



TEST REPORT CHEMICAL & MICROBIOLOGY

Report Serial No	AR-00150-20	Total No of Pages	2
Customer Name & Address	BDW" Aqua Stream", Global Food Industry, Islamabad.		
Sampling Date & Time	22-10-2020, 10:40 AM	Customer Code	BDW" Aqua Stream"
NWQL Sample Code	MCL-2050-20	Sample Receipt Date & Time	22-10-2020 12:08
Temperature of Sample at receipt °C	30	Humidity (%) at Receipt	53
Date(s) of Analysis	22-08-2020 to 01-11-2020	Reporting Date	02-11-2020

PHYSICAL & AESTHETIC PARAMETERS

Sr.#	Water Quality Parameter	Units	Det. Limit	Reference Methods	Permissible Limits	Results	Measurement Uncertainty
					Potable Water (PSQCA / NSDWQ, 2010)		
1	Color	-	-	Sensory Evaluation	Colorless	Colorless	-
2	Electrical Conductivity	(µS/cm)	0.11	APHA, 23 rd Edition	NGVS	357.00	± 4%
3	pH	-	0.03	APHA, 23 rd Edition	6.5 - 8.5	7.20	± 3%
4	Turbidity	NTU	0.31	APHA, 23 rd Edition	< 5	BDL	-

MAJOR CHEMICAL PARAMETERS

Sr.#	Water Quality Parameter	Units	Det. Limit	Reference Methods	Permissible Limits	Results	Measurement Uncertainty
					Potable Water (PSQCA / NSDWQ, 2010)		
5	Alkalinity as CaCO ₃	mg/L	5	APHA, 23 rd Edition	NGVS	59.00	± 6%
6	Bicarbonates	mg/L	5.0	APHA, 23 rd Edition	NGVS	50.00	± 6%
7	Calcium	mg/L	2.0	APHA, 23 rd Edition	NGVS	16.00	± 5%
8	Carbonates	mg/L	5.0	APHA, 23 rd Edition	NGVS	BDL	-
9	Chlorides	mg/L	2.0	APHA, 23 rd Edition	< 250	65.00	± 5%
10	Total Hardness	mg/L	5.0	APHA, 23 rd Edition	< 500	100.00	± 6%
11	Magnesium	mg/L	1.0	APHA, 23 rd Edition	NGVS	7	± 6%
12	Potassium	mg/L	0.02	APHA, 23 rd Edition	NGVS	1.2	± 1%
13	Sodium	mg/L	1.57	APHA, 23 rd Edition	NGVS	43.00	± 4%
14	Sulphate	mg/L	0.24	APHA, 23 rd Edition	NGVS	42.00	± 3%
15	Nitrate (N)	mg/L	0.03	APHA, 23 rd Edition	NGVS	BDL	-
16	TDS	mg/L	-	APHA, 23 rd Edition	< 500	196.00	-

MICROBIOLOGICAL PARAMETERS





Sr. #	Water Quality Parameter	Units	Det. Limit	Reference Methods	Permissible Limits	Results	Measurement Uncertainty (95% Confidence Limits)
					Potable Water (PSQCA / NSDWQ, 2010)		
18	Total Coliforms	MPN/100 ml	<1.8*	APHA, 23 rd Edition	0 (NSDWQ,2010)	-ve	-
19	Fecal Coliforms	MPN/100	<1.8*	APHA, 23 rd Edition	0 (NSDWQ,2010)	-ve	-
20	<i>E-coli</i>	+ve/-ve	-ve	FAO,1998 (Internal method based on APHA Standard Methods: 9221 B-C)	0 (NSDWQ,2010)	-ve	-

NGVS: No Guideline Value Set
 WHO: World Health Organization
 MPN: Most Probable Number
 PSQCA: Pakistan Standard Quality Control Authority
 National Standards for Drinking Water Quality
 BDL: Below Detection Limit
 MPN: Most Probable Number

APHA: American Public Health Association,
 FAO: Food & Agriculture Organization
 USEPA: United States Environmental Protection Agency
 AOAC: Association of Official Analytical Chemists NSDWQ:
 CFU: Colony Forming Unit
 QC: Quality control
 *It is equals to zero and it is reported as safe

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)		

			
Prepared By (Technical Representative)	Reviewed By (Tech. Manager Chemical)	Reviewed By (Tech. Manager Microbiology)	Approved By (Tech. Manager QC)

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.
- The decision rule for the statement of conformity being used is Zero Guard band rule also referred to as the **“simple decision rule”**
“Safe” will be reported whenever the measured result is within Permissible limit (Legal standards)
“Unsafe” will be reported when the measured result is out-of Permissible limits (legal standards)