

National Water Quality Laboratory

CHEMICAL & MICROBIOLOGY LABORATORY

	PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES Ministry of Water Resources, Government of Pakistan Khayban-e-Johar, H-8/1, Islamabad www.pcrwr.gov.pk	 Pakistan National Accreditation Council LAB-48 17025
TEST REPORT CHEMICAL & MICROBIOLOGY		

Report Serial No	AR-07118	Total No of Pages	2
Customer Name & Address	Blue H2O (Pvt)Ltd, 1st Floor, Shinka Plaza, Main PWD Road, PWD Islamabad.		
Sampling Date & Time	13-02-2025 , 01:30 AM	Customer Code	RO Water
NWQL Sample Code	MCL-16349-25	Sample Receipt Date & Time	13-02-2025 03:02
Temperature of Sample at receipt °C	17	Humidity (%) at Receipt	37
Date(s) of Analysis	13-02-2025 to 21-02-2025	Reporting Date	6-3-2025

PHYSICAL & AESTHETIC PARAMETERS

Sr.#	Water Quality Parameter	Units	Det. Limit	Reference Methods	Permissible Limits / Tolerance Limit	Results	Measurement Uncertainty U=w
					Potable Water (PSQCA / NSDWQ, 2010)		
1	Color*	-	-	Sensory Evaluation	Colorless	Colorless	-
2	Electrical Conductivity	(μS/cm)	0.11	Standard Method,2510-B APHA, 24 th Edition	NGVS	218.00	± 4%
3	pH	-	0.03	Standard Method,4500-H+ B APHA, 24 th Edition	6.5 - 8.5	7.68	± 4%
4	Turbidity	NTU	0.31	Standard Method,2130B APHA, 24 th Edition	< 5	BDL	-

MAJOR CHEMICAL PARAMETERS

Sr.#	Water Quality Parameter	Units	Det. Limit	Reference Methods	Permissible Limits / Tolerance Limit	Results	Measurement Uncertainty U=w
					Potable Water (PSQCA / NSDWQ, 2010)		
5	Alkalinity as CaCO ₃ *	mg/L	5	Standard Method 2320-B APHA, 24 th Edition	NGVS	32.00	± 6%

6	Bicarbonates*	mg/L	5.0	Standard Method 2320-B APHA, 24 th Edition	NGVS	32.00	± 6%
7	Calcium	mg/L	2.0	Standard Method 3500 Ca ₂₊ -B APHA, 24 th Edition	NGVS	17.00	± 7%
8	Carbonates*	mg/L	5.0	Standard Method 2320-B APHA, 24 th Edition	NGVS	BDL	-
9	Chlorides*	mg/L	2.0	Standard Method 4500- Cl- B APHA, 24 th Edition	< 250	36.00	± 5%
10	Total Hardness	mg/L	5.0	Standard Method 2340-C APHA, 24 th Edition	< 500	82.00	± 8%
11	Magnesium	mg/L	1.0	Standard Method 3500 Mg ²⁺ -B APHA, 24 th Edition	NGVS	10	± 6%
12	Potassium	mg/L	0.02	Standard Method 3500- K-B APHA, 24 th Edition	NGVS	0.20	± 5%
13	Sodium	mg/L	1.57	Standard Method 3500- Na-B APHA, 24 th Edition	NGVS	11.00	± 5%
14	Sulphate	mg/L	0.28	Standard Method 4500- SO ₄ ²⁻ -B APHA, 24 th Edition	NGVS	24.00	± 5%
15	Nitrate (N)	mg/L	0.06	Standard Method 4500- NO ₃ -B APHA, 24 th Edition	< 10	0.14	± 5%
16	TDS*	mg/L	-	APHA, 24 th Edition	< 1000	120	-

MICROBIOLOGICAL PARAMETERS

Sr.#	Water Quality Parameter	Units	Det. Limit	Reference Methods	Permissible Limits / Tolerance Limit	Results	Measurement Uncertainty U=w (95% Confidence Limits)
					Potable Water (PSQCA / NSDWQ, 2010)		
17	Total Coliforms	CFU/100 ml	0	Standard Method (9222-B) APHA, 24 th Edition	0 (NSDWQ,2010)	-ve	-
18	Fecal Coliforms	CFU/100 ml	0	Standard Method (9222-D) APHA, 24 th Edition	0 (NSDWQ,2010)	-ve	-
19	<i>E-coli</i>	CFU/100 ml	0	USEPA-1603	0 (NSDWQ,2010)	-ve	-

NGVS: No Guideline Value Set

WHO: World Health Organization

MPN: Most Probable Number

PSQCA: Pakistan Standard Quality Control Authority

NSDWQ: National Standards for Drinking Water Quality

BDL: Below Detection Limit

MPN: Most Probable Number

**It is equals to zero and it is reported as safe

APHA: American Public Health Association,

FAO: Food & Agriculture Organization

USEPA: United States Environmental Protection Agency

AOAC: Association of Official Analytical Chemists

CFU: Colony Forming Unit

QC: Quality control

*Non Accredited

Interpretation (Statement of Conformity)

Quality of water sample based on tested chemical parameter	✓ Safe	Unsafe
Quality of water sample based on tested microbial parameter	✓ Safe	Unsafe
Remarks (if any)		

* Verified by technical manager & authorized by QC manager.

Terms & Conditions:

- Test results in this report relate only to the test item/sample submitted and tested.
- The test report shall not be reproduced except in full, without written approval of NWQL-PCRWR
- Water Quality Parameters exceeding the WHO Drinking Water Guideline values (Guidelines for Drinking-Water Quality, third editions, 2004) National Environmental Quality Standards (1999) and Pakistan Standard Quality Control Authority/National Standard for Drinking Water Quality (NSDWQ, 2010, PAKEPA) are highlighted.
- Safe - acceptance based on guard band; if the measurement result being below the acceptance limit, $AL = TL - w$. the risk of accepted items to be outside the tolerance limit is $< 2.5\%$.
- Unsafe - rejection based on guard band; if the measurement result is above the acceptance limit, $AL = TL - w$. the risk to be inside the tolerance limit is $< 2.5\%$. (ILAC-G8:09/2019).

Doc ID: NWQL/LMS/TR-11 | Revision No. : 21 | Initiated by: QC | Reviewed by: QM**Approved by: Director NWQL | Issued by: DQM | Issue Date: 02-12-2024**