

Relatório Técnico_ Apresentação Trimestral

Entidade Gestora	Município de Celorico da Beira
Campanha de Controlo	4º 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 do 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 4º 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
		Minimo	Maximo			Agendas	Realizadas	
Escherichia Coli (N/100ml)	0	0	0	0	100%	23	23	100%
Bactérias Coliformes (N/100ml)	0	0	0	0	100%	23	23	100%
Desinfetante residual (mg Cl ₂ /L)	---	<0,05	1,3	---	---	23	23	100%
Alumínio (µg Al/L)	200	<20	25	0	100%	4	4	100%
Amónio (mg NH ₄ /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.	N.D.	---	---	4	4	100%
N.ºColónias 36°C (N/ml a 36°C)	Sem alter. anormal	N.D.	N.D.	---	---	4	4	100%
Condutividade (µS/cm, a 20 °C)	2500	55,4	106	0	100%	4	4	100%
Clostridium Perfringens (N/100ml)	0	0	0	0	100%	4	4	100%
Cor (mg PtCo/L)	20	<5	<5	0	100%	4	4	100%
pH (E. Sorensen)	6,5 - 9,5	6,5	7,9	0	100%	4	4	100%
Ferro (µg Fe/L)	200	<10	<10	0	100%	2	2	100%
Manganês (µg Mn/L)	50	<10	<10	0	100%	4	4	100%
Nitrato (mg NO ₃ /L)	50	3,8	5,4	0	100%	2	2	100%
Nitrito (mg NO ₂ /L)	0,50	<0,020	<0,020	0	100%	2	2	100%
Oxidabilidade (mg O ₂ /L)	5,0	<2,0	2,2	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	<0,3	0,3	0	100%	4	4	100%
Antimónio (µg Sb/L)	5,0	<2	<2	0	100%	2	2	100%
Arsénio (µg As/L)	10	2	5	0	100%	2	2	100%
Benzeno (µg/L)	1,0	<0,5	<0,5	0	100%	2	2	100%
Benzo(a)pireno (µg/L)	0,010	<0,002	<0,002	0	100%	2	2	100%
Boro (mg B/L)	1,0	<0,10	<0,10	0	100%	2	2	100%
Bromato (µg BrO ₃ /L)	10	<5	<5	0	100%	2	2	100%
Cádmio (µg Cd/L)	5,0	<1,0	<1,0	0	100%	2	2	100%
Cálcio (mg Ca/L)	---	2,3	4,9	---	---	2	2	100%
Chumbo (µg Pb/L)	10	<3	<3	0	100%	2	2	100%
Cianeto (µg CN/L)	50	<10	<10	0	100%	2	2	100%
Cobre (mg Cu/L)	2,0	<0,010	<0,010	0	100%	2	2	100%
Crómio (µg Cr/L)	50	<5	<5	0	100%	2	2	100%
1,2-Dicloroetano (µg/L)	3,0	<0,5	<0,5	0	100%	2	2	100%
Dureza Total (mg CaCO ₃ /L)	---	7,9	16	---	---	2	2	100%
Enterococos fecais (N/100ml)	0	0	0	0	100%	2	2	100%
Fluoreto (mg F/L)	1,5	0,05	0,41	0	100%	2	2	100%
Magnésio (mg Mg/L)	---	0,55	0,997	---	---	2	2	100%
Mercurio (µg Hg/L)	1,0	<0,30	<0,30	0	100%	2	2	100%
Níquel (µg Ni/L)	20	<5	5	0	100%	2	2	100%
Selénio (µg Se/L)	10	<0,5	<0,5	0	100%	2	2	100%
Cloro (mg Cl/L)	250	4,7	5,3	0	100%	2	2	100%
Sódio (mg Na/L)	200	8,2	8,9	0	100%	2	2	100%
Sulfato (mg SO ₄ /L)	250	<5,0	<5,0	0	100%	2	2	100%
Carbono Orgânico Total (mg C/L)	Sem alteração anormal	-	-	-	---	0	0	N.A
Tetracloroetano e Tricloroetano (µg/L)	10	<3 (maior LQ)	<3 (maior LQ)	0	100%	2	2	---
Tetracloroetano (µg/L)	---	<3	<3	---	---	2	2	100%
Tricloroetano (µg/L)	---	<0,5	<0,5	---	---	2	2	100%
Hidrocarbonetos Aromáticos Policíclicos (µg/L)	0,10	<0,005 (Maior LQ)	<0,005 (Maior LQ)	0	100%	2	2	---
Benzo(b)fluoranteno (µg/L)	---	<0,005	<0,005	---	---	2	2	100%
Benzo(k)fluoranteno (µg/L)	---	<0,002	<0,002	---	---	2	2	100%
Benzo(ghi)perileno (µg/L)	---	<0,004	<0,004	---	---	2	2	100%
Indeno(1,2,3-cd)pireno (µg/L)	---	<0,004	<0,004	---	---	2	2	100%
Trihalometanos - total (µg/L)	100	<3 (maior LQ)	5	0	100%	2	2	---
Clorofórmio (µg/L)	---	<3	5	---	---	2	2	100%
Bromofórmio (µg/L)	---	<3	<3	---	---	2	2	100%
Bromodiclorometano (µg/L)	---	<3	<3	---	---	2	2	100%
Dibromoclorometano (µg/L)	---	<3	<3	---	---	2	2	100%
Dose Indicativa (mSv/ano)	0,10	<0,10	<0,10	0	100%	2	2	100%
Alfa-total (Bq/L)	0,10 (Nível de Verificação)	<0,04	<0,04	---	---	2	2	---
Beta-Total (Bq/L)	1,0 (Nível de verificação)	<0,10	<0,10	---	---	2	2	---
Radão (Bq/L)	500	<10,0	238	0	100%	2	2	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



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.

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.

CESAB - Centro de Serviços do Ambiente

Zona Industrial Ponte de Viadores
MEALHADA
3050-481

Mapa de Incumprimentos

Período de 01-10-2018 a 31-01-2019 (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
Não ocorreram violações						Total de Parâmetros da Área: 3	

Área: Assanhas

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

Área: Cabeça Alta

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
15-10-2018	30-10-2018	32976 Centro de Saúde - Celorico	Cloro Residual Livre	---	---	0,80 mg Cl2/L	V.R.
19-11-2018	21-11-2018	37138 Café Fino - Carvalheda	Cloro Residual Livre	---	---	1,3 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
Não ocorreram violações						Total de Parâmetros da Área: 3	

Área: Fontanário de Barco

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
15-10-2018	18-10-2018	32971 Chafariz 1 - Barco	Cloro Residual Livre	---	---	<0,05 mg Cl2/L	V.R.
17-12-2018	18-12-2018	40734 Chafariz 2 - Barco	Cloro Residual Livre	---	---	<0,05 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
Não ocorreram violações						Total de Parâmetros da Área: 3	

Área: Prados

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
19-11-2018	21-11-2018	37141 Chafariz 3 - Prados	Cloro Residual Livre	---	---	0,10 mg Cl2/L	V.R.
						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
Não ocorreram violações						Total de Parâmetros da Área: 22	

Área: Rio Mondego - Sto António do Rio

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
17-12-2018	18-12-2018	40736 Fontanário - Casas do Rio	Cloro Residual Livre	---	---	0,70 mg Cl2/L	V.R.
						Total de Parâmetros da Área: 6	

Área: Salgueirais

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
15-10-2018	18-10-2018	32974 Chafariz Igreja - Salgueirais	Cloro Residual Livre	---	---	0,90 mg Cl2/L	V.R.
17-12-2018	18-12-2018	40737 Café - Salgueirais	Cloro Residual Livre	---	---	0,83 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
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CESAB - Centro de Serviços do Ambiente

Zona Industrial Ponte de Viadores
MEALHADA
3050-481

Mapa de Incumprimentos

Período de 01-10-2018 a 31-01-2019 (Data de Colheita)

Não ocorreram violações

Área: Vale da Azares

Total de Parâmetros da Área: 59

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
Não ocorreram violações							Total de Parâmetros da Área: 59

Área: Velosa

Dt Col./Emis.	Boletim	Ponto de Amostragem	Parâmetro	V.R.	V.A.	Resultado	Violação
17-12-2018	18-12-2018	40738 Junta de Freguesia - Velosa	Cloro Residual Livre	---	---	0,10 mg Cl2/L	V.R.

Total de Parâmetros da Área: 6
Total de Parâmetros do Cliente: 207



4. COMENTÁRIO TÉCNICO DOS RESULTADOS

Neste trimestre não foram registados incumprimentos.

Os Níveis de Verificação, estabelecidos para os parâmetros radiológicos Alfa-Total e Beta-Total, foram respeitados.

Em relação aos valores indicados como desejáveis ou recomendados, Dureza Total, Magnésio, Cálcio, Desinfetante Residual, N.º colónias a 22 e a 36 °C, há a referir que das 23 determinações efetuadas ao cloro residual livre em campo, foram contabilizadas 19 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, 7 de fevereiro de 2019

Daumonde

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

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,25	0,25	---	---	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	---
Merúrio (µg Hg/L)	1,0	---	---	---	---	0	0	---
Níquel (µg Ni/L)	20	---	---	---	---	0	0	---
Selénio (µg Se/L)	10	---	---	---	---	0	0	---
Cloro (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._ Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Assanhas

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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 Cl ₂ /L)	---	0,19	0,31	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---
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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Cabeça Alta

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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%
Desinfetante residual (mg Cl ₂ /L)	---	0,64	1,3	---	---	3	3	100%
Alumínio (µg Al/L)	200	25	25	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	105	105	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	7,9	7,9	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	---	---	---	---	0	0	---
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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Cadafaz

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,57	0,57	---	---	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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

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

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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 Cl ₂ /L)	---	<0,05	<0,05	---	---	2	2	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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Linhares

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,38	0,38	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Prados

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,10	0,10	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Rapa

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,15	0,15	---	---	1	1	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Rio Mondego - Ponte Ladrão							4.º TRIMESTRE 2018 01 outubro a 31 dezembro	
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%
Desinfetante residual (mg Cl ₂ /L)	---	0,37	0,49	---	---	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	7,1	7,1	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	---	---	---	---	0	0	---
Nitrito (mg NO ₂ /L)	0,50	---	---	---	---	0	0	---
Oxidabilidade (mg O ₂ /L)	5,0	2,2	2,2	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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Rio Mondego - Sto António do Rio							4.º TRIMESTRE 2018 01 outubro a 31 dezembro	
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 Cl ₂ /L)	---	0,52	0,70	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Salgueirais

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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 Cl ₂ /L)	---	0,83	0,90	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Soutomoninho

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,29	0,29	---	---	1	1	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	72,0	72,0	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	6,5	6,5	0	100%	1	1	100%
Ferro (µg Fe/L)	200	<10	<10	0	100%	1	1	100%
Manganês (µg Mn/L)	50	<10	<10	0	100%	1	1	100%
Nitrato (mg NO ₃ /L)	50	5,4	5,4	0	100%	1	1	100%
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	0,3	0,3	0	100%	1	1	100%
Antimónio (µg Sb/L)	5,0	<2	<2	0	100%	1	1	100%
Arsénio (µg As/L)	10	5	5	0	100%	1	1	100%
Benzeno (µg/L)	1,0	<0,5	<0,5	0	100%	1	1	100%
Benzo(a)pireno (µg/L)	0,010	<0,002	<0,002	0	100%	1	1	100%
Boro (mg B/L)	1,0	<0,10	<0,10	0	100%	1	1	100%
Bromato (µg BrO ₃ /L)	10	<5	<5	0	100%	1	1	100%
Cádmio (µg Cd/L)	5,0	<1,0	<1,0	0	100%	1	1	100%
Cálcio (mg Ca/L)	---	4,9	4,9	---	---	1	1	100%
Chumbo (µg Pb/L)	10	<3	<3	0	100%	1	1	100%
Cianeto (µg CN/L)	50	<10	<10	0	100%	1	1	100%
Cobre (mg Cu/L)	2,0	<0,010	<0,010	0	100%	1	1	100%
Crómio (µg Cr/L)	50	<5	<5	0	100%	1	1	100%
1,2-Dicloroetano (µg/L)	3,0	<0,5	<0,5	0	100%	1	1	100%
Dureza Total (mg CaCO ₃ /L)	---	16	16	---	---	1	1	100%
Enterococos fecais (N/100ml)	0	0	0	0	100%	1	1	100%
Fluoreto (mg F/L)	1,5	0,41	0,41	0	100%	1	1	100%
Magnésio (mg Mg/L)	---	0,997	0,997	---	---	1	1	100%
Mercúrio (µg Hg/L)	1,0	<0,30	<0,30	0	100%	1	1	100%
Níquel (µg Ni/L)	20	<5	<5	0	100%	1	1	100%
Selénio (µg Se/L)	10	<0,5	<0,5	0	100%	1	1	100%
Cloreto (mg Cl/L)	250	5,3	5,3	0	100%	1	1	100%
Sódio (mg Na/L)	200	8,9	8,9	0	100%	1	1	100%
Sulfato (mg SO ₄ /L)	250	<5,0	<5,0	0	100%	1	1	100%
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	<3 (maior LQ)	<3 (maior LQ)	0	100%	1	1	100%
Tetracloroetano (µg/L)	---	<3	<3	---	---	1	1	100%
Tricloroetano (µg/L)	---	<0,5	<0,5	---	---	1	1	100%
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	<3 (maior LQ)	<3 (maior LQ)	0	100%	1	1	---
Clorofórmio (µg/L)	---	<3	<3	---	---	1	1	100%
Bromofórmio (µg/L)	---	<3	<3	---	---	1	1	100%
Bromodiorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dibromoclorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dose Indicativa (mSv/ano)	0,10	<0,10	<0,10	0	100%	1	1	100%
Alfa-total (Bq/L)	0,10 (Nível de verificação)	<0,04	<0,04	0	---	1	1	---
β-Total (Bq/L)	1,0 (Nível de verificação)	<0,10	<0,10	0	---	1	1	---
Radão (Bq/L)	500	238	238	0	100%	1	1	100%
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D. - Não Detectado

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

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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)	---	0,25	0,25	---	---	1	1	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	55,4	55,4	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	6,7	6,7	0	100%	1	1	100%
Ferro (µg Fe/L)	200	<10	<10	0	100%	1	1	100%
Manganês (µg Mn/L)	50	<10	<10	0	100%	1	1	100%
Nitrato (mg NO ₃ /L)	50	3,8	3,8	0	100%	1	1	100%
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	0,3	0,3	0	100%	1	1	100%
Antimónio (µg Sb/L)	5,0	<2	<2	0	100%	1	1	100%
Arsénio (µg As/L)	10	2	2	0	100%	1	1	100%
Benzeno (µg/L)	1,0	<0,5	<0,5	0	100%	1	1	100%
Benzo(a)pireno (µg/L)	0,010	<0,002	<0,002	0	100%	1	1	100%
Boro (mg B/L)	1,0	<0,10	<0,10	0	100%	1	1	100%
Bromato (µg BrO ₃ /L)	10	<5	<5	0	100%	1	1	100%
Cádmio (µg Cd/L)	5,0	<1,0	<1,0	0	100%	1	1	100%
Cálcio (mg Ca/L)	---	2,3	2,3	---	---	1	1	100%
Chumbo (µg Pb/L)	10	<3	<3	0	100%	1	1	100%
Cianeto (µg CN/L)	50	<10	<10	0	100%	1	1	100%
Cobre (mg Cu/L)	2,0	<0,010	<0,010	0	100%	1	1	100%
Crómio (µg Cr/L)	50	<5	<5	0	100%	1	1	100%
1,2-Dicloroetano (µg/L)	3,0	<0,5	<0,5	0	100%	1	1	100%
Dureza Total (mg CaCO ₃ /L)	---	7,9	7,9	---	---	1	1	100%
Enterococos fecais (N/100ml)	0	0	0	0	100%	1	1	100%
Fluoreto (mg F/L)	1,5	0,050	0,050	0	100%	1	1	100%
Magnésio (mg Mg/L)	---	0,55	0,55	---	---	1	1	100%
Mercurio (µg Hg/L)	1,0	<0,30	<0,30	0	100%	1	1	100%
Níquel (µg Ni/L)	20	5	5	0	100%	1	1	100%
Selénio (µg Se/L)	10	<0,5	<0,5	0	100%	1	1	100%
Cloreto (mg Cl/L)	250	4,7	4,7	0	100%	1	1	100%
Sódio (mg Na/L)	200	8,2	8,2	0	100%	1	1	100%
Sulfato (mg SO ₄ /L)	250	<5,0	<5,0	0	100%	1	1	100%
Carbono Orgânico Total (mg C/L)	Sem alter. anormal	---	---	---	---	0	0	---
Soma de Tetracloroetano e Tricloroetano (µg/L)	10	<3 (maior LQ)	<3 (maior LQ)	0	100%	1	1	100%
Tetracloroetano (µg/L)	---	<3	<3	---	---	1	1	100%
Tricloroetano (µg/L)	---	<0,5	<0,5	---	---	1	1	100%
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	5	5	0	100%	1	1	---
Clorofórmio (µg/L)	---	5	5	---	---	1	1	100%
Bromofórmio (µg/L)	---	<3	<3	---	---	1	1	100%
Bromodiorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dibromoclorometano (µg/L)	---	<3	<3	---	---	1	1	100%
Dose Indicativa (mSv/ano)	0,10	<0,10	<0,10	0	100%	1	1	100%
Alfa-total (Bq/L)	0,10 (Nível de verificação)	<0,04	<0,04	0	---	1	1	---
β-Total (Bq/L)	1,0 (Nível de verificação)	<0,10	<0,10	0	---	1	1	---
Radão (Bq/L)	500	<10,0	<10,0	0	100%	1	1	100%
Pesticidas Totais (µg/L)	0,50	---	---	---	---	0	0	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._ Não Detectado

Resumo dos parâmetros pesquisados na zona de abastecimento: Velosa

 4.º TRIMESTRE 2018
 01 outubro a 31
 dezembro

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 Cl ₂ /L)	---	0,10	0,22	---	---	2	2	100%
Alumínio (µg Al/L)	200	---	---	---	---	0	0	---
Amónio (mg NH ₄ /L)	0,50	---	---	---	---	0	0	---
N.º Colónias 22°C (N/ml a 22°C)	Sem alter. anormal	---	---	---	---	0	0	---
N.º Colónias 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	---
Merúrio (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	---

rea:

Notas:

L.Q. - Limite de Quantificação

N.D._Não Detectado