

TEST REPORT

Name & Address of the Customer

: M/S. KLE INDEPENDENT DEGREE COLLEGE,
#5 Block, 2nd Stage, Naagarabhaavi,
Bengaluru, Karnataka 560072

Date of Sample Collection

: 05/02/2024

Particulars of sample

: Borewell Water

Sample Qty: 2Ltr+500ml, Sampling Type: Grab

Sampling Point: From Borewell Tap Water

Date of sample Receipt

: 05/02/2024

Sample ID/Code

: NALRC/2024/02/W/062

Date of Analysis Started

: 05/02/2024

Date of Completion

: 09/02/2024

Report No

: NALRC/2024/02/W/062

Report Date

: 09/02/2024

Page No

: 1/2

Description: • Colourless, Odourless, Transparent liquid.

Sl No	Parameters	Result	Requirement	Permissible	Test Method
			Acceptable limits	limit in the absence of alternate source	
			(As per IS 10500:2012)		
01	Color, Hazen Units	<1.0	5	15	IS 3025 (P-04)2021
02	Odor	Agreeable	Agreeable	Agreeable	IS 3025 (P-05)2018
03	pH Value	7.6	6.5-8.5	No relaxation	IS 3025 (P-11)2022
04	Turbidity, NTU	2.7	1	5	IS 3025 (P-10)1984 RA 2017
05	Conductivity, $\mu\text{S}/\text{cm}$	758.0	—	—	IS 3025 (P-14)1984 RA 2019
06	Total Dissolved Solids, mg/L	455.0	500	2000	IS 3025 (P-16)1984 RA 2017
07	Total Hardness as CaCO_3 , mg/L	295.0	200	600	IS 3025 (P-21)2009 RA 2019
08	Calcium as Ca, mg/L	63.0	75	200	IS 3025 (P-40)1991 RA 2019
09	Magnesium as Mg, mg/L	33.0	30	100	IS 3025 (P-46)1994 RA 2019
10	Chloride as Cl, mg/L	65.5	250	1000	IS 3025 (P-32)1988 RA 2019
11	Total Alkalinity as CaCO_3 , mg/L	231.0	200	600	IS 3025 (P-23)1988 RA 2019
12	Residual Free Chlorine as Cl_2 , mg/L	<0.2	Min 0.2	Min 1.0	IS 3025 (P-26)2021
13	Boron as B, mg/L	<0.1	0.5	2.4	APHA 23rd Edition 4500B B
14	Fluoride as F, mg/L	0.64	1	1.5	APHA 23rd Edition 4500F D
15	Nitrate as NO_3 , mg/L	11.6	45	No relaxation	IS 3025 (P-34)1988 RA 2019
16	Iron as Fe, mg/L	<0.05	1	No relaxation	APHA 23rd Edition 3500-Fe B
17	Sulphate as SO_4 , mg/L	30.0	200	400	APHA 23rd Edition 4500 SO_4 E
18	Aluminum as Al, mg/L	<0.005	0.03	0.2	IS 3025 (P-2)2019
19	Manganese as Mn, mg/L	<0.005	0.1	0.3	IS 3025 (P-2)2019
20	Selenium as Se, mg/L	<0.005	0.01	No relaxation	IS 3025 (P-2)2019
21	Copper as Cu, mg/L	<0.005	0.05	1.5	IS 3025 (P-2)2019
22	Zinc as Zn, mg/L	0.014	5	15	IS 3025 (P-2)2019
23	Cadmium as Cd, mg/L	<0.003	0.003	No relaxation	IS 3025 (P-2)2019
24	Total chromium, mg/L	<0.005	0.05	No relaxation	IS 3025 (P-2)2019
25	Lead as Pb, mg/L	<0.005	0.01	No relaxation	IS 3025 (P-2)2019
26	Barium as Ba, mg/L	0.011	0.70	No relaxation	IS 3025 (P-2)2019
27	Nickel as Ni, mg/L	<0.005	0.02	No relaxation	IS 3025 (P-2)2019
28	Arsenic as As, mg/L	<0.005	0.01	No relaxation	IS 3025 (P-2)2019

Verified By

 National Analytical Laboratories And Research Center
Bengaluru
Authorized Sign

Note: 1. The results listed above pertain only to the listed samples and applicable test methods. 2. Samples can be stored for a period of 1 month. 3. This report is for information only, wholly or in part and can not be used as evidence in the court of law and should not be used in any other way without written permission from NALRC.

NALRC/2024/02/W/062

TEST REPORT

Name & Address of the Customer

**M/S. KLE INDEPENDENT DEGREE COLLEGE,
#5 Block, 2nd Stage, Naagarabhaavi,
Bengaluru, Karnataka 560072**

Date of Sample Collection

: 05/02/2024

Particulars of sample

: Borewell Water

Sample Qty: 2Ltr+500ml, Sampling Type: Grab

Sampling Point: From Borewell Tap Water

Date of sample Receipt

: 05/02/2024

Sample ID/Code

: NALRC/2024/02/W/062

Date of Analysis Started

: 05/02/2024

Date of Completion

: 09/02/2024

Report No

: NALRC/2024/02/W/062

Report Date

: 09/02/2024

Page No

: 2/2

Description: - Colourless, Odourless, Transparent liquid.

Sl No	Parameters	Results	Requirement Acceptable Limits	Permissible limit in the absence of alternate source	Test Method
			(As per IS 10500:2012)		
01	Taste	Agreeable	Agreeable	Agreeable	IS 3025 (P-08)1984 RA 2017
02	Phenolic compounds as C ₆ H ₅ OH, mg/L	<0.001	0.001	0.002	IS 3025 (P-43)1992 RA 2019
Bacteriological Parameters:					
03	Total coliform bacteria MPN/100ml	Not Detected	Shall not be detectable in 100 ml sample		IS 15185 2016 (RA-2021)
04	E.coli, MPN/100ml	Not Detected	Shall not be detectable in 100 ml sample		IS 15185 2016 (RA-2021)

Min: Minimum

Note: The Test Residual free Chlorine is applicable only when water is chlorinated.

Remarks: -The given sample meets to Permissible limits as per IS 10500:2012 for above Physico - chemical testing & bacteriological tests.

***** End of the Report*****

Verified By



TEST REPORT

Name & Address of the Customer

: M/S. KLE INDEPENDENT DEGREE COLLEGE,
#5 Block, 2nd Stage, Naagarabhaavi,
Bengaluru, Karnataka 560072

Date of Sample Collection
Particulars of sample

: 05/02/2024
: RO Water
Sample Qty: 2Ltr+500ml, Sampling Type: Grab
Sampling Point: From RO Plant Water

Date of sample Receipt

: 05/02/2024
: NALRC/2024/02/W/063

Sample ID/Code

: 05/02/2024

Date of Analysis Started

: 09/02/2024

Date of Completion

: NALRC/2024/02/W/063

Report No

: 09/02/2024

Report Date

Page No

: 1/2

Description: - Colourless, Odourless, Transparent liquid.

Sl No	Parameters	Results	Requirement	Permissible	Test Method
			Acceptable Limits	limit in the absence of alternate source	
			(As per IS 10500:2012)		
01	Color, Hazen Units	<1.0	5	15	IS 3025 (P-04)2021
02	Odor	Agreeable	Agreeable	Agreeable	IS 3025 (P-05)2018
03	pH Value	7.6	6.5-8.5	No relaxation	IS 3025 (P-11)2022
04	Turbidity, NTU	0.2	1	5	IS 3025 (P-10)1984 RA 2017
05	Conductivity, µS/cm	33.0	—	—	IS 3025 (P-14)1984 RA 2019
06	Total Dissolved Solids, mg/L	20.0	500	2000	IS 3025 (P-16)1984 RA 2017
07	Total Hardness as CaCO ₃ , mg/L	9.0	200	600	IS 3025 (P-21)2009 RA 2019
08	Calcium as Ca, mg/L	2.0	75	200	IS 3025 (P-40)1991 RA 2019
09	Magnesium as Mg, mg/L	<1.0	30	100	IS 3025 (P-46)1994 RA 2019
10	Chloride as Cl, mg/L	2.0	250	1000	IS 3025 (P-32)1988 RA 2019
11	Total Alkalinity as CaCO ₃ , mg/L	11.0	200	500	IS 3025 (P-23)1986 RA 2019
12	Residual Free Chlorine as Cl ₂ , mg/L	<0.2	Min 0.2	Min 1.0	IS 3025 (P-26)2021
13	Boron as B, mg/L	<0.1	0.5	2.4	APHA 23rd Edition4500B B
14	Fluoride as F, mg/L	<0.1	1	1.5	APHA 23rd Edition4500F D
15	Nitrate as NO ₃ , mg/L	<0.1	45	No relaxation	IS 3025 (P-34)1988 RA 2019
16	Iron as Fe, mg/L	<0.05	1	No relaxation	APHA 23rd Edition 8500-Fe B
17	Sulphate as SO ₄ , mg/L	<1.0	200	400	APHA 23rd Edition4500SO ₄ -E
18	Aluminum as Al, mg/L	<0.005	0.03	0.2	IS 3025 (P-2)2019
19	Manganese as Mn, mg/L	<0.003	0.1	0.3	IS 3025 (P-2)2019
20	Selenium as Se, mg/L	<0.005	0.01	No relaxation	IS 3025 (P-2)2019
21	Copper as Cu, mg/L	<0.005	0.05	1.5	IS 3025 (P-2)2019
22	Zinc as Zn, mg/L	<0.005	5	15	IS 3025 (P-2)2019
23	Cadmium as Cd, mg/L	<0.003	0.003	No relaxation	IS 3025 (P-2)2019
24	Total chromium, mg/L	0.009	0.05	No relaxation	IS 3025 (P-2)2019
25	Lead as Pb, mg/L	<0.005	0.01	No relaxation	IS 3025 (P-2)2019
26	Barium as Ba, mg/L	0.031	0.70	No relaxation	IS 3025 (P-2)2019
27	Nickel as Ni, mg/L	<0.005	0.02	No relaxation	IS 3025 (P-2)2019
28	Arsenic as As, mg/L	0.008	0.01	No relaxation	IS 3025 (P-2)2019

Verified By



Authorized Signatory

TEST REPORT

Name & Address of the Customer

: M/S. KLE INDEPENDENT DEGREE COLLEGE,
#5 Block, 2nd Stage, Naagarabhaavi,
Bengaluru, Karnataka 560072

Date of Sample Collection
Particulars of sample

: 05/02/2024
: RO Water
Sample Qty: 2Ltr+500mL Sampling Type: Grab
Sampling Point: From RO Plant Water

Date of sample Receipt
Sample ID/Code
Date of Analysis Started

: 05/02/2024
: NALRC/2024/02/W/063

Date of Completion
Report No

: 05/02/2024
: 09/02/2024

Report Date
Page No

: NALRC/2024/02/W/063
: 09/02/2024
: 2/2

Description: - Colourless, Odourless, Transparent liquid.

Sl No	Parameters	Results	Requirement Acceptable Limits	Permissible limit in the absence at alternate source	Test Method
			(As per IS 10500:2012)		
01	Taste	Agreeable	Agreeable	Agreeable	IS 3025 (P-08)1984 RA-2017
02	Phenolic compounds as C ₆ H ₅ OH, mg/L	<0.001	0.001	0.002	IS 3025 (P-43)1992 RA-2019
Bacteriological Parameters:					
03	Total coliform bacteria MPN/100ml	Not Detected	Shall not be detectable in 100 ml sample		IS 15185 2016 (RA-2021)
04	E. coli, MPN/100ml	Not Detected	Shall not be detectable in 100 ml sample		IS 15185 2016 (RA-2021)

Min: Minimum

Note: The Test Residual free Chlorine is applicable only when water is chlorinated.

Remark: -The given sample meets to Acceptable limits as per IS 10500:2012 for above Physico - (chemical) testing & bacteriological tests

..... End of the Report*.....

Verified By



Authorized Signatory