



Komite Akreditasi Nasional  
Laboratorium Penguji  
LP-433-IDN

## CERTIFICATE OF ANALYSIS

COA No : 23R0479

Report To:

### PT. Halmahera Persada Lygend

Gedung Panin Lt.5 Jl.Jend.Sudirman Kav.01  
Kelurahan Gelora Kecamatan Tanah Abang  
Jakarta Pusat 10270

Attention:

Mr. Dian Kristiyanto / Mrs. Yayuk Sri Rejeki

Project Name :

**Water Samples 2023**

PT. WLN Indonesia



**Arief Rakhmadi**

Business Manager

SGS WLN

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PF-ID-[EHS]-LA-090

**SURFACE WATER ANALYSIS RESULTS**  
**PT. Halmahera Persada Lygend**

Customer sample ID : RW01HPL WLN Lab ID : 2301054  
 Sample Matrix : Surface Water Coordinates : -  
 Sampling By : Customer  
 Sampling Date : 09-01-2023

Government Regulation Limit (GRL) : Peraturan Pemerintah RI No. 22 Tahun 2021 Lampiran VI Point I  
 (Baku mutu Air Sungai & Sejenisnya) - Kelas II

No	Test Description	UoM	Result	GRL	Method Reference	Rem Q
1	Total Dissolved Solids	mg/L	204	n/a	APHA-2540-C(2017) and WI-(ID)-[EHS]-LA-020 (konduktifitas method)	Q
2	Total Suspended Solids*	mg/L	< 1	n/a	APHA-2540-D(2017)	Q
3	pH*	n/a	7.86	n/a	APHA-4500H <sup>+</sup> .B(2017)	Q
4	Colour*	TCU	< 5	n/a	APHA-2120-C(2017)	Q
5	Chlorophyl-a	mg/m <sup>3</sup>	< 0.00001	n/a	APHA-10200-H(2017)	
6	Chloride	mg/L	2.9	n/a	WI-(ID)-[EHS]-LA-005 (Spektofotometri)	Q
7	Fluoride	mg/L	< 0.02	n/a	APHA-4500F-C(2017)	Q
8	Sulphate	mg/L	61	n/a	APHA-4500SO <sub>4</sub> <sup>2-</sup> -E(2017)	Q
9	Unionized Sulfide (H <sub>2</sub> S)	mg/L	< 0.002	n/a	APHA-4500S <sup>2-</sup> -H(2017)	
10	Free Chlorine*	mg/L	< 0.02	n/a	WI-(ID)-[EHS]-LA-011 (HACH)	Q
11	Ammonia (N-NH <sub>3</sub> )	mg/L	0.06	n/a	WI-(ID)-[EHS]-LA-064 (FIA)	Q
12	Nitrate (N-NO <sub>3</sub> )	mg/L	0.468	n/a	APHA-4500-NO <sub>3</sub> -E(2017)	Q
13	Nitrite (N-NO <sub>2</sub> )*	mg/L	< 0.001	n/a	APHA-4500-NO <sub>2</sub> -B(2017)	Q
14	Total-Phosphate (P-PO <sub>4</sub> )	mg/L	0.009	n/a	WI-(ID)-[EHS]-LA-063 (FIA)	Q
15	Total Nitrogen	mg/L	0.5	n/a	WI-(ID)-[EHS]-LA-064 (FIA)	
16	Cyanide (Total)	mg/L	< 0.005	n/a	WI-(ID)-[EHS]-LA-041 (FIA)	
17	Chromium Hexavalent-Dissolved (Cr-VI)	mg/L	0.014	n/a	APHA-3500Cr-B(2017)	Q
18	Arsenic-Dissolved (As)	mg/L	< 0.005	n/a	APHA-3120-B(2017)	Q
19	Boron-Dissolved (B)	mg/L	0.078	n/a	APHA-3120-B(2017)	Q
20	Barium-Dissolved (Ba)	mg/L	< 0.005	n/a	APHA-3120-B(2017)	Q
21	Cadmium-Dissolved (Cd)	mg/L	0.0001	n/a	APHA-3120-B(2017)	Q
22	Cobalt-Dissolved (Co)	mg/L	0.002	n/a	APHA-3120-B(2017)	Q
23	Copper-Dissolved (Cu)	mg/L	< 0.005	n/a	APHA-3120-B(2017)	Q
24	Iron-Dissolved (Fe)	mg/L	0.09	n/a	APHA-3120-B(2017)	Q

Remarks : \*These parameters are analyzed passed their intended holding time

The value of Government Regulation Limit (GRL) that is written not available (n/a) based on customer's request