

Analytical Laboratory Report

Client: Santos Port Authority

Collected By: Quality Control CDN

Project: Water Supply and Sewage Collection - Santos Port

Project Number: Contract DIPRE/04.2020

Date Collected: 04/01/2024

Time Collected: 11:00 A.M.

Sample Identification: Treated Water at Saboo
Treatment Plant

Report Number: RE004/2024-0

PARAMETERS	ANALYSIS DATE	RESULT	LQ	METHOD	Portaria 888 - VMP
Aluminum (mg/L Al^{3+})	04/11/24	0,027	0,025	SMWW,23ª Edição 2017, 3120 B	0,2
pH (-)	04/01/24	7,14	4 a 10	SMWW,24ª Edição 2023, 4500-H+B	/
Temperature (°C)	04/01/24	23,1	10 a 30	SMWW,24ª Edição 2023, 2550 B	/
Chloride (mg/L Cl^{-})	04/02/24	4,372	0,5	EPA SW - 846 - 300.1 - 1999	250
Residual Free Chlorine (mg/L Cl_2)	04/01/24	1,80	0,1	ME-003-Rev.02	0,2 - 5,0
Conductivity ($\mu S/cm$)	04/01/24	40,1	1	SMWW, 24ª Edição 2023, 2510 B	/
Total Coliform (A/P 100mL)	04/02/24	Absence	/	SMWW,23ª Edição 2017, 9223 B	Absence
Color (CU)	04/01/24	< 5	5	SMWW,24ª Edição 2023, 2120 C	15
Total Hardness (mg/L $CaCO_3$)	04/11/24	3,632	0,353	SMWW,23ª Edição 2017, 2340 B	300
<i>Escherichia coli</i> (P/A 100mL)	04/02/24	Absence	/	SMWW,23ª Edição 2017, 9223 B	Absence
Total Iron (mg/L Fe)	04/11/24	< 0,005	0,025	SMWW,23ª Edição 2017, 3120 B	0,3
Fluoride (mg/L F ⁻)	04/01/24	0,66	0,2	SMWW,24ª Edição 2023, 4500 F ⁻ D	1,5
Total Manganese (mg/L Mn)	04/11/24	< 0,005	0,025	SMWW,23ª Edição 2017, 3120 B	0,1
Nitrate (mg/L NO_3^{-} - N)	04/02/24	0,266	0,02	EPA SW - 846 - 300.1 - 1999	10
Nitrite (mg/L NO_2^{-} - N)	04/02/24	< 0,0025	0,152	EPA SW - 846 - 300.1 - 1999	1
Total Dissolved Solids (mg/L)	04/04/24	20	20	POP 077	500
Sulfate (mg/L SO_4^{2-})	04/02/24	1,078	0,5	EPA SW - 846 - 300.1 - 1999	250
Sulphide (mg/L S^{2-})	04/02/24	< 0,002	0,002	POP 061	/
Turbidity (NTU)	04/01/24	< 0,5	0,5	SMWW,24ª Edição 2023, 2130 B	5
Zinc (mg/L Zn)	04/11/24	< 0,004	0,025	SMWW,23ª Edição 2017, 3120 B	5

On the basis of the above test result(s), this water sample **DOES MEET**
of Ministério da Saúde (Health Ministry) for **POTABLE WATER**

Portaria GM/MS N°888

The following notes apply to this sample:

- 1) Analysis Undertaken as basic methodology described in the "Standard Methods" 23rd/24rd edition, EPA and POP.
- 2) The results of that analysis has restricted meaning and apply only to sample

Santos, April 15, 2024

Responsible for report:


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