



2. Monitoring of wastewater quality at STP Digital Learning Center Building in June 2023, namely SUCOFINDO



Laporan No. 052810LACAG
Tanggal: 15 Juni 2023

SUCOFINDO
Pusat Riset
Jl. Jend. Sudirman No. 55 No. 115 Medan 20132
Telp. (061) 4411800(1) 540388
Email: cs@sucofindo.co.id

LAPORAN ANALISIS

Contoh uji ini diserahkan dan diidentifikasi oleh pelanggan sebagai:

PELANGGAN : PT. SATRIA NUSA ENGINEERING
J. RA Kartini Dalam II No. 11 Medan Hulu, Medan-Polinia

JENIS CONTOH : AIR LIMBAH

TANGGAL PENERIMAAN : 07 Juni 2023

TANGGAL ANALISA : 07 Juni 2023 sampai 15 Juni 2023

ANALISA / UJI : pH di Laboratorium, Amoniak (NH₃-N), Total Padatan Tersuspensi, Minyak dan Lemak, COD dgn K₂Cr₂O₇, BOD 5 hari 20 °C, Total Coliform

KETERANGAN CONTOH : Bentuk : Cairan
Isi : 1,5 liter
Kemasan : Botol plastik berselot
1 (satu) contoh

IDENTIFIKASI CONTOH : OUTLET-STP USU GEDUNG DIGITAL CENTER BUILDING

REFERENSI : -

Hasil:

PARAMETER	SATJIAN	HASIL	METODA
pH di Laboratorium	-	7,04	4500-IF-B
Amoniak (NH ₃ -N)	mg/l	0,47	4500-NH ₃ -F
Total Padatan Tersuspensi	mg/l	23	2540 G
Minyak dan Lemak	mg/l	<2	5210-10 2011
COD dgn K ₂ Cr ₂ O ₇	mg/l	50,76	5220 C
BOD 5 hari 20 °C	mg/l	21,8	5210 B
Total Coliform	CFU/100ml	490	9222 B

* Standard methods, 23rd edition 2017, APHA-AWWA-WEF
= lebih kecil dari MCL

Hasil uji ini hanya berlaku dengan contoh uji yang diserahkan ke kami, jika ada keperluan verifikasi hasil uji hasil dapat diverifikasi dengan cara membandingkan dengan contoh uji yang diserahkan kepada laboratorium Sucofindo.

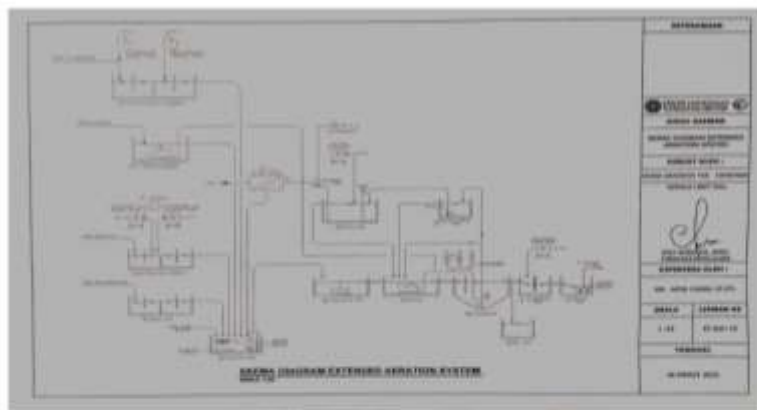
Pemeriksaan dan validasi data ini dapat dilakukan dengan cara menghubungi Sucofindo, yang selanjutnya dapat membantu anda memperoleh data lebih lanjut pada www.sucofindo.co.id

1701.03.23.002062

Bidang Pengujian
Kualitas Insani
SUCOFINDO

4477707
301-20074

3. The results of sampling the wastewater quality of STP Digital Learning Center Building in July 2023



Sumber : Rumah Sakit USU, 2022

Keterangan :

- | | | |
|-------------------------------------|-------------------------|------------------|
| 1. Neutralization Chamber 1 | 7. Aeration | 13. Mixing Tank |
| 2. Aeration Laundry (Pre-treatment) | 8. Sedimentation | 14. Filter Press |
| 3. Neutralization Chamber 2 | 9. Chlorination Tank | |
| 4. Grease Trap | 10. Fish Pond | |
| 5. Collecting Tank | 11. Sludge Holding Tank | |
| 6. Equalization Tank | 12. Effluent Tank | |

4a. USU Hospital wastewater treatment diagram schematic



4b. Monitoring of wastewater quality at USU Hospital IPAL conducted by a third party, namely SUCOFINDO and inspection conducted by North Sumatra DLH

Description:

1. The presence of STP Digital Learning Center Building USU functions as a wastewater treatment site generated by activities at USU, after the wastewater has been treated it will be discharged into water bodies around USU. This STP Digital Learning Center Building processes feces, urine, and gray water which is used for laundry and bathrooms
2. STP Digital Learning Center Building wastewater quality monitoring will be carried out in June 2023, the monitoring is carried out by PT SUCOFINDO.
3. USU monitors the quality of wastewater from the STP Digital Learning Center Building in June 2023 with the pollutant parameters tested are pH, Ammonia (NH₃), Total Suspended Solids, Oil and Fat, COD, BOD and Total Coliform. The results of sampling the quality of wastewater from the STP Digital Learning Center Building in June 2023 show that all parameters still meet the quality standards of the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.68/Menlhk/Setjen/Kum.1/8/2016 concerning Water Quality Standards Domestic Waste.



4. The existence of WWTPs for USU Hospital is to treat wastewater before being discharged into water bodies to maintain surface water quality.
5. Monitoring the quality of wastewater from the USU Hospital is carried out by a third party, namely Sucofindo and an inspection has also been carried out by the DLH North Sumatra Province which states that the results of the effluent test parameters from the USU Hospital WWTP still meet the wastewater quality standards

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):

<https://greencampus.usu.ac.id/index.php/id/green-campus/bidang/bidang-air>