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|  PCRWR | PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES Ministry of Science & Technology, Government of Pakistan Khayban-e-Johar, H-8/1, Islamabad www.pcrwr.gov.pk |  PNAC Pakistan National Accreditation Council Lab-48 ISO-17025:2017 Accredited |
| TEST REPORT CHEMICAL & MICROBIOLOGY | | |

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|--|---|---------------------------------------|------------------|
| Report Serial No | AR-01150 | Total No of Pages | 2 |
| Customer Name & Address | Pak Beverages & Foods (Pvt) Ltd, Islamabad. | | |
| Sampling Date & Time | 18-01-2021 , 11:00 AM | Customer Code | Filter Water |
| NWQL Sample Code | MCL-02590-21 | Sample Receipt Date & Time | 18-01-2021 02:30 |
| Temperature of Sample at receipt °C | 21 | Humidity (%) at Receipt | 54 |
| Date(s) of Analysis | 19-01-2021 to 28-01-2021 | Reporting Date | 02-02-2021 |

PHYSICAL & AESTHETIC PARAMETERS

| Sr.# | Water Quality Parameter | Units | Det. Limit | Reference Methods | Permissible Limits | Results | Measurement Uncertainty |
|------|-------------------------|---------|------------|--------------------------------|---------------------------|-----------|-------------------------|
| | | | | | Bottled Water(PSQCA 2018) | | |
| 1 | Color* | - | - | Sensory Evaluation | Colorless | Colorless | - |
| 2 | Electrical Conductivity | (µS/cm) | 0.11 | APHA, 23 rd Edition | NGVS | 321.00 | ± 4% |
| 3 | pH | - | 0.03 | APHA, 23 rd Edition | 6.5 - 8.5 | 6.95 | ± 5% |
| 4 | Turbidity | NTU | 0.31 | APHA, 23 rd Edition | 0.5 | BDL | - |

MAJOR CHEMICAL PARAMETERS

| Sr.# | Water Quality Parameter | Units | Det. Limit | Reference Methods | Permissible Limits | Results | Measurement Uncertainty |
|------|-----------------------------------|-------|------------|--------------------------------|---------------------------|---------|-------------------------|
| | | | | | Bottled Water(PSQCA 2018) | | |
| 5 | Alkalinity as CaCO ₃ * | mg/L | 5 | APHA, 23 rd Edition | NGVS | 102.00 | ± 6% |
| 6 | Bicarbonates* | mg/L | 5.0 | APHA, 23 rd Edition | NGVS | 102.00 | ± 6% |
| 7 | Calcium | mg/L | 2.0 | APHA, 23 rd Edition | 100 | 24.00 | ± 5% |
| 8 | Carbonates* | mg/L | 5.0 | APHA, 23 rd Edition | NGVS | BDL | - |
| 9 | Chlorides* | mg/L | 2.0 | APHA, 23 rd Edition | 250 | 21.00 | ± 5% |
| 10 | Total Hardness | mg/L | 5.0 | APHA, 23 rd Edition | NGVS | 80.00 | ± 6% |
| 11 | Magnesium | mg/L | 1.0 | APHA, 23 rd Edition | 100 | 5.2 | ± 6% |
| 12 | Potassium | mg/L | 0.02 | APHA, 23 rd Edition | 10 | 1.40 | ± 5% |
| 13 | Sodium | mg/L | 1.57 | APHA, 23 rd Edition | 50 | 34.00 | ± 5% |
| 14 | Sulphate* | mg/L | 0.28 | APHA, 23 rd Edition | 250 | BDL | - |
| 15 | Nitrate (N) | mg/L | 0.06 | APHA, 23 rd Edition | 10 | 2.00 | ± 5% |
| 16 | TDS* | mg/L | - | APHA, 23 rd Edition | 500 | 177 | - |

MICROBIOLOGICAL PARAMETERS

| Sr.# | Water Quality Parameter | Units | Det. Limit | Reference Methods | Permissible Limits | Results | Measurement Uncertainty (95% Confidence Limits) |
|------|-------------------------|-------|------------|-------------------|---------------------------|---------|---|
| | | | | | Bottled Water(PSQCA 2018) | | |

| | | | | | | | |
|----|-----------------|------------|---|--------------------------------|----------|-----|---|
| 17 | Total Coliforms | CFU/100 ml | 0 | APHA, 23 rd Edition | 0/250 ml | -ve | - |
| 18 | Fecal Coliforms | CFU/100 ml | 0 | APHA, 23 rd Edition | 0/250 ml | -ve | - |
| 19 | <i>E-coli</i> | CFU/100 ml | 0 | USEPA-1603 | 0/250 ml | -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) | | |

* It is computer generated report and does not need signatures.

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)