THE - Impact Rankings 2025

6.3.4 Water Conscious Building standard

Kalasalingam Academy of Research and Education adopted standard policies for water usage in the campus. We are following the Indian and International standard for drinking water supply and rain water harvesting. Pressure reducing plumbing valves. We have an active plumbing team for routine maintenance and to correct leakages of pipes.We use aerators pressure reducing nozzles at taps in order to reduce water loss. We have proximity sensor based taps at our wash areas to prevent unnecessary water loss.

Table 1: Standards for drinking and domestic use

Sl. No	Type of Building	Domestic liters per head/day	Flushing liters per head/day	Total Consumption liters per head/day
1.	Schools/Educational institutions:			
	a) Without boarding facilities	25	20	45
	b) With boarding facilities	90	45	135

KALASALINGAM
ACADEMY OF RESEARCH & EDUCATION
(DEEMED TO BE UNIVERSITY)
Under sec. 3 of UGC Act 1956. Accredited by NAAC with "A" Grade

SCHOOL OF ADVANCED SCIENCES / DEPARTMENT OF CHEMISTRY

CHEMISTRY LABORATORY

09.07.2024

Water Analysis Report

Name of the sample : KARE Sewage Plant

Date of the sample taken : 09.07.2024

Analyzed Date : 09.07.2024

Sl. No	Parameters	Observed Values		Agriculture Irrigation Standard
		Inlet	Outlet 500 KLD	
1.	**pH**	10.5	8.1	6.5 – 8.5
2.	**TDS**	1250 ppm	867 ppm	< 1000 ppm
3.	**Turbidity**	10 NTU	3 NTU	< 5 NTU

E. N. Nagaraj 5/7/2024
HoD / Chemistry

Department of Chemistry (Deemed to be University) Anand Nagar, Krishnankoil - 626 126. Academy of Research and Education

10/7/2024
Dean / SAS

TAMILNADU POLLUTION CONTROL BOARD

Advanced Environmental Laboratory, Madurai

(E Mail: aelmdu@tnpcb.gov.in, Phone No:0452 2489497)

ROA No. 226 /AEL-MDU/2022-23, Dated: 01.03.2023

1.	Name and address of the sender	The District Environmental Engineer Tamil Nadu Pollution Control Board Virudhunagar.
2.	Dated and Time of collection	01.02.2023, 3.50 pm, 04.00 pm
3.	Date and Time of receipt at Lab.	02.02.2023, 03.15 pm
4.	Condition of Seal, Fastening	Unsealed, Unfastened
5.	Nature and Number of Samples	2 Numbers of Sewage
6.	Date of Analysis	02.02.2023

DEE Code No.	Lab code No.	Point of Collection	Whether Untreated/Treated
02-01	1653	STP Inlet	Untreated
02-02	1654	STP Outlet	Treated

Test Report

Sl. No	PARAMETER	TEST METHOD	Unit	Test Samples Code Nos.	
				Lab: 1653	Lab: 1654
				DEE: 02-01	DEE: 02-02
1.	pH @ 25° C	APHA 23rd Edt 2017, Part No. 4500 H+	–	6.40	7.16
2.	Total Suspended Solids	APHA 23rd Edt 2017, Part No. 2540 D	mg/L	58	10
3.	Total Dissolved Solids	APHA 23rd Edt 2017, Part No. 2540 C	mg/L	1132	968
4.	BOD for 3 days @ 27° C	IS 3025 (Part 44) 1993	mg/L	242	4
5.	C O D	IS 3025 (Part58) 2006	mg/L	1008	32
6.	Total Solids	APHA 23rd Edt 2017, Part No. 4500- Norg B NH3 B,C, NO_2, NO_3	mg/L	1190	978
7.	Ammoniacal Nitrogen	APHA 23rd Edt 2017, Part No. 4500- NH3 B,C	mg/L	20.16	1.12
8.	Total Kjeldahl Nitrogen	APHA 23rd Edt 2017, Part No. 4500- Norg B	mg/L	44.8	3.92
9.	Total Coliform	APHA 23rd Edt 2017, Part No. 9221-B	MPN/ 100ml	33 x 10^3	32
10.	Fecal Coliform	APHA 23rd Edt 2017, Part No. 9221-E	MPN/ 100ml	14 x 10^3	17

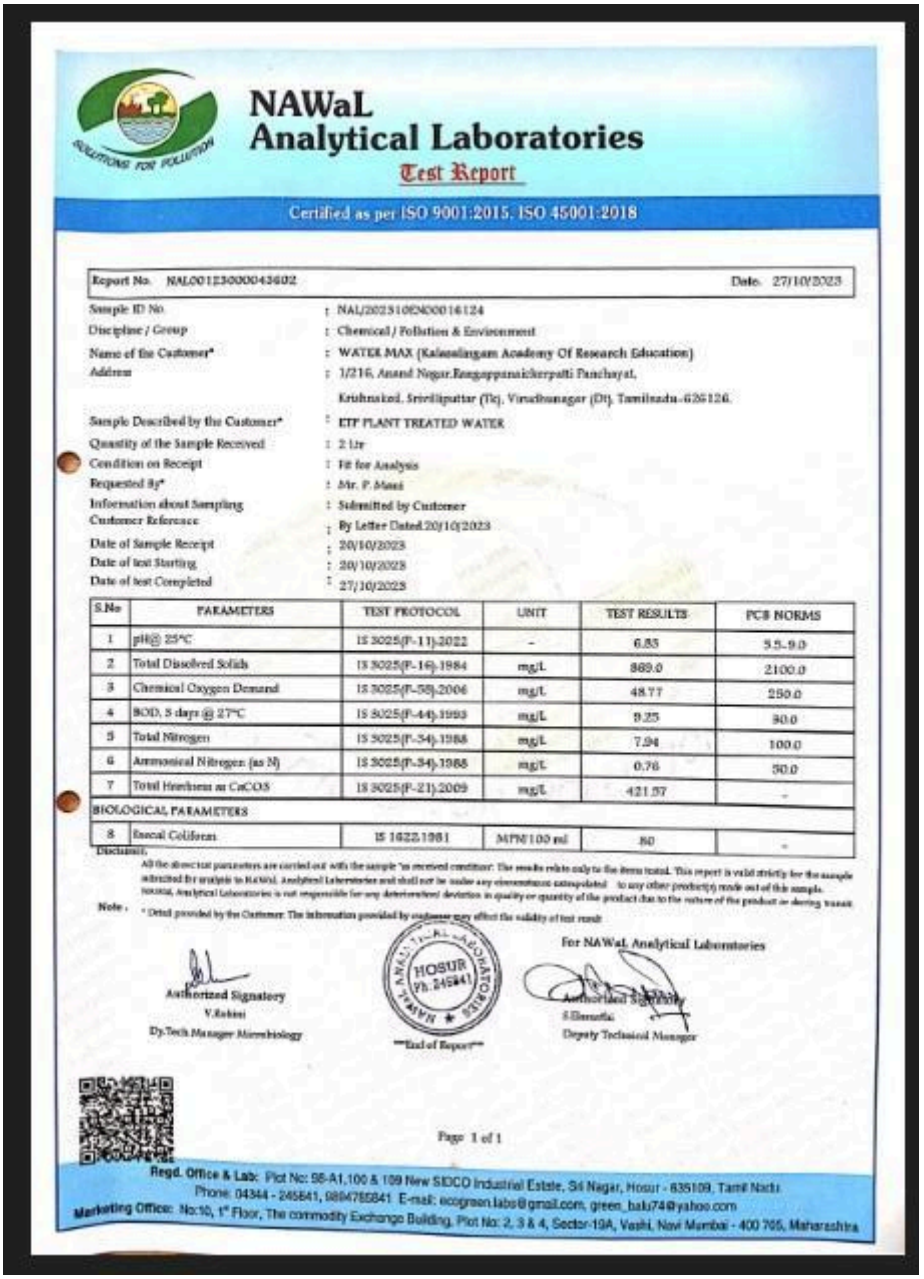
Note:
1. Results relate only to the items tested samples.
2. The reports shall not be reproduced except in fully approval of the laboratory can provide assurance that parts of a reports are not take out of context.

Checked by

DCSO

Authorized Signatory

Chief Scientific Officer,
AEL, TNPCB, Madurai



NAWaL
Analytical Laboratories
Test Report

Certified as per ISO 9001:2015, ISO 45001:2018

Report No. NALO0123000043602 Date: 27/10/2023

Sample ID No.	:	NAL/2023102EN00016124
Discipline / Group	:	Chemical / Pollution & Environment
Name of the Customer*	:	WATER MAX (Kalasalingam Academy Of Research Education)
Address	:	1/216, Anand Nagar,Rengapparaickerpatti Panchayat, Krishnakoil, Sivvilliputtur (Tk), Virudhunagar (Dt), Tamilnadu.-626126.
Sample Described by the Customer*	:	ETP PLANT TREATED WATER
Quantity of the Sample Received	:	2 Ltr
Condition on Receipt	:	Fit for Analysis
Requested By*	:	Mr. P. Mani
Information about Sampling	:	Submitted by Customer
Customer Reference	:	By Letter Dated 20/10/2023
Date of Sample Receipt	:	20/10/2023
Date of test Starting	:	20/10/2023
Date of test Completed	:	27/10/2023

S.No	PARAMETERS	TEST PROTOCOL	UNIT	TEST RESULTS	PCB NORMS
1	pH@ 25°C	IS 3025(P-11):2022	-	6.85	5.5-9.0
2	Total Dissolved Solids	IS 3025(P-16):1984	mg/L	869.0	2100.0
3	Chemical Oxygen Demand	IS 3025(P-58):2006	mg/L	48.77	250.0
4	BOD, 3 days @ 27°C	IS 3025(P-44):1993	mg/L	9.25	30.0
5	Total Nitrogen	IS 3025(P-34):1988	mg/L	7.94	100.0
6	Ammonical Nitrogen (as N)	IS 3025(P-34):1988	mg/L	0.76	50.0
7	Total Hardness as CaCO3	IS 3025(P-21):2009	mg/L	421.57	-
BIOLOGICAL PARAMETERS					
8	Faecal Coliform	IS 1622:1981	MPN/100 ml	80	-

Disclaimer:
All the above test parameters are carried out with the sample "as received condition". The results relate only to the items tested. This report is valid strictly for the sample submitted for analysis to NAWaL Analytical Laboratories and shall not be under any circumstances extrapolated to any other product(s) made out of this sample. NAWaL Analytical Laboratories is not responsible for any deterioration/ deviation in quality or quantity of the product due to the nature of the product or during transit.

Note : * Detail provided by the Customer. The information provided by customer may affect the validity of test result

Authorized Signatory
V.Rohini
Dy.Tech.Manager-Microbiology

HOSUR

"End of Report"

For NAWaL Analytical Laboratories
Authorized Signatory
S.Shanmuga
Deputy Technical Manager

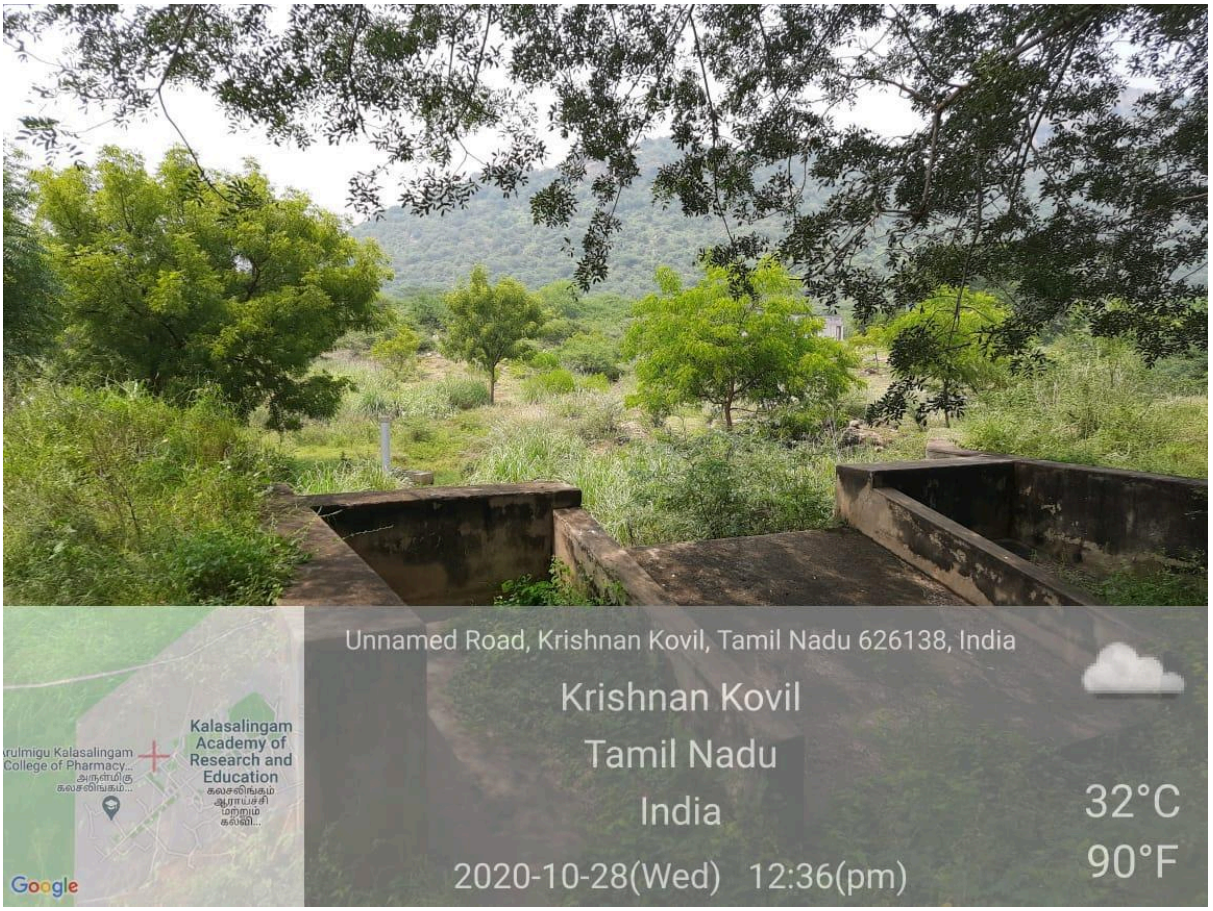
Page 1 of 1

Regd. Office & Lab: Plot No: 98-A1,100 & 109 New SIDCO Industrial Estate, Sri Nagar, Hosur - 635109, Tamil Nadu
Phone: 04344 - 245841, 9894765841 E-mail: ecogreen.labs@gmail.com, green_balu74@yahoo.com
Marketing Office: No:10, 1st Floor, The commodity Exchange Building, Plot No: 2, 3 & 4, Sector-19A, Vashi, Navi Mumbai - 400 705, Maharashtra

Rainwater Harvesting System

KARE has established a sustainable water management system that includes rain water harvesting pits, trenches, check dams, canals and percolation ponds. The rainwater is harvested from the roof-top of the academic buildings and hostels. Our campus maintains separate canals for sewage water, rainwater and drinking water so there is no possibility In our campus of mixing polluted water with drinking water.

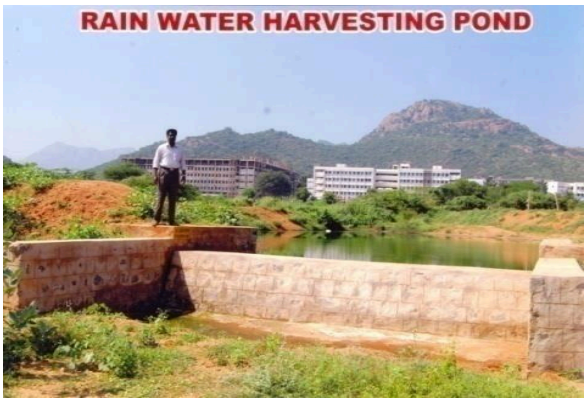
The rainwater collected is also used to recharge the groundwater through the campus's bore wells and open wells. Open wells and Borewells, which are strategically placed throughout the campus, are also used to recharge the groundwater. To meet the water needs of the campus community and also to help the nearby communities, the institution maintains open wells on its land near the campus.



Percolation pond for storage of water within the KARE campus

Rain water Storage:

The institution has a huge area for water absorption during the rainfall. The rainwater is also stored in the check dam and percolation pond. Due to this facility the groundwater level within the campus has increased. Rainwater harvesting facility is also provided in each building so as to harvest the rainwater and store them for a long period.



Recharging Percolation Ponds and Rain water harvesting pond inside the KARE campus

Rainwater Harvesting System near Homi. J. Bhabha Block / Block-II / Chemistry Lab

Rainwater Harvesting System near Dr.A.P.J. Abdulkalam Block / Academic Block-IX

Recharge Trenches near Manimandapam

Aeration Tapes are used for reduced water usage