    | ≥ 150 e ≤ 500                 | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Fluoretos                                     | 0                                                                                  | 0                      | ---                      | mg/L            | 1,5                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Hidrocarbonetos Aromáticos Policíclicos (HAP) | 0                                                                                  | 0                      | ---                      | µg/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Benzo(b)fluoranteno                           | 0                                                                                  | 0                      | ---                      | µg/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Benzo(k)fluoranteno                           | 0                                                                                  | 0                      | ---                      | µg/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Benzo(g,h,i)perileno                          | 0                                                                                  | 0                      | ---                      | µg/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Indeno(1,2,3-cd)pireno                        | 0                                                                                  | 0                      | ---                      | µg/L            | 0,1                    | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Magnésio                                      | 0                                                                                  | 0                      | ---                      | mg/L            | ---                    | ≤ 50                          | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Mercurio                                      | 0                                                                                  | 0                      | ---                      | µg/L            | 1                      | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Níquel                                        | 0                                                                                  | 0                      | ---                      | µg/L            | 20                     | ---                           | ---                | ---     | ---                          | ---                           |
|                                                                                                                                                                                                                                                                                                   | Pesticidas totais                             | 2                                                                                  | 2                      | 100                      | µg/L            | 0,5                    | ---                           | <0,10              | <0,10   | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Alacloro                                      | 0                                                                                  | 1                      | ---                      | µg/L            | 0,1                    | ---                           | <0,030             | <0,030  | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Bentazona                                     | 0                                                                                  | 1                      | ---                      | µg/L            | 0,1                    | ---                           | <0,030             | <0,030  | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Clorpirifos                                   | 1                                                                                  | 2                      | 200                      | µg/L            | 0,1                    | ---                           | <0,0300            | <0,0300 | 0                            | 100                           |
|                                                                                                                                                                                                                                                                                                   | Dimetoato                                     | 1                                                                                  | 2                      | 200                      | µg/L            | 0,1                    | ---                           | <0,030             | <0,030  | 0                            | 100                           |
| Ormeofoato                                                                                                                                                                                                                                                                                        | 1                                             | 2                                                                                  | 200                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Diurão                                                                                                                                                                                                                                                                                            | 1                                             | 2                                                                                  | 200                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Imidaclopride                                                                                                                                                                                                                                                                                     | 1                                             | 2                                                                                  | 200                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Isoproturão                                                                                                                                                                                                                                                                                       | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Linurão                                                                                                                                                                                                                                                                                           | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,10            | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| MCPA                                                                                                                                                                                                                                                                                              | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Metalaxil / Metalixil-M                                                                                                                                                                                                                                                                           | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Metolactoro                                                                                                                                                                                                                                                                                       | 1                                             | 2                                                                                  | 200                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Oxamil                                                                                                                                                                                                                                                                                            | 1                                             | 2                                                                                  | 200                    | µg/L                     | 0,1             | ---                    | <0,050                        | <0,050             | 0       | 100                          |                               |
| Simazina                                                                                                                                                                                                                                                                                          | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Desetilsimazina                                                                                                                                                                                                                                                                                   | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Terbutilazina                                                                                                                                                                                                                                                                                     | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,10            | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Desetilterbutilazina                                                                                                                                                                                                                                                                              | 0                                             | 0                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Dimetanamida-P                                                                                                                                                                                                                                                                                    | 1                                             | 1                                                                                  | 100                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| M656PH051                                                                                                                                                                                                                                                                                         | 1                                             | 1                                                                                  | 100                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Metribuzina                                                                                                                                                                                                                                                                                       | 0                                             | 1                                                                                  | ---                    | µg/L                     | 0,1             | ---                    | <0,030                        | <0,030             | 0       | 100                          |                               |
| Polónio-210                                                                                                                                                                                                                                                                                       | 0                                             | 0                                                                                  | ---                    | Bq/L                     | 0,1             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Radão                                                                                                                                                                                                                                                                                             | 0                                             | 0                                                                                  | ---                    | Bq/L                     | 500             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Rádio-226                                                                                                                                                                                                                                                                                         | 0                                             | 0                                                                                  | ---                    | Bq/L                     | 0,5             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Selénio                                                                                                                                                                                                                                                                                           | 0                                             | 0                                                                                  | ---                    | µg/L                     | 10              | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Sódio                                                                                                                                                                                                                                                                                             | 0                                             | 0                                                                                  | ---                    | mg/L                     | 200             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Sulfatos                                                                                                                                                                                                                                                                                          | 0                                             | 0                                                                                  | ---                    | mg/L                     | 250             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Tetracloretoeno e Tricloretoeno                                                                                                                                                                                                                                                                   | 0                                             | 0                                                                                  | ---                    | µg/L                     | 0,5             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Trítio-232                                                                                                                                                                                                                                                                                        | 0                                             | 0                                                                                  | ---                    | Bq/L                     | 2,8             | ---                    | ---                           | ---                | ---     | ---                          |                               |
| Urânio-238                                                                                                                                                                                                                                                                                        | 0                                             | 0                                                                                  | ---                    | Bq/L                     | 3               | ---                    | ---                           | ---                | ---     | ---                          |                               |
| TOTAL                                                                                                                                                                                                                                                                                             |                                               | 74                                                                                 | 91                     |                          |                 |                        |                               |                    |         |                              |                               |

**Legenda**

&gt;= Valor superior ou inferior ao Limite de Quantificação

SAA Sem alteração anómala

Abc Valor superior ao limite permitido por lei (valor paramétrico)

Abc Valor superior / inferior ao recomendado por lei (parâmetros indicadores)

a) A realizar apenas quando o resultado dos parâmetros "alfa total" &gt; 0,10 Bq/L e "Dose Indicativa total" &gt; 0,1 mSv

Metodologia de averiguação de causas relativas a incumprimentos:

Causas relativas a incumprimentos:

Medidas corretivas implementadas:

O Presidente do Conselho de Administração,

Henrique António Belista Antunes

O Diretor Delegado,

Samuel Amis (engº)

Técnico Responsável,

Mária Reis (engº)