

Relatório Técnico_ Apresentação Trimestral

Entidade Gestora	Município de Celorico da Beira
Campanha de Controlo	2º Trimestre de 2018

1. INTRODUÇÃO

A qualidade da água fornecida aos seus consumidores é uma preocupação constante do Município de Celorico da Beira. Com o objetivo de assegurar o controlo da água distribuída aos seus Clientes são realizadas análises com o intuito de verificar o cumprimento dos requisitos de qualidade estabelecidos no Decreto-Lei n.º 152/2017 de 7 de Dezembro.

Esta legislação tem como premissa avaliar a qualidade da água na torneira do consumidor. Neste sentido foi elaborado um Plano de Controlo da Qualidade da Água, PCQA, para o ano de 2018, que mereceu a aprovação por parte da entidade competente – Entidade Reguladora dos Serviços de Águas e Resíduos - ERSAR.

O D. L. n.º 152/2017 no seu artigo n.º 17 refere que é obrigação da Entidade Gestora a publicação trimestral, dos resultados obtidos nas análises de demonstração de conformidade, acompanhados de elementos informativos que permitam avaliar o grau de cumprimento das normas de qualidade constante no anexo I, do referido D.L.

No presente documento, por cada zona de abastecimento e por cada parâmetro, são apresentados: O valor paramétrico; o valor mínimo e máximos obtidos; número de análises superiores ao V.P.; percentagem de análises que cumprem a legislação; número de análises agendadas e realizadas e a respetiva percentagem de análises realizadas.

Os documentos apresentados poderão ser usados para o referido fim, publicação trimestral.

É, também, enviada informação adicional, compilada, para a totalidade das zonas de abastecimento, apresentada em seguida.



Compilação dos parâmetros pesquisados durante o 2º trimestre de 2018 no Município de Celorico da Beira

Parâmetro (unidades)	Valor Paramétrico (VP) fixado no DL N.º152/2017	Valores Obtidos		N.º Análises Superiores ao V.P	% Cumprimento do VP	N. Análises		% Análises Realizadas
		Mínimo	Maximo			Agendas	Realizadas	
Escherichia Coli (N/100ml)	0	0	13	1	96%	23	23	100%
Bactérias Coliformes (N/100ml)	0	0	40	1	96%	23	23	100%
Desinfectante residual (mg Cl2/L)	---	<0,05	1,5	---	---	23	23	100%
Alumínio (µg Al/L)	200	<20	31	0	100%	2	2	100%
Amónio (mg NH4/L)	0,5	<0,050	<0,050	0	100%	4	4	100%
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	N.D.	>300	---	---	4	4	100%
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	N.D.	15	---	---	4	4	100%
Condutividade (µS/cm, a 20 °C)	2500	51,8	106	0	100%	4	4	100%
Clostridium Perfringens (N/100ml)	0	0	0	0	100%	2	2	100%
Cor (mg PtCo/L)	20	<5	<5	0	100%	4	4	100%
pH (E. Sorensen)	6,5 - 9,5	6,0	7,3	1	75%	4	4	100%
Ferro (µg Fe/L)	200	20	20	0	100%	1	1	100%
Manganês (µg Mn/L)	50	<10	<10	0	100%	4	4	100%
Nitrato (mg NO3/L)	50	2,9	5	0	100%	2	2	100%
Nitrito (mg NO2/L)	0,50	<0,020	<0,020	0	100%	1	1	100%
Oxidabilidade (mg O2/L)	5,0	<2,0	<2,0	0	100%	4	4	100%
Cheiro, a 25°C (Fator de diluição)	3	<1	<1	0	100%	4	4	100%
Sabor, a 25 °C (Fator de diluição)	3	<1	<1	0	100%	4	4	100%
Turvação (UNT)	4	<1	1,1	0	100%	4	4	100%
Antimónio (µg Sb/L)	5,0	-	-	-	-	0	0	N.A
Arsénio (µg As/L)	10	-	-	-	-	0	0	N.A
Benzeno (µg/L)	1,0	-	-	-	-	0	0	N.A
Benzo(a)pireno (µg/L)	0,010	<0,002	<0,002	0	100%	1	1	100%
Boro (mg B/L)	1,0	-	-	-	-	0	0	N.A
Bromato (µg BrO3/L)	10	-	-	-	-	0	0	N.A
Cádmio (µg Cd/L)	5,0	-	-	-	-	0	0	N.A
Cálcio (mg Ca/L)	---	12	12	---	---	1	1	100%
Chumbo (µg Pb/L)	10	<3	<3	0	100%	1	1	100%
Cianeto (µg CN/L)	50	-	-	-	-	0	0	N.A
Cobre (mg Cu/L)	2,0	0,017	0,017	0	100%	1	1	100%
Crómio (µg Cr/L)	50	-	-	-	-	0	0	N.A
1,2-Dicloroetano (µg/L)	3,0	-	-	-	-	0	0	N.A
Dureza Total (mg CaCO3/L)	---	37	37	---	---	1	1	100%
Enterococos fecais (N/100ml)	0	0	0	0	100%	1	1	100%
Fluoreto (mg F/L)	1,5	-	-	-	-	0	0	N.A
Magnésio (mg Mg/L)	---	1,6	1,6	---	---	1	1	100%
Mercurio (µg Hg/L)	1,0	-	-	-	-	0	0	N.A
Níquel (µg Ni/L)	20	8	8	0	100%	1	1	100%
Selénio (µg Se/L)	10	-	-	-	-	0	0	N.A
Cloro (mg Cl/L)	250	-	-	-	-	0	0	N.A
Sódio (mg Na/L)	200	-	-	-	-	0	0	N.A
Sulfato (mg SO4/L)	250	-	-	-	-	0	0	N.A
Carbono Orgânico Total (mg C/L)	Sem alteração anormal	-	-	-	---	0	0	N.A
Tetracloreto e Tricloroeteno (µg/L)	10	-	-	-	-	0	0	---
Tetracloreto (µg/L)	---	-	-	-	---	0	0	N.A
Tricloroeteno (µg/L)	---	-	-	-	---	0	0	N.A
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	0,005 (Maior LC)	0,005 (Maior LC)	0	100%	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%
Trihalometanos - total (µg/L)	100	4	4	0	100%	1	1	---
Clorofórmio (µg/L)	---	4	4	---	---	1	1	100%
Bromofórmio (µg/L)	---	<3	<3	---	---	1	1	100%
Bromodichlorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dibromodichlorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dose Indicativa (mSv/ano)	0,10	-	-	-	-	0	0	N.A
Alfa-total (Bq/L)	0,10 (Nível de Verificação)	-	-	-	---	0	0	---
Beta-Total (Bq/L)	1,0 (Nível de verificação)	-	-	-	---	0	0	---
Radão (Bq/L)	500	<10,0	<10,0	0	100%	1	1	100%
Pesticidas Totais (µg/L)	0,50	-	-	-	-	0	0	N.A

Notas:

N. D. - Não Detectado.

N.A. - Não aplicável. Parâmetro não determinado durante este trimestre.

L.Q. - Limite de Quantificação

**Informação complementar relativa aos incumprimentos.**

ZA PE	Data Colheita	Parâmetro	Causas Incumprimento	Análises Verificação (A.V.)*	Medida tomadas ou a implementar	Acompanhamento do incumprimento (A.V.)
Rio Mondego - Sto António do Rio	18-06-2018	E. coli	# Não foram identificadas	02-07-2018	# Não foram tomadas medidas porque as análises posteriores não confirmaram o incumprimento	Ultrapassado
Rio Mondego - Sto António do Rio	18-06-2018	Bactérias coliformes	# Não foram identificadas	02-07-2018	# Não foram tomadas medidas porque as análises posteriores não confirmaram o incumprimento	Ultrapassado
Soutomoninho	21-05-2018	pH	Características naturais da qualidade da água bruta	-	Não foram tomadas medidas por não haver risco para a saúde(parecer da A.S ou por ausência)	Por encerrar

Notas:

Informação presente no portal da Entidade Reguladora_ERSAR

* Cujo resultado demonstrou que o incumprimento tinha sido ultrapassado.

3. INCUMPRIMENTOS

Apresenta-se, em seguida, o “Mapa de Incumprimentos”, onde são indicados (caso existam) os resultados que violaram o respetivo Valor Paramétrico definido no D.L. n.º 152/2017.

Nesta avaliação quando na coluna “Violação” aparece a indicação V.A., significa que foi registada uma violação ao Valor Paramétrico fixado no D. L. n.º152/17. Quando na coluna “Violação” aparece a indicação V.R. significa que os valores definidos, para os parâmetros Desinfetante Residual, N.º de Colónias a 22 e a 36 °C, Dureza Total, Cálcio e Magnésio, indicados como desejáveis no D. L. n.º 152/17, foram ultrapassados.

Os Níveis de verificação impostos para os parâmetros Alfa total e Beta total quando ultrapassados são, de igual modo, apresentados na coluna “Violação” com a indicação V.R..

Será enviado por correio eletrónico, um ficheiro IDQA, retirado do portal do ERSAR, onde poderão ser visualizados todos os incumprimentos registados.

No referido ficheiro, também, estão apresentados os locais de amostragem onde foi possível realizar as colheitas e os locais previstos inicialmente no PCQA.

CESAB - Centro de Serviços do Ambiente

Zona Industrial Ponte de Viadores
MEALHADA
3050-481

Mapa de Incumprimentos

Período de 01-04-2018 a 30-06-2018 (Data de Colheita)

Cliente: Câmara Municipal de Celorico da Beira

Tipo de Amostra: Águas de Consumo Humano

Área: Aldeia da Serra

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
21-05-2018	23-05-2018	14813 Casa Particular - Aldeia da Serra	Cloro Residual Livre	---	---	<0,05 mg Cl2/L	V.R.
Total de Parâmetros da Área: 3							

Área: Assanhas

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
18-06-2018	21-06-2018	18130 Centro de Dia Carrapichana - Assanhas	Cloro Residual Livre	---	---	0,09 mg Cl2/L	V.R.
Total de Parâmetros da Área: 6							

Área: Cabeça Alta

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
16-04-2018	24-04-2018	11097 Associação - Casas de Soeiro	Cloro Residual Livre	---	---	0,82 mg Cl2/L	V.R.
18-06-2018	21-06-2018	18131 Centro de Dia - Galisteu	Cloro Residual Livre	---	---	0,87 mg Cl2/L	V.R.
Total de Parâmetros da Área: 22							

Área: Cadafaz

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
21-05-2018	23-05-2018	14815 Fontanário 3- Cadafaz	Cloro Residual Livre	---	---	0,13 mg Cl2/L	V.R.
Total de Parâmetros da Área: 3							

Área: Fontanário de Barco

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
16-04-2018	18-04-2018	11092 Chafariz 2 - Barco	Cloro Residual Livre	---	---	<0,05 mg Cl2/L	V.R.
18-06-2018	21-06-2018	18132 Chafariz 3 - Barco	Cloro Residual Livre	---	---	1,5 mg Cl2/L	V.R.
Total de Parâmetros da Área: 6							

Área: Linhares

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
21-05-2018	23-05-2018	14816 Café Pôr do sol - Linhares	Cloro Residual Livre	---	---	0,05 mg Cl2/L	V.R.
Total de Parâmetros da Área: 3							

Área: Prados

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
Não ocorreram violações							Total de Parâmetros da Área: 3

Área: Rapa

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
Não ocorreram violações							Total de Parâmetros da Área: 3

Área: Rio Mondego - Ponte Ladrão

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
16-04-2018	18-04-2018	11093 Café Vitor - Ratoeira	Cloro Residual Livre	---	---	0,74 mg Cl2/L	V.R.
Total de Parâmetros da Área: 43							

Área: Rio Mondego - Sto António do Rio

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
18-06-2018	21-06-2018	18134 Restaurante Aquario - Celorico Gare	Bactérias Coliformes	---	0	40 N/100ml	V.A.
18-06-2018	21-06-2018	18134 Restaurante Aquario - Celorico Gare	Escherichia Coli	---	0	13 N/100ml	V.A.
Total de Parâmetros da Área: 6							

Área: Salgueirais

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
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CESAB - Centro de Serviços do Ambiente

Zona Industrial Ponte de Viadores
MEALHADA
3050-481

Mapa de Incumprimentos

Período de 01-04-2018 a 30-06-2018 (Data de Colheita)

18-06-2018	21-06-2018	18135	Chafariz Central - Salgueirais	Cloro Residual Livre	---	---	0,93 mg Cl2/L	V.R.
								Total de Parâmetros da Área: 6

Área: Soutomoninho

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
21-05-2018	29-05-2018	14819 Associação Cadafaz - Soutomoninho	pH	---	≥6,5 e ≤9,5	6,0 a 23°C Escala de Sorensen	V.A.
Total de Parâmetros da Área: 15							

Área: Vale da Azares

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
21-05-2018	29-05-2018	14820 Escola - Vale de Azares	Número de Colónias a 22 °C	---	s/ alter. anormal	>300 N/ml a 22°C	V.R.
Total de Parâmetros da Área: 15							

Área: Velosa

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
Não ocorreram violações						Total de Parâmetros da Área: 6	
						Total de Parâmetros do Cliente: 140	

V.R. - Valores Recomendados de acordo com o Tipo de Amostra
V.A. - Valores Admissíveis de acordo com o Tipo de Amostra

Total de Clientes: 1
Total de Áreas: 14
Total de Pontos: 23
Total de Parâmetros: 140



A legislação no artigo n.º15 refere que as Entidades Gestoras devem avaliar se o local onde a amostra foi recolhida é de igual modo representativo da área da zona de amostragem que se pretende controlar. Se tal não for o caso a Entidade Gestora deverá proceder à alteração do ponto de amostragem no Portal da ERSAR.

3.1 INDICAÇÃO DAS COMUNICAÇÕES DOS INCUMPRIMENTOS.

Relembra-se que segundo o artigo n.º 18, a Entidade Gestora deve comunicar de forma auditável, à Autoridade de Saúde e à ERSAR os incumprimentos até ao fim do dia útil seguinte àquele em que teve conhecimento da sua ocorrência.

A comunicação do(s) incumprimento(s) foi efetuada por correio eletrónico e/ou fax imediatamente após a validação do respetivo resultado.

Data da Campanha	Parâmetros em violação	Data de envio da comunicação de incumprimento
21-05-2018	pH	23-05-2018
18-06-2018	Bactérias Coliformes	20-06-2017
18-06-2018	Escherichia Coli	20-06-2017

4. COMENTÁRIO TÉCNICO DOS RESULTADOS

Neste trimestre foram registados três incumprimentos.

A zona de abastecimento de Rio Mondego - Sto António do Rio apresentou problemas relativos à sua qualidade microbiológica atendendo à presença de Bactérias Coliformes e E. Coli. Na amostra em questão foi registada a presença de agente desinfetante.

Situações deste tipo ocorrem com frequência quando: a amostra recolhida possui influência de água de uma origem particular; o local de colheita possui um depósito incluído na rede predial; o sistema de desinfecção é intermitente (levando a que o tempo de contacto não seja suficiente para promover uma correta desinfecção); ou existe alguma pequena rotura na rede de distribuição.



Foi registado um valor de pH inferior ao valor paramétrico mínimo na zona de Soutomoninho. Valores reduzidos de pH são característicos da zona em questão. O incumprimento poderá ser encerrado, uma vez que a zona não possui correção de pH e caso a autoridade de saúde, não tenha identificado risco para a saúde (parecer da A.S ou por ausência).

Resta referir que das 23 determinações efetuadas ao cloro residual livre foram contabilizadas 17 amostras com valores próximos da gama referida na legislação 0,2_0,6 mg Cl₂/L.

O CESAB coloca-se à disposição para a colaboração que entenderem necessária.

Mealhada, 12 de julho de 2018

A. Almeida

Resumo dos parâmetros pesquisados na zona de abastecimento: Aldeia da Serra

2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfectante residual (mg Cl ₂ /L)	---	<0,05	<0,05	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO ₃ /L)	50	---	---	---	---	0	0	---
Nitrito (mg NO ₂ /L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O ₂ /L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO ₃ /L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO ₃ /L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO ₄ /L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._ Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Assanhas

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	2	2	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	2	2	100%
Desinfetante residual (mg Cl2/L)	---	0,09	0,25	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodiclorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Cabeça Alta

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	3	3	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	3	3	100%
Desinfectante residual (mg Cl2/L)	---	0,43	0,87	---	---	3	3	100%
Alumínio (µg Al/L)	200	31	31	0	100%	1	1	100%
Amónio (mg NH4/L)	0,50	<0,050	<0,050	0	100%	1	1	100%
N.ºColónias 22°C (N/ml a 22°C)	s/ alter. anormal	N.D.	N.D.	---	---	1	1	100%
N.ºColónias 36°C (N/ml a 36°C)	s/ alter. anormal	1	1	---	---	1	1	100%
Condutividade (µS/cm, a 20 °C)	2500	69,4	69,4	0	100%	1	1	100%
Clostridium perfringens (N/100ml)	0	0	0	0	100%	1	1	100%
Cor (mg PtCo/L)	20	<5	<5	0	100%	1	1	100%
pH (E. Sorensen)	≥6,5 e ≤9,5	7,2	7,2	0	100%	1	1	100%
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	<10	<10	0	100%	1	1	100%
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	<2,0	<2,0	0	100%	1	1	100%
Cheiro, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Sabor, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Turvação (UNT)	4	<0,3	<0,3	0	100%	1	1	100%
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Cadafaz

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfetante residual (mg Cl2/L)	---	0,13	0,13	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodiclorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Fontanário de Barco

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	2	2	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	2	2	100%
Desinfetante residual (mg Cl2/L)	---	<0,05	1,5	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloreto e Tricloreto (µg/L)	10	---	---	---	---	---	---	---
Tetracloreto (µg/L)	---	---	---	---	---	0	0	---
Tricloreto (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Linhares

2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfetante residual (mg Cl2/L)	---	0,05	0,05	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodiclorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Prados

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfetante residual (mg Cl2/L)	---	0,19	0,19	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Rapa

2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfetante residual (mg Cl ₂ /L)	---	0,21	0,21	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO ₃ /L)	50	---	---	---	---	0	0	---
Nitrito (mg NO ₂ /L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O ₂ /L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO ₃ /L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO ₃ /L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO ₄ /L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodiclorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Rio Mondego - Ponte Ladrão							2º TRIMESTRE 2018 1 abril a 30 Junho	
Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	3	3	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	3	3	100%
Desinfectante residual (mg Cl ₂ /L)	---	0,41	0,74	---	---	3	3	100%
Alumínio (µg Al/L)	200	<20	<20	0	100%	1	1	100%
Amónio (mg NH ₄ /L)	0,50	<0,050	<0,050	0	100%	1	1	100%
N.ºColónias 22°C (N/ml a 22°C)	s/ alter. anormal	N.D.	N.D.	---	---	1	1	100%
N.ºColónias 36°C (N/ml a 36°C)	s/ alter. anormal	N.D.	N.D.	---	---	1	1	100%
Condutividade (µS/cm, a 20 °C)	2500	106	106	0	100%	1	1	100%
Clostridium perfringens (N/100ml)	0	0	0	0	100%	1	1	100%
Cor (mg PtCo/L)	20	<5	<5	0	100%	1	1	100%
pH (E. Sorensen)	≥6,5 e ≤9,5	7,3	7,3	0	100%	1	1	100%
Ferro (µg Fe/L)	200	20	20	0	100%	1	1	100%
Manganês (µg Mn/L)	50	<10	<10	0	100%	1	1	100%
Nitrato (mg NO ₃ /L)	50	---	---	---	---	0	0	---
Nitrito (mg NO ₂ /L)	0,50	<0,020	<0,020	0	100%	1	1	100%
Oxidabilidade (mg O ₂ /L)	5,0	<2,0	<2,0	0	100%	1	1	100%
Cheiro, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Sabor, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Turvação (UNT)	4	1,1	1,1	0	100%	1	1	100%
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	<0,002	<0,002	0	100%	1	1	100%
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO ₃ /L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	12	12	---	---	1	1	100%
Chumbo (µg Pb/L)	10	<3	<3	0	100%	1	1	100%
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	0,017	0,017	0	100%	1	1	100%
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO ₃ /L)	---	37	37	---	---	1	1	100%
Enterococos fecais (N/100ml)	0	0	0	0	100%	1	1	100%
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	1,6	1,6	---	---	1	1	100%
Mercurio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	8	8	0	100%	1	1	100%
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO ₄ /L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	<0,005 (Maior LQ)	<0,005 (Maior LQ)	0	100%	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%
Trihalometanos Totais (µg/L)	100	4	4	0	100%	1	1	---
Clorofórmio (µg/L)	---	4	4	---	---	1	1	100%
Bromofórmio (µg/L)	---	<3	<3	---	---	1	1	100%
Bromodichlorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dibromoclorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
Beta-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	<10,0	<10,0	0	100%	1	1	100%
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Rio Mondego - Sto António do Rio

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	13	1	50%	2	2	100%
Bactérias Coliformes (N/100ml)	0	0	40	1	50%	2	2	100%
Desinfectante residual (mg Cl2/L)	---	0,59	0,64	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromochlorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
Beta-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---
ZA PE	Data Colheita	Parâmetro	Causas Incumprimento		Análises Verificação (A.V.)	Medida tomadas ou a implementar		
Rio Mondego - Sto António do Rio	18-06-2018	E. coli	# Não foram identificadas		02-07-2018	# Não foram tomadas medidas porque as análises posteriores não confirmaram o incumprimento		
Rio Mondego - Sto António do Rio	18-06-2018	Bactérias coliformes			02-07-2018			

Informação presente no portal da Entidade Reguladora_ERSAR

Notas:

L.Q. - Limite de Quantificação

N.D. - Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Salgueirais

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	2	2	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	2	2	100%
Desinfetante residual (mg Cl2/L)	---	0,42	0,93	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloreto e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloreto (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
Beta-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D. - Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Soutomoninho

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfetante residual (mg Cl ₂ /L)	---	0,31	0,31	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	<0,050	<0,050	0	100%	1	1	100%
N.ºColónias 22°C (N/ml a 22°C)	s/ alter. anormal	N.D.	N.D.	---	---	1	1	100%
N.ºColónias 36°C (N/ml a 36°C)	s/ alter. anormal	N.D.	N.D.	---	---	1	1	100%
Condutividade (µS/cm, a 20 °C)	2500	57,3	57,3	0	100%	1	1	100%
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	<5	<5	0	100%	1	1	100%
pH (E. Sorensen)	≥6,5 e ≤9,5	6,0	6,0	1	0%	1	1	100%
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	<10	<10	0	100%	1	1	100%
Nitrato (mg NO ₃ /L)	50	2,9	2,9	0	100%	1	1	100%
Nitrito (mg NO ₂ /L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O ₂ /L)	5,0	<2,0	<2,0	0	100%	1	1	100%
Cheiro, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Sabor, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Turvação (UNT)	4	<0,3	<0,3	0	100%	1	1	100%
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO ₃ /L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO ₃ /L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercurio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO ₄ /L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodiclorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
Beta-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---
ZA PE	Data Colheita	Parâmetro	Causas Incumprimento	Análises Verificação (A.V.)	Medida tomadas ou a implementar			
Soutomoninho	21-05-2018	pH	Características naturais da qualidade da água bruta	-	Não foram tomadas medidas por não haver risco para a saúde(parecer da A.S ou por ausência)			

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Vale da Azares

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	1	1	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	1	1	100%
Desinfetante residual (mg Cl ₂ /L)	---	0,30	0,30	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	<0,050	<0,050	0	100%	1	1	100%
N.ºColónias 22°C (N/ml a 22°C)	s/ alter. anormal	>300	>300	---	---	1	1	100%
N.ºColónias 36°C (N/ml a 36°C)	s/ alter. anormal	15	15	---	---	1	1	100%
Condutividade (µS/cm, a 20 °C)	2500	51,8	51,8	0	100%	1	1	100%
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	<5	<5	0	100%	1	1	100%
pH (E. Sorensen)	≥6,5 e ≤9,5	6,8	6,8	0	100%	1	1	100%
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	<10	<10	0	100%	1	1	100%
Nitrato (mg NO ₃ /L)	50	5,0	5,0	0	100%	1	1	100%
Nitrito (mg NO ₂ /L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O ₂ /L)	5,0	<2,0	<2,0	0	100%	1	1	100%
Cheiro, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Sabor, a 25°C (Fator de diluição)	3	<1	<1	0	100%	1	1	100%
Turvação (UNT)	4	<0,3	<0,3	0	100%	1	1	100%
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO ₃ /L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO ₃ /L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercurio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO ₄ /L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	---	---	---	---	---	---	---
Tetracloroetano (µg/L)	---	---	---	---	---	0	0	---
Tricloroetano (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
Beta-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._ Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Velosa

 2º TRIMESTRE 2018
 1 abril a 30 Junho

Parâmetro (unidades)	Valor Paramétrico (V.P.) fixado no DL n.º 152/17	Mínimo	Máximo	N.º Análises Superiores ao V.P.	% Cumprimento do V.P.	N.º Análises Agendadas	N.º Análises Realizadas	% Análises Realizadas
Escherichia Coli (N/100ml)	0	0	0	0	100%	2	2	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	2	2	100%
Desinfetante residual (mg Cl2/L)	---	0,17	0,20	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH4/L)	0,50	---	---	---	---	0	0	---
N.ºColónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	---	---	---	---	0	0	---
Condutividade (µS/cm, a 20 °C)	2500	---	---	---	---	0	0	---
Clostridium perfringens (N/100ml)	0	---	---	---	---	0	0	---
Cor (mg PtCo/L)	20	---	---	---	---	0	0	---
pH (E. Sorensen)	≥6,5 e ≤9,5	---	---	---	---	0	0	---
Ferro (µg Fe/L)	200	---	---	---	---	0	0	---
Manganês (µg Mn/L)	50	---	---	---	---	0	0	---
Nitrato (mg NO3/L)	50	---	---	---	---	0	0	---
Nitrito (mg NO2/L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O2/L)	5,0	---	---	---	---	0	0	---
Cheiro, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Sabor, a 25°C (Fator de diluição)	3	---	---	---	---	0	0	---
Turvação (UNT)	4	---	---	---	---	0	0	---
Antimónio (µg Sb/L)	5,0	---	---	---	---	0	0	---
Arsénio (µg As/L)	10	---	---	---	---	0	0	---
Benzeno (µg/L)	1,0	---	---	---	---	0	0	---
Benzo(a)pireno (µg/L)	0,010	---	---	---	---	0	0	---
Boro (mg B/L)	1,0	---	---	---	---	0	0	---
Bromato (µg BrO3/L)	10	---	---	---	---	0	0	---
Cádmio (µg Cd/L)	5,0	---	---	---	---	0	0	---
Cálcio (mg Ca/L)	---	---	---	---	---	0	0	---
Chumbo (µg Pb/L)	25	---	---	---	---	0	0	---
Cianeto (µg CN/L)	50	---	---	---	---	0	0	---
Cobre (mg Cu/L)	2,0	---	---	---	---	0	0	---
Crómio (µg Cr/L)	50	---	---	---	---	0	0	---
1,2-Dicloroetano (µg/L)	3,0	---	---	---	---	0	0	---
Dureza Total (mg CaCO3/L)	---	---	---	---	---	0	0	---
Enterococos fecais (N/100ml)	0	---	---	---	---	0	0	---
Fluoreto (mg F/L)	1,5	---	---	---	---	0	0	---
Magnésio (mg Mg/L)	---	---	---	---	---	0	0	---
Mercúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloreto (mg Cl/L)	250	---	---	---	---	0	0	---
Sódio (mg Na/L)	200	---	---	---	---	0	0	---
Sulfato (mg SO4/L)	250	---	---	---	---	0	0	---
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloreto e Tricloreto (µg/L)	10	---	---	---	---	---	---	---
Tetracloreto (µg/L)	---	---	---	---	---	0	0	---
Tricloreto (µg/L)	---	---	---	---	---	0	0	---
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	---	---	---	---	---	---	---
Benzo(b)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(k)fluoranteno (µg/L)	---	---	---	---	---	0	0	---
Benzo(ghi)perileno (µg/L)	---	---	---	---	---	0	0	---
Indeno(1,2,3-cd)pireno (µg/L)	---	---	---	---	---	0	0	---
Trihalometanos Totais (µg/L)	100	---	---	---	---	---	---	---
Clorofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromofórmio (µg/L)	---	---	---	---	---	0	0	---
Bromodichlorometano (µg/L)	---	---	---	---	---	0	0	---
Dibromoclorometano (µg/L)	---	---	---	---	---	0	0	---
Dose Indicativa (mSv/ano)	0,10	---	---	---	---	0	0	---
Alfa-total (Bq/L)	0,10 (Nível verificação)	---	---	---	---	0	0	---
β-Total (Bq/L)	1,0 (Nível verificação)	---	---	---	---	0	0	---
Radão (Bq/L)	500	---	---	---	---	0	0	---
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado