



QUARTERLY REPORT BOTTLED WATER QUALITY

(April-June, 2018)



PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES
Ministry of Science & Technology
Khyban-e-Johar, H-8/1, Islamabad.
www.pcrwr.gov.pk

April-June, 2018



SUMMARY

The poor quality of drinking water has forced a large cross-section of citizens to buy bottled water. However, many of the mineral water companies were found selling contaminated water. To monitor and improve the quality of bottled water, the government of Pakistan through Ministry of Science and Technology has designated the task for quarterly monitoring of bottled/mineral water brands to PCRWR. According to the monitoring report for the quarter April-June, 2018 following is the brief overview of the findings.

Quarterly Monitoring of Bottled/Mineral Water (April-June, 2018)

Item	No.	% age
Total No. of Brands Collected	85	-
Overall Safe Brands	80	94%
Overall Unsafe Brands	5	6%
Chemically Safe Brands	85	100%
Chemically Unsafe Brands	0	0%
Microbiologically Safe Brands	80	94%
Microbiologically Unsafe Brands	5	6%

Name of Targeted Cities	Islamabad, Rawalpindi, Peshawar, Lahore, Bahawalpur, Tandojam, Quetta, Karachi.	
Unsafe Brands (Microbiologically)	Gourmet	Gourmet Foods: Gate # 1, Plot # 1-5, Sunder Industrial Estate, Raiwind Sunder Road, Lahore, Pakistan.
	Aqua Super Life	Aqua Super Life 30-C Naz Town, Lahore 0336-7777617
	SHIRAZ	Frontier Botanical Research Laboratory (Pvt) Ltd 107-A, Hayatabad Small Industrial Estate, Peshawar www.onelife.pk .
	Aqua Splash	Euro International: 192-A Industrial Estate, Hayatabad, Peshawar.
	MARINA	Malik Food Industries: 091-5001244



INTRODUCTION

Drinking water quality is deteriorating continually due to biological contamination from human waste, chemical pollutants from industries and agricultural inputs. Piped water also gets contaminated because pipes are laid very close to sewerage lines or open drains and cause many serious water borne diseases. It was found that 45% of infant deaths have been attributed to diarrhea and about 60% to overall infectious waterborne diseases in Pakistan. According to the World Health Organization (WHO) 25-30% of the diseases are gastro-intestinal in nature. The poor quality of drinking water has forced a large cross-section of citizens to buy bottled water. As a consequence of this expanding market a mushroom growth of bottled water industry in the country is witnessed during the last few years. However, many of the mineral water companies were found selling contaminated water. To monitor and improve the quality of bottled water, the government of Pakistan has designated the PCRWR as focal point agency.

1. Ministry of Science & Technology informed PCRWR Vide U.O. No. 5(21)/2004-ATA-II dated 17.10.2005 that the Cabinet in its meeting under the chairmanship of Prime Minister directed Ministry of Science & Technology to undertake regular survey/samples of bottled/mineral water and publicize the results on a quarterly basis and follow up with punitive/legal action.
2. Ministry of Science & Technology has assigned the task of quality monitoring of bottled water and publicize the results to PCRWR Vide U.O. No.1(1)/2005-Secy (MoST) dated 8.12.2005.

PCRWR SAMPLING METHODOLOGY

No. of Brands Collected	85	
No. of Cities Targeted	08 (Islamabad, Rawalpindi, Peshawar, Lahore, Bahawalpur, Quetta, Tando Jam, Karachi)	
Composition of Sampling Team As per MoU Signed between PCRWR & PSQCA	One Research Officer and one Laboratory Assistants from PCRWR and Senior staff member and field officer from PSQCA.	
Sampling Procedure	Samples of 85 commercially available brands of mineral/bottled water were collected from local market of 8 cities of Pakistan. These samples were collected by the senior staff members of National Water Quality Laboratory (NWQL) of PCRWR Head Office and Regional/district Water Quality Laboratories of PCRWR during April-June, 2018. A set of four bottles of each brand was collected and sealed on site. Identification codes were allotted to all the brands according to PCRWR Bottled Water Classification System.	
Transparency	Sample No. 1	Handed over to shopkeeper at the time of sample collection;
	Sample No. 2	Preserved in the National Water Quality Laboratory of PCRWR, Islamabad for future record.
	Sample No. 3	Used for Microbiological Analysis
	Sample No. 4	Used for Physico-chemical Analysis



PCRWR BOTTLED WATER CLASSIFICATION SYSTEM

Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Noble	BWR-01	Tando Jam	21/05/2018	12/2019	0.6 Liter	Qalandari Communication Main Road, Matiari	Head Office: Tower Market Hakeem Habib Road, Hyderabad
Nestle Pure Life	BWR-02	Tando Jam	21/05/2018	09/2019	0.5 Liter	Bissmillah General Store Main Road ,Matiari	Bottled By Nestle Pakistan Ltd. 308-Upper Mall, Lahore
Water Plus	BWR-03	Tando Jam	21/05/2018	12/2020	0.6 Liter	Bissmillah General Store Main Road, Matiari	Bottled By: Mega fine industries Plot# A-79,Industrial Area Malir Karachi
Re-Fine	BWR-04	Tando Jam	21/05/2018	-	0.6 Liter	Bissmillah General Store Main Road, Matiari	Head Office:A-84,Tando Meer Ghulam Hussain Unit#9 Latifabad Hyderabad Sindh
Aqua Hayat	BWR-05	Tando Jam	21/05/2018	-	0.6 Liter	Muzamil Medical Store Shahi Bazar Chowk ,Matiari	Street No.9 Clifton Karachi
Do Aab Water	BWR-06	Karachi	12/06/2018	06/2018	0.6 Liter	New 786 General Store, Block-18, Perfume Chowk.	-
Pure 18	BWR-07	Karachi	11/06/2018	-	0.6 Liter	Al-Rehmat Store, Gulistan-e-Johar, Block-10, Karachi.	Quality Drinking Water a Product of Bawany Group.
Aqua Ayolam	BWR-08	Karachi	12/06/2018	-	0.6 Liter	Sawabi General Store, Shah Faisal Colony No.01, Karachi.	A Product of Noor-ul-ain Enterprises
Yes	BWR-09	Karachi	11/06/2018	12/2018	0.6 Liter	Abdul Qadeer General Store, Malir Cantt. No.6, Karachi.	Mega Fine Industries: Plot A-79, Industrial Area, Malir Karachi
Popular Maza	BWR-10	Karachi	11/06/2018	04/2018	0.6 Liter	Subhan Allah General Store, Gulistan-e-Johar, Block-4, Karachi	A Product Of Popular Food Industries Ltd. 311 Chapal Plaza Off 1.1 Chandigarh Road, Karachi
Droplet	BWR-11	Karachi	12/06/2018	-	0.6 Liter	Al-Hameed Communication Shop, Rafi Green City, Block-18, near Peshawr Chowk	Bottled By: Makkah International Block 1-A,Gulshan-e-Johar Karachi
Pure Aqua	BWR-12	Karachi	12/06/2018	12/2019	0.6 Liter	Nizam General Store, Shah Faisal Town, Karachi-3.	Head Office:ST-B-2,Block-19 Gulistan-e-ali Al-Noor More F.B Area, Karachi www.pureaqua.com.pk 0308-2416521
Safe Life	BWR-13	Karachi	12/06/2018	-	0.6 Liter	Sawabi General Store, Shah Faisal Colony No.01, Karachi.	Head Office:Plot#411,M.Colony, Garden West, Karachi
ABS Minerals	BWR-14	Karachi	12/06/2018	-	0.6 Liter	Bismillah Shop, Johar More, Karachi.	Bottled by: ABS Enterprises B-16, A, E.C.H.S Block-8, Gulistan-e-Johar, Karachi.
Aquench	BWR-15	Karachi	11/06/2018	-	0.6 Liter	Sajjad Karyana Store, Gulistan-e-Johar, Block-10, Karachi.	Shop No.A-2,A-3 Foundation Blessing Block No.2,Gulshan-e-Johar New Sara Banquet University Road Karachi
Crystal Maya	BWR-16	Karachi	11/06/2018	12/2020	0.6 Liter	Rashid Khan Ice Shop, Gulistan-e-Johar, Block-10, Karachi.	A Product of Asghar and Sons



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Mag Life	BWR-17	Karachi	11/06/2018		0.6 Liter	Jan Super Store, Gulistan-e-Johar, Block-10, Karachi.	Address: S-1, Ground Floor, West Land Trade Centre, Block7-b, Shaheed-e-Millat Road, K.C.H.S Karachi.
Orion	BWR-18	Karachi	11/06/2018	-	0.6 Liter	Aamir General Store, Malir Cantt. No.6, Karachi.	Madina Bottles(Pvt)Ltd 0/3 Elahi Ware house Sector,7-A Korangi Industrial Area Karachi
Jel	BWR-19	Karachi	11/06/2018	12/2020	1.5 Liter	Abdul Majeed General Store, Malir Cantt. No.6, Karachi.	Mega Fine Industries: Plot No.A-79,Malir Industrial Area Malir Karachi E-mail: info@megafineindustries.com
Douro	BWR-20	Karachi	11/06/2018	12/2020	1.5 Liter	Bismillah General Store, Gulistan-e-Johar, Block-10, Karachi.	A Product of Douro International: Plot#C-14, Sultan Road, F.B Area Karachi 0314-3442577
Al-Sahar	BWR-21	Karachi	11/06/2018	-	1.5 Liter	Jan Super Store, Gulistan-e-Johar, Block-10, Karachi.	Al-Safrrat International:Plot#68,Site Super Highway International Area Karachi
Every	BWR-22	Quetta	30/05/2018	-	1.5 Liter	Gul Super Store Near ,B.M.C Hospital	A Product of Z.M Enterprises:N-5,Block No.13 KDA Scheme 16 F.B Industrial Area Karachi
Dasani	BWR-23	Quetta	30/05/2018	04/2019	1.5 Liter	Al-Madina Super General Store Jinnah Town Quetta	Bottled Under Authority of The Coca Cola Company By coca-cola Beverages Pakistan Ltd.(CCBPL)26,FCC,Syed Maratab Ali Road, Gulberg IV, Lahore, Pakistan
Pure Next	BWR-24	Quetta	31/05/2018	03/2019	1.5 Liter	Diamond Bakery Sabzal Road, Quetta	Filled by: Mezan Beverages(Pvt)Ltd 45 km,Multan Road, Lahore
Kinley	BWR-25	Quetta	31/05/2018	10/2018	1.5 Liter	Al Aska Bakers & G.Store Samungli Housing Quetta	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-II Gulberg III, Lahore Pakistan.
I pure	BWR-26	Quetta	31/05/2018	-	1.5 Liter	Diamond Bakery Sabzal Road, Quetta	Bottled by:S&G Brothers sngbottlers@gmail.com
Aquafina	BWR-27	Quetta	30/05/2018	04/2018	1.5 Liter	Al-Madina Super General Store Jinnah Town Quetta	Purified & Filled By Pakistan Beverages Ltd.Survey#212, Deh Konkar, District Malir, Karachi
Aqua Hygienic	BWR-28	Quetta	30/05/2018	06/2019	1.5 Liter	Al Asif Medical Store Mona Chowk Jinnah Road Quetta	Marketed By: ZAUHRAS Plot#2,Street#12,Faisal Town, Brewery Road, Quetta
Cool Aqua Cool	BWR-29	Quetta	30/05/2018	-	1.5 Liter	Al-Madina Super General Store Jinnah Town Quetta	J&B Group Quetta www.coolaquacool.com 081-2453316
Nestle	BWR-30	Quetta	31/05/2018	-	0.5 Liter	Diamond Bakery Sabzal Road, Quetta	Bottled By Nestle Pakistan Ltd. 308-Upper Mall, Lahore
Nestle	BWR-31	Islamabad	29/06/2018	12/2018	1.5 Liter	Save Mart Aman Plaza Lehtar Road,Tramari Chowk Islamabad	Bottled By Nestle Pakistan Ltd. 308-Upper Mall, Lahore
AquaFina	BWR-32	Islamabad	29/06/2018	-	0.6 Liter	Mama G Murgh Palao & Resturant Tramri Chowk, Islamabad	Purified and Filled by Haideri Beverages(Pvt)Ltd CDA Industrial Triangle Kahuta Road, Islamabad
Mehr	BWR-33	Rawalpindi	29/06/2018	11/2018	0.5 Liter	Collected from manufacturing point	Bottled by Pir MEHR Ali Shah Arid Agriculture University Murree Road, Rawalpindi



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Kinley	BWR-34	Islamabad	29/06/2018	12/2018	0.5 Liter	New Madina Restaurant B-1259 Satellite Town Commercial Market Rawalpindi	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-II Gulberg III, Lahore Pakistan
Gourmet	BWR-35	Islamabad	29/06/2018	12/2018	0.6 Liter	Gourmet Foods Said Pur Road, Islamabad	Gourmet Foods: Gate # 1, Plot # 1-5, Sunder Industrial Estate, Raiwind Sunder Road, Lahore, Pakistan.
Murree Sparkletts	BWR-36	Islamabad	29/06/2018	-	0.5 Liter	Unique Bakers Saidpur Road, Haideri Chowk, Rawalpindi	Murree Sparkletts (A Division of Murree Brewery Co.) Plot No.10/2, Phase III Industrial Estate, Hattar. tops@comsats.net.pk
Berg	BWR-37	Rawalpindi	29/06/2018	12/2018	06 Liter	Shaheen Chemist Commercial Market Satellite Town Rawalpindi	M-1851/2, St#12, Iqbal Pura (Mitter Pura) Rawalpindi
Nurturmil Water	BWR-38	Islamabad	29/06/2018	11/2018	1.5 Liter	Shaheen Chemist Commercial Market Satellite Town Rawalpindi	Manufactured Mac & Rains Health Care (Pvt) Ltd 540-D, Sundar Industrial Estate, Raiwind Road, Lahore
Nectar	BWR-39	Islamabad	28/06/2018	12/2018	0.6 Liter	Collected from manufacturing point	Bottle By Nectar Water Islamabad Plot No.14/10 Markaz G-7, Islamabad. nectarenterprises@live.com
Fresh Life	BWR-40	Islamabad	28/06/2018	01/2019	0.6 Liter	Collected from manufacturing point	A Project of T&S Enterprises, Pindorin Main Khana Dak, Islamabad freshlife786@gmail.com Islamabad
Nestol	BWR-41	Islamabad	28/06/2018	12/2018	0.6 Liter	Collected from manufacturing point	Khana Dak, Park Area Islamabad. 0300-5303135 0315-2340090
Deosai	BWR-42	Islamabad	28/06/2018	12/2018	0.6 Liter	Collected from manufacturing point	Bottled By: Margalla Foods & Beverages Plot No.32, Khyaban-e-Johar Industrial Area, Sector 1-9/2, Islamabad
Hydra	BWR-43	Islamabad	28/06/2018	11/2018	0.6 Liter	Collected from manufacturing point	Bottled By: Pakistan PVC Limited (food Division) 31-A, Sector 1-9 Islamabad
Sunley Pure	BWR-44	Islamabad	28/06/2018	11/2018	0.6 Liter	Collected from manufacturing point	Bottled By: Pakistan PVC Limited (food Division) 31-A, Sector 1-9 Islamabad
Oxygen+	BWR-45	Islamabad	28/06/2018	12/2018	0.6 Liter	Collected from manufacturing point	Registered Trade Mark of Care Enterprises; Address: Plot#86, St#10 Sector I-9/2 Islamabad.
Water Plus	BWR-46	Islamabad	28/06/2018	12/2018	0.6 Liter	Collected from manufacturing point	Plot#235, St#9, 1-9/2 Industrial Area, Islamabad
Venora	BWR-47	Islamabad	28/06/2018	10/2018	1.5 Liter	Collected from manufacturing point	Plot No.238, St#8, I-9/3 Islamabad 051-4432848
Deep Spring	BWR-48	Islamabad	28/06/2018	12/2018	1.5 Liter	Collected from manufacturing point	A Product of BNK (Pvt) Ltd. Plot No.226, St#7, Sector I-9/2, Islamabad
ELIM	BWR-49	Islamabad	28/06/2018	10/2018	1.5 Liter	Collected from manufacturing point	Plot No.195, Sector I-9/2, Islamabad 051-4442338
Bio Crystal	BWR-50	Islamabad	28/06/2018	12/2018	0.6 Liter	Collected from manufacturing point	692-A, Road, D Phase III, Bahria Town, Islamabad.



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Aqua Platinum	BWR-51	Bahawalpur	03/07/2018	03/2019	0.6 Liter	Life Medical Store Opp.BVH Bahawalpur	Aqua Platinum Manufactured by :FB Food Industries 0300-2846999
Pure Next	BWR-52	Bahawalpur	03/07/2018	04/2019	1.5 Liter	Usman Pharmacy M.T.C Road, Bahawalpur	Filled by: Mezan Beverages(Pvt)Ltd 45 km,Multan Road, Lahore
Al SAFA	BWR-53	Bahawalpur	28/06/2018	06/2019	0.6 Liter	Utility Store, Pakistan Haji Muhammad Colony Hospital Road Rahim Yar Khan	46-C Abbasia Banglos Street No.2,Rahim Yar Khan 0300-7996436
Falah	BWR-54	Bahawalpur	28/06/2018	06/2019	0.6 Liter	Asif Pharmacy Hospital Road Rahim Yar Khan	Bottled& Resources at R.I.M Enterprises Rahim Yar Khan Pakistan
Jalandhar	BWR-55	Bahawalpur	28/06/2018	06/2019	0.6 Liter	Collected from manufacturing point	Jalandhar Foods (Pvt) Ltd. Laghari Road, Chowk Pathanistan Rahim Yar Khan. Pakistan.
Aqua Crystal	BWR-56	Bahawalpur	28/06/2018	03/2019	0.6 Liter	Punjab Medical Store Hospital Road Rahim Yar Khan	Aslam Town Abu Dabhi Road Rahim Yar Khan
Sky Blue	BWR-57	Bahawalpur	28/06/2018	06/2019	0.6 Liter	Khursheed Pharmacy Hospital Road Rahim Yar Khan	Abbasia Banglows, Near Free Eye Hospital, Rahim Yar Khan
Dasani	BWR-58	Bahawalpur	28/06/2018	05/2019	0.5 Liter	Utility Store, Pakistan Haji Muhammad Colony Hospital Road Rahim Yar Khan	Bottled Under Authority of The Coca Cola Company By coca-cola Beverages Pakistan Ltd.(CCBPL)26,FCC,Syed Maratab Ali Road, Gulberg IV, Lahore, Pakistan
Murree Sparkletts	BWR-59	Bahawalpur	28/06/2018	06/2019	0.5 Liter	Fine Sweets &Bakers Shahi Road Rahim Yar Khan	Murree Sparkletts (A Division of Murree Brewery Co.) Plot No.10/2, Phase III Industrial Estate, Hattar. tops@comsats.net.pk
Nestle	BWR-60	Bahawalpur	28/06/2018	10/2019	0.6 Liter	Abdul Hye Sons Pharmacy Hospital Road Rahim Yar Khan	Bottled By Nestle Pakistan Ltd. 308-Upper Mall, Lahore
AquaFina	BWR-61	Bahawalpur	28/06/2018	06/2019	0.5 Liter	Zam Zam Pharmacy M.T.C Road Bahawalpur	Purified & Filled Riaz Bottles (Pvt)Ltd.32-N,Gulberg II Lahore Under appointment from PepsiCo
Panee	BWR-62	Bahawalpur	03/07/2018	05/2019	0.6 Liter	Al-Khair Pharmacy Opp.BVH Bahawalpur	SUALEH Sons Foods Head Office Room#2/32 ,Al-Abid Chamber Shahrah-e-Liaqat Karachi
Ever Best	BWR-63	Bahawalpur	03/07/2018	01/2019	1.5 Liter	Usman Pharmacy M.T.C Road, Bahawalpur	Friends Beverages :Sukhail Road, Ahmedpur Pur East Bahawalpur Friendsbeverages1@gmail.com
Good Water	BWR-64	Lahore	09/07/2018	04/2019	1.5 Liter	Collected from manufacturing point	554-2-A-II Chaudhry Road Al-Kareem Chowk Township Lahore Goodwater848@gmail.com
Doce	BWR-65	Lahore	09/07/2018	05/2019	1.5 Liter	Collected from manufacturing point	48-M, Quaid-e-Azam Industrial State, Kot Lakhpat, Lahore www.doce.pk
Glacial	BWR-66	Lahore	09/07/2018	04/2019	1.5 Liter	Collected from manufacturing point	358-E,Johar Town, Lahore www.glacial.pk 03424522425
AMFAHH	BWR-67	Lahore	09/07/2018	08/2019	1.5 Liter	Collected from manufacturing point	Bottled by Amfahh 870-E Block Johar Town Lahore



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Klinz	BWR-68	Lahore	10/07/2018	01/2019	1.5 Liter	Collected from manufacturing point	Plot#10-A,Punjab Small Industrial Estate Kacha Jail Road Kot Lakhpat Lahore
De-Manzi	BWR-69	Lahore	10/07/2018	03/2019	1.5 Liter	Collected from manufacturing point	Plot#143 2-Bll Township, Lahore Demanzi.purification 042+35123535
Rahat	BWR-70	Lahore	10/07/2018	04/2019	1.5 Liter	Collected from manufacturing point	Rahat Bakers & Departmental Stores Rahat Market, Aziz Bhatti Shaheed Road, Lahore Cantt.
Jami	BWR-71	Lahore	10/07/2018	07/2019	1.5 Liter	Collected from manufacturing point	A Product of Jami Water Services:356-E PIA Housing Society PIA Road, Lahore www.jamiwater.com
Cristalene	BWR-72	Lahore	10/07/2018	02/2019	1.5 Liter	Collected from manufacturing point	A Product of Cristalene Pak Brothers: 30/A-1 Al-Feroz Plaza Commercial Area Valenica Society Lahore. www.cristalenepak.com
ZAMS Pure Drinking Water	BWR-73	Lahore	10/07/2018	05/2019	1.5 Liter	Collected from manufacturing point	Zams Global Enterprises Pvt Ltd. Shop No.4, Block-A, Commercial Market Plaza PECHS Valancia Town Lahore.
Aqua One	BWR-74	Lahore	10/07/2018	01/2019	1.5 Liter	Collected from manufacturing point	Aqua One Filtration (Pvt)Ltd 30-C, Naz Town Main Boulevard Lahore. www.aquaonefiltration.com
Aqua Super Life	BWR-75	Lahore	10/07/2018	07/2018	1.5 Liter	Collected from manufacturing point	Aqua Super Life 30-C NazTown,Lahore 0336-7777617
Wah Water	BWR-76	Peshawar	18/07/2018	07/2019	1.5 Liter	Collected from manufacturing point	RG Enterprises: Plot#141, 7-Industrial Estate, Hayatabad, Peshawar. Web: www.aqwah.com
Top Up	BWR-77	Peshawar	18/07/2018	07/2017	0.5 Liter	Collected from manufacturing point	Top Up Industry:Plot#C-3,Industrial Estate Hayatabad Peshawar
Nebraska	BWR-78	Peshawar	18/07/2018	07/2019	0.6 Liter	Collected from manufacturing point	Bottled at Dew Point Healthcare Water Purification and Processing Facility:12-CIndustrial Estate, Hayatabad, Peshawar.
Shiraz	BWR-79	Peshawar	18/07/2018	06/2019	0.6 Liter	Collected from manufacturing point	Frontier Botanical Research Laboratory(Pvt)Ltd 107-A,Hayatabad Small Industrial Estate, Peshawar www.onelife.pk .
Aquatic Fresh	BWR-80	Peshawar	18/07/2018	07/2019	0.6 Liter	Collected from manufacturing point	Royal Food Industries: Plot#1-C, Industrial Estate Hayatabad, Peshawar
Aqua Splash	BWR-81	Peshawar	18/07/2018	05/2019-	0.6 Liter	Collected from manufacturing point	Euro International: 192-AIndustrial Estate, Hayatabad, Peshawar.
Marine	BWR-82	Peshawar	18/07/2018	07/2019	0.6 Liter	Collected from manufacturing point	Malik Food Industries:091-5001244
One Life	BWR-83	Peshawar	18/07/2018	07/2019	0.6 Liter	Collected from manufacturing point	Frontier Botanical Research Laboratory(Pvt)Ltd 107-A,Hayatabad Small Industrial Estate, Peshawar www.onelife.pk



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Aab-e-Khyber	BWR-84	Peshawar	18/07/2018	07/2019	1.5 Liter	Collected from manufacturing point	I&S International:Plot#87,88-A Hayatabad Small Industrial Estate Peshawar Abekhyber123@gmail.com
Natural Aqwah	BWR-85	Peshawar	18/07/2018	07/2019	1.5 Liter	Collected from manufacturing point	RG Enterprises: Plot#141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com

WATER QUALITY PARAMETERS AND METHODS USED FOR ANALYSIS

Sr. #	PARAMETERS	ANALYTICAL METHOD
1.	Alkalinity (mg/l as CaCO ₃)	2320, Standard method (2012) APHA
2.	Arsenic (ppb)	AAS Vario 6, Analytik Jena AG
3.	Bicarbonate	2320, Standard method (2012) APHA
4.	Calcium (mg/l)	3500-Ca-D, Standard Method (2012) APHA
5.	Carbonate (mg/l)	2320, Standard method (2012)
6.	Chloride (mg/l)	Titration (Silver Nitrate), Standard Method (2012) APHA
7.	Color (TCU)	Sensory Test
8.	Conductivity (μS/cm)	E.C meter, Hach-44600-00, USA
9.	Hardness (mg/l)	EDTA Titration, Standard Method (2012) APHA
10.	Magnesium (mg/l)	2340-C, Standard Method (2012) APHA
11.	Nitrate Nitrogen (mg/l)	Cd. Reduction (Hach-8171) by Spectrophotometer
12.	Odor	Sensory Test
13.	pH	pH Meter, Hanna Instrument, Model 8519, Italy
14.	Potassium (mg/l)	Flame photometer PFP7, UK
15.	Sodium (mg/l)	Flame photometer PFP7, UK
16.	Sulfate (mg/l)	SulfaVer4 (Hach-8051) by Spectrophotometer
17.	Phosphate (mg/l)	8190 and 8048 (Hach)
18.	Taste	Sensory Test
19.	TDS (mg/l)	2540C, Standard method (2012) APHA
20.	Turbidity (NTU)	Turbidity Meter, Lamotte, Model 2008, USA
21.	Fluoride (mg/l)	4500-F C. ion-Selective Electrode Method Standard method (2005) APHA
22.	Iron (mg/l)	FerroVer method (HACH Cat. 21057-69)
23.	Total Coliforms(MPN/100ml)	9221-B,C&D, Standard Methods (2012) APHA
24.	E. Coli (MPN/100ml)	9221-B,C&D, Standard Methods (2012) APHA



WATER QUALITY PERMISSIBLE LIMITS FOR BOTTLED WATER

Sr. #	Parameter	Units	Permissible Limits		
			WHO	IBWA	PSQCA
1.	Alkalinity	(mg/l)	NGVS	NGVS	NGVS
2.	Bicarbonate	(mg/l)	NGVS	NGVS	NGVS
3.	Calcium	(mg/l)	NGVS	NGVS	100
4.	Carbonate	(mg/l)	NGVS	NGVS	NGVS
5.	Chloride	(mg/l)	250	250	250
6.	Co lour	(TCU)	15	NGVS	5
7.	Conductivity	(μ S/cm)	NGVS	NGVS	NGVS
8.	Fluoride	(mg/l)	1.5	3	0.7
9.	Hardness	(mg/l)	NGVS	NGVS	NGVS
10	Iron	(mg/l)	0.3	0.3	0.3
11.	Magnesium	(mg/l)	NGVS	NGVS	50
12.	Odor	-	Odorless	NGVS	Unobjectionable
13.	Nitrate-N	(mg/l)	10	10	10
14.	pH	-	6.5-8.5	NGVS	6.5-8.5
15.	Potassium	(mg/l)	NGVS	NGVS	10
16.	Sodium	(mg/l)	200	NGVS	50
17.	Sulfate	(mg/l)	250	250	250
18.	Taste	-	Unobject.	NGVS	Unobjectionable
19.	TDS	(mg/l)	1000	500	500
20.	Turbidity	(NTU)	5	NGVS	0.5
21.	Phosphate	(mg/l)	NGVS	NGVS	NGVS
22.	Arsenic	Ppb	10	10	10
23.	Total Coliforms	MPN/100ml	0	0	0
24.	E-Coli	MPN/100ml	0	0	0

WHO World Health Organization
IBWA International Bottled Water Association
PSQCA Pakistan Standards and Quality Control Authority



SUMMARY OF RESULTS OF PCRWR MONITORING

Contaminants of Potential Concerns Found in Bottled Water Brands

Bacteriological: (Total Coliforms , Fecal Coliforms &E Coli) (Safe Limit: 0/100ml)				
Sr. No	Brand Name	Code	Results	
			Total Coliforms (MPN/100ml)	E. Coli (MPN/100ml)
1.	Gourmet	BWR-35	5	Nil
2.	Aqua Super Life	BWR-75	6	Nil
3.	SHIRAZ	BWR-79	6	Nil
4.	Aqua Splash	BWR-81	14	Nil
5.	MARINA	BWR-82	8	Nil

PCRWR TESTING: SAFE BRANDS

Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
1.	Noble	BWR-01	Safe	Safe
2.	Nestle Pure Life	BWR-02	Safe	Safe
3.	Water Plus	BWR -03	Safe	Safe
4.	Refine	BWR- 04	Safe	Safe
5.	Aqua Hayat	BWR- 05	Safe	Safe
6.	Do Abe Water	BWR -06	Safe	Safe
7.	Pure 18	BWR -07	Safe	Safe
8.	Aqua Avolam	BWR -08	Safe	Safe
9.	Yes	BWR -09	Safe	Safe
10.	Popular Maza	BWR -10	Safe	Safe
11.	Droplet	BWR -11	Safe	Safe
12.	Pure Aqua	BWR -12	Safe	Safe
13.	Safe Life	BWR -13	Safe	Safe
14.	ABS Minerals	BWR -14	Safe	Safe
15.	Aquench	BWR -15	Safe	Safe
16.	Crystal Maya	BWR -16	Safe	Safe
17.	Mag life	BWR -17	Safe	Safe
18.	Orion	BWR -18	Safe	Safe
19.	Jel	BWR -19	Safe	Safe
20.	Douro	BWR -20	Safe	Safe
21.	Al-Sahar	BWR -21	Safe	Safe
22.	Every	BWR -22	Safe	Safe
23.	Dasani	BWR -23	Safe	Safe
24.	Pure Next	BWR -24	Safe	Safe
25.	Kinley	BWR -25	Safe	Safe
26.	I Pure	BWR -26	Safe	Safe
27.	Aquafina	BWR -27	Safe	Safe
28.	Aqua Hygienic	BWR -28	Safe	Safe
29.	Cool Aqua Cool	BWR -29	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
30.	Nestle	BWR -30	Safe	Safe
31.	Nestle	BWR -31	Safe	Safe
32.	Aquafina	BWR -32	Safe	Safe
33.	Mehr	BWR -33	Safe	Safe
34.	Kinley	BWR-34	Safe	Safe
35.	Muree Sparkletts	BWR-36	Safe	Safe
36.	Berg	BWR-37	Safe	Safe
37.	Nurturmil water	BWR-38	Safe	Safe
38.	Nectar	BWR-39	Safe	Safe
39.	Fresh life	BWR-40	Safe	Safe
40.	Nestol	BWR-41	Safe	Safe
41.	Deosai	BWR-42	Safe	Safe
42.	Hydra	BWR-43	Safe	Safe
43.	Sunley Pure	BWR-44	Safe	Safe
44.	Oxygen+	BWR-45	Safe	Safe
45.	Water plus	BWR-46	Safe	Safe
46.	Venora	BWR-47	Safe	Safe
47.	Deep Spring	BWR-48	Safe	Safe
48.	Elim	BWR-49	Safe	Safe
49.	Bio Crystal	BWR-50	Safe	Safe
50.	Aqua	BWR-51	Safe	Safe
51.	Pure Next	BWR-52	Safe	Safe
52.	Al-Safa	BWR-53	Safe	Safe
53.	Falah	BWR-54	Safe	Safe
54.	Jalandhar	BWR-55	Safe	Safe
55.	Aqua crystal	BWR-56	Safe	Safe
56.	Sky blue	BWR-57	Safe	Safe
57.	Dasani	BWR-58	Safe	Safe
58.	Muree Sparkletts	BWR-59	Safe	Safe
59.	Nestle	BWR-60	Safe	Safe
60.	Aquafina	BWR-61	Safe	Safe
61.	Panee	BWR-62	Safe	Safe
62.	Ever Best	BWR-63	Safe	Safe
63.	Good water	BWR-64	Safe	Safe
64.	Doce	BWR-65	Safe	Safe
65.	Glacial	BWR-66	Safe	Safe
66.	Amfahh	BWR-67	Safe	Safe
67.	Klinz	BWR-68	Safe	Safe
68.	De-Manzi	BWR-69	Safe	Safe
69.	Rahat	BWR-70	Safe	Safe
70.	Jami	BWR-71	Safe	Safe
71.	Cristalene	BWR-72	Safe	Safe
72.	Zams	BWR-73	Safe	Safe
73.	Aqua one	BWR-74	Safe	Safe
74.	Wah water	BWR-76	Safe	Safe
75.	Top up	BWR-77	Safe	Safe
76.	NEBRASKA	BWR-78	Safe	Safe
77.	Aquatic fresh	BWR-80	Safe	Safe
78.	One life	BWR-83	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
79.	AB-E-Khyber	BWR-84	Safe	Safe
80.	Natural water	BWR-85	Safe	Safe

PC#RWR TESTING: UNSAFE BRANDS

Sr. No	Brand Name	Code	Address/Manufacturer	Quality (Safe/Unsafe)	
				Chemical	Microbiological
1.	Gourmet	BWR-35	Gourmet Foods: Gate # 1, Plot # 1-5, Sunder Industrial Estate, Raiwind Sunder Road, Lahore, Pakistan.	Safe	Unsafe
2.	Aqua Super Life	BWR-75	Aqua Super Life 30-C NazTown, Lahore 0336-7777617	Safe	Unsafe
3.	SHIRAZ	BWR-79	Frontier Botanical Research Laboratory(Pvt)Ltd 107-A, Hayatabad Small Industrial Estate, Peshawar www.onelife.pk	Safe	Unsafe
4.	Aqua Splash	BWR-81	Euro International: 192-A Industrial Estate, Hayatabad, Peshawar.	Safe	Unsafe
5.	MARINA	BWR-82	Malik Food Industries:091-5001244	Safe	Unsafe

MARKET CONSISTENCY IN TWO NEIGHBORING QUARTERS

Sr. No	Consistent Brands	New Brands	Unavailable Brands
1.	Nestle Pure Life	Noble	New Aqua Care
2.	Pure 18	Water Plus	Vital Happy Life
3.	Pure Aqua	Re-Fine	Pure Fresh Water
4.	Safe Life	Aqua Hayat	Alfalah
5.	ABS Minerals	Do Aab Water	Zam
6.	Crystal Maya	Aqua Ayolam	New Deep
7.	Mag Life	Popular Maza	SN Pure Drinking Water
8.	Orion	Droplet	Celay Mineral Water
9.	Jel	Aquench	Pearl
10.	Douro	Al-Sahar	Naseh Mineral Water
11.	Dasani	Every	Vey
12.	Pure Next	Aqua Hygienic	Oslo
13.	Kinley	Cool Aqua Cool	New Aqua Water Fresh
14.	I pure	Berg	Edlen Premium
15.	Aquafina	Deosai	NEO
16.	Nestle	Hydra	Aqua Gold
17.	Nestle	Sunley Pure	Water Empire
18.	AquaFina	Water Plus	Sparkling
19.	Mehr	Venora	Manahal
20.	Kinley	Deep Spring	Volvic
21.	Gourmet	ELIM	Sufi
22.	Murree Sparkletts	Bio Crystal	Fresh Sprinkle
23.	Nurturmil Water	Aqua Platinum	Net Water
24.	Nectar	Al SAFA	Al-Saudia(Water Pack)
25.	Fresh Life	Falah	Moya Mineral Water
26.	Nestol	Jalandhar	Atlantis Water
27.	Oxygen+	Sky Blue	Smart Life
28.	Pure Next	Panee	Aquas
29.	Aqua Crystal	AMFAHH	National
30.	Dasani	Klinz	Erie



Sr. No	Consistent Brands	New Brands	Unavailable Brands
31.	Murree Sparkletts	De-Manzi	Fine Life Mineral Water
32.	Nestle	Cristalene	Seasly
33.	AquaFina	Aqua Super Life	Blue Ice
34.	Ever Best	Marine	Omuse
35.	Good Water	Aab-e-Khyber	Aab-e-Khoob
36.	Doce		Aqua Super Life
37.	Glacial		Aqua Safe
38.	Rahat		Aqua Shilling
39.	Jami		Musafa
40.	ZAMS Pure Drinking Water		Health Guard
41.	Wah Water		New Elixir Water
42.	Top Up		Trust
43.	Nebraska		Cristaline
44.	Shiraz		Miracle
45.	Aquatic Fresh		Florence
46.	Aqua Splash		Masafi
47.	One Life		Al-Atash
48.	Natural Aqwah		Aab-e-Dubai
49.	Aqua One		Aab-e-Noor
50.	Yes		Dam
51.			Defence Mineral Water
52.			Livon
53.			Evan
54.			Springley
55.			Culligan
56.			Aqua One
57.			Chen Water
58.			New Aqua Care
59.			Vital Happy Life

DISEASE POTENTIAL FROM CONTAMINATED BOTTLED WATER

Sr. No	Contaminant	Diseases Impacts
1.	Bacteriological Contamination	Cholera, Diarrhea, Dysentery, Hepatitis, Typhoid

CONCLUSIONS

Sr. No	Item	Conclusion	
		No.	% age
1.	Total No. of Brands Collected	85	-
2.	Overall Safe Brands	80	94
3.	No. of Overall Unsafe Brands	5	6
4.	No. of Chemically Safe Brands	85	100
5.	No. of Chemically Unsafe Brands	0	0
6.	No. of Microbiologically Safe Brands	80	94
7.	No. of Microbiologically Unsafe Brands	05	6
8.	No. of Consistent Brands in Market	50	59
9.	No. of Brands Disappeared/Unavailable	59	69
10.	No. of New Brands	35	41

Detailed water quality status of each bottled water brand is available at **Annexure-1**



Annexure-1

Chemical and Microbiological Quality of Bottled/Mineral Water Brands

Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	Fe	K	NO ₃	SO ₄	As	* Microbiological Contaminants	
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	0.3	10	10	250	10	Total Coli forms 0/100ml	E-Coli 0/100ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	5	2	1	0.03	0.03	0.2	0.06	0.4	0.1	-	-
Units	-	NTU		µS/cm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	MPN /100ml	MPN /100ml
Noble	BWR-01	BDL	7.20	396	218	30	16	140	40	86	27	0.2	BDL	0.6	BDL	40	0.4	Negative	Negative
Nestle Pure Life	BWR-02	BDL	7.10	432	238	36	18	165	45	98	23	BDL	BDL	0.3	1.1	33	0.4	Negative	Negative
Water Plus	BWR-03	BDL	7.05	234	129	16	7	70	40	50	25	BDL	BDL	0.4	BDL	15	0.3	Negative	Negative
Refine	BWR-04	BDL	7.25	419	230	30	16	140	40	85	31	0.08	BDL	1.5	BDL	48	2	Negative	Negative
Aqua Hayat	BWR-05	BDL	7.26	336	185	20	15	110	50	56	25	0.04	BDL	0.3	BDL	36	6	Negative	Negative
Do Abe Water	BWR-06	BDL	6.75	301	166	16	12	90	30	70	30	BDL	BDL	0.4	0.5	24	0.4	Negative	Negative
Pure 18	BWR-07	BDL	6.60	402	221	24	10	100	30	105	43	0.22	BDL	0.0	BDL	19	0.7	Negative	Negative
Aqua Avolam	BWR-08	BDL	6.77	368	202	0	12	50	40	74	61	0.22	BDL	0.0	0.4	35	0.4	Negative	Negative
Yas	BWR-09	BDL	7.10	236	130	28	0	70	20	48	21	0.02	BDL	0.4	BDL	25	0.4	Negative	Negative
Popular Maza	BWR-10	BDL	6.75	326	179	40	7	130	30	96	14	0.03	BDL	1.9	BDL	0	1	Negative	Negative
Droplet	BWR-11	BDL	6.75	302	166	28	12	120	40	60	18	0.28	BDL	0.6	BDL	32	0.5	Negative	Negative
Pure Aqua	BWR-12	BDL	6.56	295	162	28	10	110	40	55	19	BDL	BDL	0.2	BDL	29	0.3	Negative	Negative
Safe Life	BWR-13	BDL	6.85	341	188	28	2	80	40	70	42	0.13	BDL	0.4	BDL	30	0.5	Negative	Negative
ABS Minerals	BWR-14	BDL	7.10	398	219	28	10	110	30	96	40	0.1	BDL	0.6	BDL	28	0.4	Negative	Negative
Aquench	BWR-15	BDL	7.50	484	266	36	12	140	40	115	48	0.47	BDL	0.6	BDL	35	0.5	Negative	Negative
Crystal Maya	BWR-16	BDL	7.01	399	219	48	6	145	40	86	25	BDL	BDL	BDL	BDL	33	0.5	Negative	Negative
Mag life	BWR-17	BDL	7.04	302	166	36	5	110	30	60	18	0.08	BDL	1.4	BDL	34	0.8	Negative	Negative
Orion	BWR-18	BDL	6.75	323	178	38	5	115	30	70	20	0.1	BDL	0.4	0.3	32	0.4	Negative	Negative
Jel	BWR-19	BDL	7.05	263	145	32	2	90	30	50	19	BDL	BDL	0.7	0.2	26	0.4	Negative	Negative

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	Fe	K	NO ₃	SO ₄	As	* Microbiological Contaminants	
																		Total Coli forms 0/100ml	E-Coli 0/100ml
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	0.3	10	10	250	10	-	-
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	5	2	1	0.03	0.03	0.2	0.06	0.4	0.1	-	-
Douro	BWR-20	BDL	6.90	377	207	28	7	100	80	52	41	0.25	BDL	0.6	BDL	29	0.5	Negative	Negative
Al-Sahar	BWR-21	BDL	6.82	308	169	32	5	100	20	72	25	BDL	BDL	1.2	BDL	30	0.4	Negative	Negative
Every	BWR-22	BDL	7.35	872	480	60	49	350	290	60	44	0.46	BDL	3.5	BDL	73	3	Negative	Negative
Dasani	BWR-23	BDL	7.25	262	144	36	5	110	30	16	10	BDL	BDL	1.1	BDL	73	0.5	Negative	Negative
Pure Next	BWR-24	BDL	7.31	347	191	30	15	135	45	70	18	BDL	BDL	1.4	BDL	30	0.3	Negative	Negative
Kinley	BWR-25	BDL	7.96	236	130	26	8	96	20	12	9	BDL	BDL	1.4	BDL	70	0.5	Negative	Negative
I Pure	BWR-26	BDL	7.82	530	292	26	36	215	180	36	23	1.87	BDL	0.7	BDL	37	0.7	Negative	Negative
AquaFina	BWR-27	BDL	7.75	245	135	22	6	80	30	30	19	BDL	BDL	0.4	BDL	44	BDL	Negative	Negative
Aqua Hygienic	BWR-28	BDL	7.24	356	196	26	21	150	70	58	16	BDL	BDL	1.2	BDL	27	0.6	Negative	Negative
Cool Aqua Cool	BWR-29	BDL	7.28	418	230	26	29	185	60	82	10	BDL	BDL	1.1	0.6	26	0.5	Negative	Negative
Nestle	BWR-30	BDL	7.41	432	238	26	30	190	55	96	12	BDL	BDL	1.3	BDL	31	0.5	Negative	Negative
Nestle	BWR-31	BDL	7.40	460	256	40	17	170	100	75	25	BDL	BDL	0.4	BDL	25	0.2	Negative	Negative
AquaFina	BWR-32	BDL	7.10	207	114	0	12	50	30	24	18	BDL	BDL	1.1	BDL	32	BDL	Negative	Negative
Mehr	BWR-33	BDL	7.02	163	89.7	10	4	40	60	10	19	0.22	BDL	0.9	BDL	6	0.2	Negative	Negative
Kinley	BWR-34	BDL	7.02	287	158	24	13	115	65	12	12	0.2	BDL	1.1	BDL	60	BDL	Negative	Negative
Gourmet	BWR-35	BDL	6.86	407	224	40	7	130	50	96	30	0.2	BDL	0.0	BDL	10	0.2	5	Negative
Muree Sparkletts	BWR-36	BDL	7.32	353	194	40	12	150	140	18	13	0.31	BDL	0.4	BDL	11	BDL	Negative	Negative
Berg	BWR-37	BDL	7.53	682	375	40	41	270	245	48	35	0.05	BDL	1.0	BDL	26	0.3	Negative	Negative
Nurturmil water	BWR-38	BDL	7.27	151	83.1	4	12	60	15	22	0	0.09	BDL	6.6	BDL	28	0.2	Negative	Negative
Nectar	BWR-39	BDL	7.18	416	229	44	12	160	150	24	22	0.32	BDL	1.1	BDL	26	BDL	Negative	Negative
Fresh life	BWR-40	BDL	7.03	339	186	40	7	130	120	20	17	0.37	BDL	1.5	0.3	23	BDL	Negative	Negative
Nestol	BWR-41	BDL	7.28	352	194	40	7	130	140	12	18	0.3	BDL	3.4	BDL	15	0.2	Negative	Negative
Deosai	BWR-42	BDL	6.55	373	205	20	17	120	140	14	30	BDL	BDL	0.2	BDL	24	BDL	Negative	Negative
Hydra	BWR-43	BDL	6.95	402	221	20	24	150	170	12	25	0.28	BDL	0.6	BDL	16	BDL	Negative	Negative

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	Fe	K	NO ₃	SO ₄	As	* Microbiological Contaminants	
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	0.3	10	10	250	10	Total Coli forms 0/100ml	E-Coli 0/100ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	5	2	1	0.03	0.03	0.2	0.06	0.4	0.1	-	-
Sunley Pure	BWR-44	BDL	6.96	408	224	40	12	150	160	19	22	0.28	BDL	0.5	BDL	17	BDL	Negative	Negative
Oxygen+	BWR-45	BDL	6.55	381	210	24	17	130	140	22	28	0.21	BDL	0.3	0.3	20	BDL	Negative	Negative
Water plus	BWR-46	BDL	7.07	527	290	48	19	200	205	26	27	0.34	BDL	1.2	0.7	21	0.2	Negative	Negative
Venora	BWR-47	BDL	7.41	379	208	40	12	150	140	24	18	0.3	BDL	1.3	BDL	20	BDL	Negative	Negative
Deep spring	BWR-48	BDL	7.35	740	407	80	29	320	300	46	29	0.45	BDL	0.7	BDL	15	BDL	Negative	Negative
Elim	BWR-49	BDL	7.05	272	150	20	10	90	80	31	20	0.14	BDL	0.2	BDL	11	BDL	Negative	Negative
Bio Crystal	BWR-50	BDL	7.90	427	235	40	19	180	140	32	17	0.2	BDL	0.8	BDL	21	BDL	Negative	Negative
Aqua	BWR-51	BDL	7.12	356	196	40	10	140	90	24	16	0.4	BDL	0.8	BDL	50	3	Negative	Negative
Pure Next	BWR-52	BDL	7.38	384	211	28	12	120	60	62	32	0.23	BDL	0.0	BDL	41	0.9	Negative	Negative
Al-Safa	BWR-53	BDL	6.53	352	194	20	12	100	60	52	30	0.17	BDL	2.5	BDL	37	0.2	Negative	Negative
Falah	BWR-54	BDL	7.10	345	190	20	12	100	100	36	33	0.7	BDL	3.8	BDL	25	0.9	Negative	Negative
Jalandhar	BWR-55	BDL	7.21	394	217	20	17	120	70	72	34	BDL	BDL	0.7	BDL	26	0.3	Negative	Negative
Aqua crystal	BWR-56	BDL	7.12	450	248	40	12	150	100	64	36	0.41	BDL	3.6	BDL	42	0.6	Negative	Negative
Sky blue	BWR-57	BDL	6.75	379	208	24	17	130	100	24	24	0.53	BDL	1.6	0.2	52	2	Negative	Negative
Dasani	BWR-58	BDL	6.84	263	145	0	19	80	40	20	20	0.22	BDL	0.4	0.6	55	BDL	Negative	Negative
Muree Sparkletts	BWR-59	BDL	7.47	355	195	28	15	130	150	16	22	0.08	BDL	0.9	BDL	6	0.6	Negative	Negative
Nestle	BWR-60	BDL	7.40	465	256	40	17	170	100	75	27	BDL	BDL	0.3	BDL	25	0.7	Negative	Negative
Aqua Fina	BWR-61	BDL	7.12	223	123	0	19	80	50	22	14	0.02	BDL	1.0	BDL	30	0.3	Negative	Negative
Panee	BWR-62	BDL	6.50	342	188	24	16	125	100	24	20	0.1	BDL	1.4	BDL	39	0.4	Negative	Negative
Ever Best	BWR-63	BDL	6.65	318	175	20	15	110	50	40	22	BDL	BDL	0.8	BDL	54	0.4	Negative	Negative
Good water	BWR-64	BDL	6.96	356	196	32	5	100	55	60	34	BDL	BDL	0.0	BDL	30	0.2	Negative	Negative
Doce	BWR-65	BDL	6.70	345	190	36	5	110	35	72	28	0.12	BDL	0.3	BDL	31	0.8	Negative	Negative
Glacial	BWR-66	BDL	6.52	307	169	40	10	140	50	60	8	0.42	BDL	0.8	BDL	20	BDL	Negative	Negative

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	Fe	K	NO ₃	SO ₄	As	* Microbiological Contaminants	
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	0.3	10	10	250	10	Total Coli forms 0/100ml	E-Coli 0/100ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	5	2	1	0.03	0.03	0.2	0.06	0.4	0.1	-	-
Amfahh	BWR-67	BDL	7.07	322	177	36	0	90	75	44	32	0.39	BDL	0.5	BDL	24	1	Negative	Negative
Klinz	BWR-68	BDL	7.10	441	243	52	10	170	50	92	16	0.3	BDL	0.3	BDL	30	BDL	Negative	Negative
De-Manzi	BWR-69	BDL	6.77	259	142	40	0	100	40	42	16	0.23	BDL	0.2	BDL	35	0.8	Negative	Negative
Rahat	BWR-70	BDL	6.72	374	206	40	5	120	110	40	32	0.64	BDL	0.0	BDL	25	0.9	Negative	Negative
Jami	BWR-71	BDL	6.88	372	205	20	10	90	100	36	44	0.2	BDL	0.3	BDL	33	0.5	Negative	Negative
Cristalene	BWR-72	BDL	6.70	342	188	44	15	170	65	60	0	0.32	BDL	0.0	BDL	19	0.2	Negative	Negative
Zams	BWR-73	BDL	6.61	292	161	36	7	120	60	42	14	0.2	BDL	0.2	BDL	30	BDL	Negative	Negative
Aqua one	BWR-74	BDL	7.37	345	190	32	12	130	60	65	22	0.39	BDL	0.3	BDL	21	0.2	Negative	Negative
Aqua super life	BWR-75	BDL	6.60	330	182	48	7	150	55	50	10	0.53	BDL	0.4	BDL	41	2	6	Negative
Wah water	BWR-76	BDL	7.24	417	229	32	17	150	90	65	25	0.34	BDL	0.4	0.2	25	0.4	Negative	Negative
Top up	BWR-77	BDL	7.35	507	279	60	12	200	110	72	25	0.54	BDL	1.6	BDL	34	0.6	Negative	Negative
NEBRASKA	BWR-78	BDL	7.40	412	227	40	17	170	80	68	15	0.7	BDL	0.2	BDL	29	0.5	Negative	Negative
SHIRAZ	BWR-79	BDL	7.08	425	234	48	10	160	90	62	21	0.36	BDL	0.2	1.1	32	0.3	6	Negative
Aquatic fresh	BWR-80	BDL	7.40	660	363	60	32	280	190	65	21	0.49	BDL	2.1	BDL	45	BDL	Negative	Negative
Aqua splash	BWR-81	BDL	7.38	387	213	40	07	130	60	75	26	0.40	BDL	0.6	BDL	18	0.4	14	Negative
MARINA	BWR-82	BDL	7.35	502	276	48	17	220	200	20	16	0.22	BDL	1.5	0.3	26	0.5	8	Negative
One life	BWR-83	BDL	7.20	388	213	40	12	150	70	70	21	0.49	BDL	0.8	BDL	28	BDL	Negative	Negative
AB-E-Khyber	BWR-84	BDL	7.01	484	266	60	15	210	70	104	16	BDL	BDL	0.7	BDL	31	0.3	Negative	Negative
Natural water	BWR-85	BDL	7.23	348	191	40	05	120	80	55	24	0.25	BDL	0.3	BDL	15	0.6	Negative	Negative