

### 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:** 04/03/2023

**Time Collected:** 12:40 P.M.

**Sample Identification:** Treated Water at Saboo  
Treatment Plant

**Report Number:** RE004/2023-0

| PARAMENTERS                                     | ANALYSIS DATE | RESULT      | LQ     | METHOD                                      | Portaria 888 - VMP |
|-------------------------------------------------|---------------|-------------|--------|---------------------------------------------|--------------------|
| Aluminum (mg/L Al <sup>3+</sup> )               | 04/03/23      | 0,083       | 0,01   | SMWW,23ª Edição 2017, 3120 B                | 0,2                |
| pH (-)                                          | 04/03/23      | 7,31        | 4 a 10 | SMWW,23ª Edição 2017, 4500-H+B              | /                  |
| Chloride (mg/L Cl <sup>-</sup> )                | 04/04/23      | 5,86        | 0,5    | POP PA 032                                  | 250                |
| Residual Free Chlorine (mg/L Cl <sub>2</sub> )  | 04/03/23      | 1,82        | 0,1    | ME-003-Rev.01                               | 0,5 - 5,0          |
| Conductivity (µS/cm)                            | 04/03/23      | 269,0       | 1      | SMWW,23ª Edição 2017, 2510 B                | /                  |
| Total Coliform (A/P)                            | 04/04/23      | Absence A/P | /      | SMWW,23ª Edição 2017, 9223 B                | Absence            |
| Color (CU)                                      | 04/03/23      | < 5         | 5      | SMWW,23ª Edição 2017, 2120 B                | 15                 |
| Total Hardness (mg/L CaCO <sub>3</sub> )        | 04/04/23      | 36,0        | 5      | SMWW,23ª Edição 2017, 2340 B                | 300                |
| Escherichia coli (P/A)                          | 04/04/23      | Absence A/P | /      | SMWW,23ª Edição 2017, 9223 B                | Absence            |
| Total Iron (mg/L Fe)                            | 04/04/23      | 0,0547      | 0,01   | SMWW,23ª Edição 2017, 3125 B                | 0,3                |
| Fluoride (mg/L F <sup>-</sup> )                 | 04/03/23      | 0,74        | 0,2    | SMWW,23ª Edição 2017, 4500 F <sup>-</sup> D | 1,5                |
| Total Manganese (mg/L Mn)                       | 04/04/23      | < 0,01      | 0,01   | SMWW,23ª Edição 2017, 3125 B                | 0,1                |
| Nitrate (mg/L NO <sub>3</sub> <sup>-</sup> - N) | 04/04/23      | 0,25        | 0,10   | EPA SW - 300.1 - 1999                       | 10                 |
| Nitrite (mg/L NO <sub>2</sub> <sup>-</sup> - N) | 04/04/23      | < 0,02      | 0,02   | EPA SW - 300.1 - 1999                       | 1                  |
| Total Dissolved Solids (mg/L)                   | 04/04/23      | 26          | 5      | SMWW,23ª Edição 2017, 2540 C e E            | 500                |
| Sulfate (mg/L SO <sub>4</sub> <sup>2-</sup> )   | 04/04/23      | 0,73        | 0,5    | POP PA 032                                  | 250                |
| Hydrogen Sulphide (mg/L S <sup>2-</sup> )       | 04/05/23      | < 0,05      | 0,05   | SMWW,23ª Edição 2017, 4500 S-2D             | 0,05               |
| Turbidity (NTU)                                 | 04/03/23      | < 0,5       | 0,5    | SMWW,23ª Edição 2017, 2130 B                | 5                  |
| Zinc (mg/L Zn)                                  | 04/04/23      | 0,030       | 0,01   | SMWW,23ª Edição 2017, 3125 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 Nº888

**The following notes apply to this sample:**

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

Santos, April 17, 2023

Responsible for report:



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