



# QUARTERLY REPORT BOTTLED WATER QUALITY

(July-September, 2017)



**PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES**

Ministry of Science & Technology

Khyban-e-johar, H-8/1, Islamabad.

[www.pcrwr.gov.pk](http://www.pcrwr.gov.pk)

**July-September, 2017**



## 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 July-September, 2017 following is the brief overview of the findings.

### Quarterly Monitoring of Bottled/Mineral Water (July-September, 2017)

Item	No.	% age
Total No. of Brands Collected	104	-
Overall Safe Brands	95	91
Overall Unsafe Brands	09	09
Chemically Safe Brands	100	96
Chemically Unsafe Brands	04	04
Microbiologically Safe Brands	99	95
Microbiologically Unsafe Brands	05	05

Name of Targeted Cities	Islamabad, Rawalpindi, Sialkot, Peshawar, Multan, Lahore, Bahawalpur, Tandojam, Quetta, Karachi, Muzaffarabad.	
<b>Chemically Unsafe Brands</b>	<b>Brand Name</b>	<b>Manufacturer(s)</b>
	<b>Clean Plus</b>	Bottled By: Clean Food (Pvt) Ltd. 46-J, Gulberg III, Lahore-Pakistan. <a href="http://www.cleanplus.com.pk">www.cleanplus.com.pk</a>
	<b>NICE</b>	Product By: Nice Mineral Water Civic Center Moon Market, Gulshan-e-Ravi, Lahore.
	<b>Blue Ice</b>	2-B, XX Block, Khayaban-e-Iqbal Phase III, D.H.A Lahore Cantt.
<b>Microbiologically Unsafe Brands</b>	<b>Pacific Pure</b>	Bottled by: Pacific Water Engineer G.T Road Lahore Web:Pacificwaterengineers.com 042-38859992
	<b>Rise Water</b>	Pure Foods Sialkot 3-KM Kingra Road Sialkot. 052-4602580
	<b>Al-Shalal</b>	Seokay, 14-KM Sialkot, Aimanabad Road, Sialkot-Pakistan.
	<b>Al-Safia</b>	Shop No.01 Al-Safia, Residency, Deeplai Colony, Hyderabad
	<b>GEM Water</b>	Near Habib P.S Sehwan Road Jamshoro
	<b>Do Aab Water</b>	A product of: Raza Multination, Karachi.



## 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

<b>No. of Brands Collected</b>	104	
<b>No. of Cities Targeted</b>	11 (Islamabad, Rawalpindi, Sialkot, Peshawar, Multan, Lahore, Quetta, Bahawalpur, Tando Jam, Karachi, Muzaffarabad)	
<b>Composition of Sampling Team</b>	One Research Officer and Two Laboratory Assistants	
<b>Sampling Procedure</b>	Samples of 104 commercially available brands of mineral/bottled water were collected from local market of 11 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 July-September, 2017. 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.	
<b>Transparency</b>	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
Isberg	BWO-01	Sialkot	10/08/2017		0.6 Liter	Collected from manufacturing point	Premier Water Refining Company, Dhabola, Roras Road, Sialkot info@pwrc.com.pk
ECO	BWO-02	Sialkot	11/08/2017	-	0.6 Liter	Collected from manufacturing point	Product of J&J Foods & Beverages: Roras Road Naul Chowk, Sialkot Pakistan www.jjfoods.bev.com
Al-Haider	BWO-03	Sialkot	11/08/2017	03/2018	0.5 Liter	Nana Muna Pan Shop Circular Road Islamabad Chowk Sialkot	Al-Haider Pure, A Purified Water with essential Minerals Gulshan e Iqbal Park China Chowk Sialkot
Nestor	BWO-04	Sialkot	11/08/2017	-	0.5 Liter	Sultani Pan Shop Sialkot	A Product by Nestor Traders Cobara Sialkot-Pakistan. 0305-6102030
Rise Water	BWO-05	Sialkot	10/08/2017	-	0.6 Liter	Collected from manufacturing point	Pure Foods Sialkot 3-KM Kingra Road Sialkot. 052-4602580
Athar	BWO-06	Sialkot	10/08/2017	07/2018	0.5 Liter	Corolla Agency Abbot Road Sialkot	Manufactured By Ajva Rice Mill Pakistan Haji Pura Road Sialkot E-mail: Ajva Rice@gmail.com.
Bake Master	BWO-07	Sialkot	11/08/2017	08/2018	0.6 Liter	Bake Master Bakery Shahab Pura Road Sialkot	Gulshan Iqbal Park, China Chowk, Sialkot-Pakistan.
Vina	BWO-08	Sialkot	10/08/2017	07/2018	0.6 Liter	Collected from manufacturing point	Al-Sultan Beverages industries: Chaprar Road Gul Bahar Kalan Sialkot. 052-4354130
ICE Well	BWO-09	Sialkot	11/08/2017	-	0.5 Liter	Yaseem Pan Shop Haji Pura Road Sialkot	Quaint Beverages Industries Baghwal Awan P.o Khas Sialkot
Al-Fajar	BWO-10	Sialkot	11/08/2017	-	0.6 Liter	Lucky Pan Shop Defance Road Sialkot	Head Office:Opp.Govt.Degree College(Boys) Sialkot Road,Daska
Al-Shalal	BWO-11	Sialkot	10/08/2017	05/2018	0.5 Liter	Collected from manufacturing point	Seokay, 14-KM Sialkot, Aimanabad Road, Sialkot-Pakistan.
Glint Aqua	BWO-12	Multan	19/08/2017	04/2018	0.6 Liter	Collected from manufacturing point	A Product of Bio Care International 49-U,St#47,Near Baqirabad Massjid U-Block New Multan
Alfalah	BWO-13	Multan	20/08/2017	08/2018	0.6 Liter	Hasan Drink Corner Sher Shah Road Multan	Western Fort Commercial Area, Qasim Bela, Multan Cantt. <a href="mailto:wateralfalah@gmail.com">wateralfalah@gmail.com</a>
Zam	BWO-14	Multan	19/08/2017	02/2018	0.6 Liter	Sabzwari Town Near Coca-Cola factory Vehari Road Multan	Bottled By: New MHN Drinks & Foods Makers (Pvt) Ltd. 129/130 Sabzwari Town, Multan E-mail: mhn drinks@gmail.com
SN Pure Drinking Water	BWO-15	Multan	21/08/2017	08/2018	0.6 Liter	Chah Muradwala Near Main Nawaz Shreef University Multan	A Product Of S.N Food &Beverages Multan Pakistan.
Purific	BWO-16	Multan	21/08/2017	08/2018	0.5 Liter	Purific Water,126, Sabzazar Colony, Multan	S.S Beverages: Head Office 12,Fazal Road,Multan.



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Aqua Care	BWO-17	Multan	20/08/2017	08/2018	0.6 Liter	Super Store Wilayat abad, Multan.	Aqua Care Drinking Water D.G. Khan, Pakistan 0331-7402128
New Deep	BWO-18	Multan	19/08/2017	01/2018	0.5 Liter	Collected from manufacturing point	Bottled by: S.B Food & Beverages Zakriya Town Bosan Road Multan
Wah Water	BWO-19	Peshawar	13/09/2017	08/2018	0.6 Liter	Collected from manufacturing point	RG Enterprises: Plot#141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com
NEBRASAKA	BWO-20	Peshawar	13/09/2017	11/2018	0.6 Liter	Collected from manufacturing point	Bottled at Dew Point Healthcare Water Purification and Processing Facility:12-C Industrial Estate, Hayatabad, Peshawar.
Aqua Splash	BWO-21	Peshawar	13/09/2017	08/2018	0.6 Liter	Collected from manufacturing point	Euro International: 192-A Industrial Estate, Hayatabad, Peshawar.
Aquatic Fresh	BWO-22	Peshawar	13/09/2017	09/2018	0.6 Liter	Collected from manufacturing point	Royal Food Industries: Plot#1-C, Industrial Estate Hayatabad, Peshawar
Top Up	BWO-23	Peshawar	13/09/2017	05/2018	0.6 Liter	Collected from manufacturing point	Top Food Industry:Plot#C-3,Industrial Estate Hayatabad Peshawar
Natural Aqwah	BWO-24	Peshawar	13/09/2017	09/2018	0.6 Liter	Collected from manufacturing point	RG Enterprises: Plot # 141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com
One Life	BWO-25	Peshawar	13/09/2017	09/2018	0.6 Liter	Collected from manufacturing point	107-A,Hayatabad Small Industrial Estate, Peshawar
Nobel	BWO-26	TandoJam	09/09/2017	-	0.6 Liter	Collected from manufacturing point	Pak National Company, Amaan Colony, Hyderabad
Al-Safia	BWO-27	TandoJam	09/09/2017	-	0.6 Liter	Collected from manufacturing point	Shop No.01 Al-Safia, Residency, Deeplai Colony, Hyderabad
AFRA	BWO-28	TandoJam	09/09/2017	-	0.6 Liter	Collected from manufacturing point	Pak National Company, Amaan Colony, Hyderabad
Crystal Spring	BWO-29	TandoJam	09/09/2017	-	0.6 Liter	Collected from manufacturing point	Plot#28 Phase-II, Qasimabad, Hyderabad www.crystalspringspk
GEM Water	BWO-30	TandoJam	09/09/2017	-	0.6 Liter	Collected from manufacturing point	Near Habib P.S Sehwan Road Jamshoro
Pearl	BWO-31	TandoJam	09/09/2017	08/2018	0.6 Liter	Collected from manufacturing point	S.Q.B .S Enterprises: Address:144/6.8 km,Near Toll Plaza Super Highway Jamshoro
Nestle	BWO-32	Quetta	15/09/2017	02/2019	1.5 Liter	Khyber Sweets&bakers,Super Store,Shahbaz, Town Quetta	Nestle Pakistan Limited 308-Upper Mall, Lahore
JEL	BWO-33	Quetta	15/09/2017	12/2017	1.5 Liter	Agha Khalij Bakery Brewery Road,Golimar Chowk Quetta	Bottle By: MEGA FINA Industries: Plot No.A-92, Malir Industrial Area, Malir Karachi
Aqua Filter King	BWO-34	Quetta	16/09/2017	12/2018	1.5 Liter	New Samad Medical Store Opp.Civil Casualty M.A Jinnah Road, Quetta	0333-7161804



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Conway	BWO-35	Quetta	16/09/2017	04/2018	1.5 Liter	S.Pharmacy Surgical Store Jinnah Road Quetta	Swiss Foods International B-31,S.I.T.E Sukkur <a href="mailto:swissfoodsinternational@yahoo.com">swissfoodsinternational@yahoo.com</a>
Aqua Hygienic	BWO-36	Quetta	15/09/2017	02/2018	1.5 Liter	Agha Medical Store Shahbaz Town Sumangali Road Queeta Cantt.	Marketed By Zauhras Plot#2,Street#12,Faisal Town Brewery Road Quetta
Sav Life	BWO-37	Quetta	16/09/2017	-	1.5 Liter	Shahid General Store, Quetta	Sav Life Enterprises: Village Ahmed Main Soomro S.I.T.E Area JCD.
Cool Aqua Cool	BWO-38	Quetta	16/09/2017	01/2018	1.5 Liter	Shahid General Store, Quetta	J&B Group Quetta <a href="http://www.coolaquacool.com">www.coolaquacool.com</a> 081-2453316
Aab e Dubai	BWO-39	Quetta	15/09/2017	05/2018	1.5 Liter	Khyber Sweets&bakers,Super Store,Shahbaz, Town Quetta	Produced By:Alpina Pure Drinking Water L.L.C United Arab Emirates <a href="http://www.aabedubaiuae.com">www.aabedubaiuae.com</a>
Kinley	BWO-40	Quetta	16/09/2017	03/2018	1.5 Liter	S.Pharmacy Surgical Store Jinnah Road Quetta	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-B Gulberg III, Lahore Pakistan.
Tahoor	BWO-41	Quetta	16/09/2017	12/2018	1.5 Liter	Shahid General Store, Quetta	C-12,Small Industrial Estate S.I.T.E Area Golimar Sukkur
New Nation	BWO-42	Lahore	14/09/2017	08/2018	0.6 Liter	Collected from manufacturing point	Bottled By:Ramez Enterprise 9-km, G.T Road, Rachna Town, Shahdra Lahore.
Cool	BWO-43	Lahore	12/09/2017	06/2018	0.6 Liter	Noshahi Pan Shop Mohlan wala Chowk Lahore.	M.T Mineral Water Co .599-Air Line Society Khayaban-e-Jinnah Road, Lahore
Aqua Dew	BWO-44	Lahore	12/09/2017	07/2018	0.6 Liter	Ali Pan Shop,Yateem Khana Chowk Lahore	Rehan Khan Food 90-E, SABZAZAR, Lahore.
Doce	BWO-45	Lahore	13/09/2017	08/2018	0.6 Liter	Doce Bakery, Shoukat Khanam Lahore.	48-M, Quaid-e-Azam Industrial State, Kot Lakhpat, Lahore www.doce.pk 042-35555555
Clean Plus	BWO-46	Lahore	12/09/2017	08/2018	0.6 Liter	Noshahi Pan Shop Mohlan wala Chowk Lahore.	Bottled By: Clean Food (Pvt) Ltd. 46-J, Gulberg III, Lahore-Pakistan. <a href="http://www.cleanplus.com.pk">www.cleanplus.com.pk</a>
Zim Water	BWO-47	Lahore	14/09/2017	08/2018	0.6 Liter	Collected from manufacturing point	A Proud Production Of Zimindar Group Of Industries New Punjab Flour Mills G.T Road,Ferozwala,Shahdra.
Gourmet	BWO-48	Lahore	13/09/2017	09/2018	0.6 Liter	Gourmet Bakery air line Society Lahore	Gourmet Foods: Gate # 1, Plot # 1-5, Sunder Industrial Estate, Raiwind Sunder Road, Lahore, Pakistan.
Aqua Lite Water	BWO-49	Lahore	13/09/2017	07/2018	0.6 Liter	Happy Pan Shop Shalamar Chowk Lahore.	Aqua Lite Water Services, Pakistan Housing Society Ferozpur,Road Lahore
Water Fresh	BWO-50	Lahore	14/09/2017	06/2018	0.6 Liter	Butt Sweets & Bakers Shalimar link Road Lahore.	Manufactured by: Butt Sweets & Bakers <a href="http://www.buttsweets.com">www.buttsweets.com</a>
FINO	BWO-51	Lahore	12/09/2017	12/2018	1.5 Liter	Bukhari Sweets & Bakers Shahpur Lahore.	Mansha Enterprises: 549-E, New Commercial Market EME Sector DHA Multan Road, Lahore.



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
NICE	BWO-52	Lahore	13/09/2017	05/2018	1.5 Liter	Khushi Sons Pan Shop, Yateem Khana Chowk Lahore	Product By: Nice Mineral Water Civic Center Moon Market, Gulshan-e-Ravi, Lahore.
Glacial	BWO-53	Lahore	13/09/2017	07/2018	1.5 Liter	Collected from manufacturing point	358-E, Johar Town, Lahore. 03424522425
Klinz Pure Water	BWO-54	Lahore	13/09/2017	08/2018	1.5 Liter	Collected from manufacturing point	Bottled By: Klinz Food (Pvt) Ltd Head Office: 6M, 1, H Block, Gulberg II, Lahore.
Cristalene	BWO-55	Lahore	14/09/2017	06/2018	1.5 Liter	Collected from manufacturing point	A Product of Cristaline Pak Bottlers Head Office: 574-1-C/1, Township, Lahore
Jami Water	BWO-56	Lahore	13/09/2017	02/2018	1.5 Liter	Collected from manufacturing point	A Product of Jami Water Services: 356-E, PIA Housing Society, PIA Road, Lahore. 042-35446800
Aqua Safe	BWO-57	Lahore	13/09/2017	07/2018	1.5 Liter	Collected from manufacturing point	Bottled By: Aqua Safe Pakistan (Pvt) Ltd. 96-McLeod Road, Lahore.
FINE Life	BWO-58	Lahore	14/09/2017	09/2018	1.5 Liter	Collected from manufacturing point	Bottled & Sourced at: Energique Beverages (Pvt) Ltd. Plot No. 35 A, Small Industrial Estate, Kot Lakhpat, Lahore.
ABSOLUTE Life	BWO-59	Lahore	13/09/2017	05/2018	1.5 Liter	Collected from manufacturing point	Main Kamaha Road, Off Bedian Road, Adjacent Gate 2, Askari 11, Lahore.
Classic	BWO-60	Lahore	13/09/2017	08/2018	1.5 Liter	Collected from manufacturing point	Bottled By: Classic Plus: 35-N, Industrial Area Gulberg II, Lahore.
Aqua Gen	BWO-61	Lahore	12/09/2017	08/2018	1.5 Liter	Fiaz Sons Pharma Plus Asif Block Iqbal Town Lahore.	A Product of AQUA Gen Services Water Treatment Company. 36-Civic Centre Liaquat Chowk Sabzazar Scheme Lahore www.aquagen.net.pk
Aqvana	BWO-62	Lahore	12/09/2017	-	1.5 Liter	Kashif Pan Shop Jiwana Garden Town Lahore	Alvitalis Food & Beverages F3-Shabnam Center, Lahore
Blue Ice	BWO-63	Lahore	12/09/2017	08/2018	1.5 Liter	Bismillah Pan Shop, Mohlan wala Chowk Lahore.	2-B, XX Block, Khayaban-e-Iqbal Phase III, D.H.A Lahore Cantt.
SUBLIME Water	BWO-64	Lahore	14/09/2017	08/2018	1.5 Liter	Collected from manufacturing point	Bottled By: Sublime SR Products (Pvt) Ltd. Near SA Garden Phase-II, Near Usman Rice, Kala Shah Kaku.
Blessings Drops	BWO-65	Lahore	14/09/2017	08/2018	1.5 Liter	Collected from manufacturing point	A Product of Al-Muarif Pak Products 11/A Tippu Park Attari Saroba 18 km Ferozepur Road, Lahore.
DEJA Blue	BWO-66	Lahore	14/09/2017	08/2018	1.5 Liter	Collected from manufacturing point	Tanzim Hussain (Pvt) Ltd. 12-A, Mason Road, Lahore 0092426375999
Pacific Pure	BWO-67	Lahore	12/09/2017	08/2018	1.5 Liter	Foji Karyana Store Chung Lahore.	Bottled by: Pacific Water Engineer G.T Road Lahore www.pacificwaterengineers.com 042-38859992
Aqua PRO	BWO-68	Lahore	12/09/2017	08/2018	1.5 Liter	Bismillah Pan Shop, Mohlan wala Chowk Lahore.	Processed & Packed By: AQUA PRO Drinking Water. 0300-4634370
Liquid Ice Arctic	BWO-69	Lahore	12/09/2017	08/2018	1.5 Liter	Saleem General Store Al-noor Hospital, Multan Road Lahore.	Purified & Packed By: Aura Enterprises, 25-Km, Multan Road, Lahore.



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Aqua Seena	BWO-70	Lahore	14/09/2017	08/2018	1.5 Liter	Collected from manufacturing point	Five Star Food Industries:330-D,Block Johar Town Lahore, Pakistan fivestarfoodsind@gmail.com
Nice Natural	BWO-71	Lahore	13/09/2017	05/2018	1.5 Liter	Happy Pan Shop Shalamar Chowk Lahore.	Bottled By: AS Mineral Water Pakistan Ltd. Nice Natural Water Lahore-Pakistan
ECO FINA	BWO-72	Bahawalpur	14/09/2017	12/2017	0.6 Liter	New Awan Medical Store M.T.C Bahawalpur	Hydro-7 Purification Multan Road Bahawalpur 0300-8846332
Pine'o	BWO-73	Bahawalpur	14/09/2017	08/2018	0.6 Liter	Usman Pharmacy, M.T.C Bahawalpur	Under Licence: Gysing Pak DDR-1, PSIE Bahawalpur. gysing@live.com
Panee	BWO-74	Bahawalpur	14/09/2017	08/2018	0.6 Liter	Life Medical Store,Opp.BVH Bahawalpur	SUALEH SONS FOODS Room#2/32, Al-Abid Chamber Shahrah-e-Liaquat, Karachi. Factory:1/2 KM, Bahawalpur Road Ahmedpur East
Blu Water	BWO-75	Bahawalpur	14/09/2017	08/2018	0.6 Liter	Abdullah General Store Opp. BVH Bahawalpur	Al-Hilal Industries(Pvt)Ltd Sultan Nagar Vehari Road, Multan
Aquafina	BWO-76	Bahawalpur	14/09/2017	08/2018	0.5 Liter	Huzafa General Store, Bahawalpur	Purified and Filled by Riaz Brothers (Pvt) Ltd, 32-N, Gulberg-II, Lahore
Nectar	BWO-77	Islamabad	26/09/2017	09/2018	0.5 Liter	Collected from manufacturing point	Islamabad Express, Near Paradise Complex, Kurri Road, Islamabad
Hydr8	BWO-78	Islamabad	26/09/2017	09/2018	0.5 Liter	Collected from manufacturing point	Plot#553,Street#20,VIP Ghauri Town, Islamabad Hydr8@live.com
MEHR	BWO-79	Rawalpindi	26/09/2017	12/2018	0.5 Liter	Collected from manufacturing point	Bottled By: Pir MEHR Ali Shah Arid Agriculture University Rawalpindi
Bio Crystal	BWO-80	Islamabad	26/09/2017	08/2018	0.5 Liter	Collected from manufacturing point	692-A, Main D Road Bahria Town Phase III, Islamabad.
Verbena	BWO-81	Rawalpindi	26/09/2017	-	0.5 Liter	Collected from manufacturing point	Vizor Pharma (Pvt)Ltd,82,Lalazar Estate Rawalpindi
Limpid Fresh	BWO-82	Islamabad	26/09/2017	09/2018	1.5 Liter	Collected from manufacturing point	Sarfaraz Town, Tarlai Islamabad limpidfresh@gmail.com 0310-7888887
Ripple	BWO-83	Rawalpindi	26/09/2017	12/2017	1.5 Liter	Collected from manufacturing point	Main Mirpur Road,Al-Noor Colony, Sector No.3,Corner of St.No.6,Behind Fazaia Colony Rawalpindi
Atlantis	BWO-84	Rawalpindi	26/09/2017	10/2018	1.5 Liter	Collected from manufacturing point	Plot#615 PO, Fazia Rawalpindi 051 111-777-200
Deep Spring	BWO-85	Islamabad	26/09/2017	-	1.5 Liter	Collected from manufacturing point	A Product of BNK (Pvt)Ltd. Plot No.226,St#7, Sector I-9/2, Islamabad
Maple Dew	BWO-86	Islamabad	26/09/2017	-	1.5 Liter	Collected from manufacturing point	Maple Dew Purification Plant Sohan Islamabad
Fresh Life	BWO-87	Islamabad	26/09/2017	06/2018	1.5 Liter	Collected from manufacturing point	T&S Enterprises office No.1 Main Hall Pindori Road ,Main Khana Dak, Islamabad freshlife786@gmail.com
Seven Streams	BWO-88	Rawalpindi	26/09/2017	01/2018	1.5 Liter	Collected from manufacturing point	CB, 50-A, Fahad Bin Zafar Road,Westridge III,Rawalpindi.
Vey	BWO-89	Karachi	13/10/2017	10/2018	0.6 Liter	Collected from manufacturing point	Fluid Technology Int'l(Pvt)Ltd.424,Bhayani Center Block-N.North Nazimabad Karachi





Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
NEO	BWO-90	Karachi	13/10/2017	09/2018	0.6 Liter	Muhammadi Stationary Model Colony Karachi	Address: Suite 115, Glass Tower, 3 Talwar Clifton, Karachi
Crystal Hashmi	BWO-91	Karachi	13/10/2017	-	0.6 Liter	Nagori Milk Shop main Saudabad Karachi	A Product Of Hashmi Enterprises. 0333-3148018 0321-2029922
Safe Way	BWO-92	Karachi	13/10/2017	12/2018	0.6 Liter	Iqbal Store, RCD Ground, Saudabad, Karachi	A Product Of Safe Way Foods Water & Beverages. M.V Industrial Area, Gadap Town, Karachi
Safe Life	BWO-93	Karachi	13/10/2017		0.6 Liter	Frseh Bakery Model Colony Karachi	Head Office: Plot#411, M. Colony, Garden West, Karachi
Pure I8	BWO-94	Karachi	13/10/2017	12/2018	0.6 Liter	Irfan Super Store Qalandarabad Karachi	Quality Drinking Water a Product of Bawany Group.
Mag Life	BWO-95	Karachi	13/10/2017	-	0.6 Liter	G.P Medical Store, Qalandarabad, Karachi	Address: S-1, Ground Floor, West Land Trade Centre, Block 7-b, Shaheed-e-Millat Road, K.C.H.S Karachi
Aab-e-Noor	BWO-96	Karachi	13/10/2017	-	0.6 Liter	Rashid Khan Ice Depo Qalandarabad, Karachi	A Product By: DP Foods Company. <a href="http://www.dpfoods.com.pk">www.dpfoods.com.pk</a>
Al-Sahar	BWO-97	Karachi	13/10/2017	-	0.6 Liter	Ayesha Bakery, Qalandarabad, Karachi	Al-SAFRAT INERNATIONAL: Plot No. C-68, SITE Super Highway Industrial Area Karachi
Do Aab Water	BWO-98	Karachi	13/10/2017	-	0.6 Liter	Zaiqa General Store, Qalandarabad, Karachi	A product of: RAZA MULTINATION, Karachi.
Droplet	BWO-99	Karachi	13/10/2017	-	0.6 Liter	Medical Store & Poly Clinic Opposite NED University Karachi	Makkah International: Block-1-A, Gulistan-e-Johar, Karachi-Pakistan.
ABS Minerals	BWO-100	Karachi	13/10/2017	-	0.6 Liter	Super Kakar Crockery Gift Centre, Safora Chorngi Karachi	Bottled by: ABS Enterprises B-16, A, E.C.H.S Block-8, Gulistan-e-Johar, Karachi.
Al-ATASH	BWO-101	Karachi	13/10/2017	12/2018	0.6 Liter	Kamran General Store, Al-Mustafa Hospital Saudabad, Karachi	A Product of HPE, Plot No. 60, Sec 51, Super Highway, Karachi.
MANAHIL	BWO-102	Karachi	13/10/2017	-	0.6 Liter	Bilal Cold Drink Corner Bakery Khokhrapar#02, Karachi	Bottled By: DUA Enterprises Plot#283-A, Opp. Block#40, Near KMC Line, Tarachand Road, Kemari, Karachi
Aqua King	BWO-103	Karachi	13/10/2017	-	1.5 Liter	Wari Shah General Store Pak Kourar Town, Karachi	A Product of HPE, Plot No. 60, Sec 51, Super Highway, Karachi.
YAS	BWO-104	Muzaffarabad	13-10-2017	06/2018	0.5 Liter	Collected from manufacturing point	Kashmir Natural Resources (Pvt) Ltd., Muzaffarabad yas@neelum.pk



## WATER QUALITY PARAMETERS AND METHODS USED FOR ANALYSIS

Sr. #	PARAMETERS	ANALYTICAL METHOD
1.	Alkalinity (mg/l as CaCO <sub>3</sub> )	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	( $\mu$ 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

#### Arsenic: Safe Limit : 10 parts per billion (ppb)

Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	Clean Plus	BWO-46	Lahore	ppb	15
2.	NICE	BWO-52	Lahore	ppb	27
3.	Blue Ice	BWO-63	Lahore	ppb	14
4.	Pacific Pure	BWO-67	Lahore	ppb	21

#### Sodium: Safe Limit : 50 parts per million (ppm)

Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	NICE	BWO-52	Lahore	ppm	130
2.	Pacific Pure	BWO-67	Lahore	ppm	82

#### 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.	Rise Water	BWO-05	12	Nil
2.	Al-Shalal	BWO-11	16	Nil
3.	Al-Safia	BWO-27	18	Nil
4.	GEM Water	BWO-30	14	Nil
5.	Do Aab Water	BWO-98	20	Nil

### PCRWR TESTING: SAFE BRANDS

Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
1.	Isberg	BWO-01	Safe	Safe
2.	ECO	BWO-02	Safe	Safe
3.	Al-Haider	BWO-03	Safe	Safe
4.	Nestor	BWO-04	Safe	Safe
5.	Athar	BWO-06	Safe	Safe
6.	Bake Master	BWO-07	Safe	Safe
7.	Vina	BWO-08	Safe	Safe
8.	ICE Well	BWO-09	Safe	Safe
9.	Al-Fajar	BWO-10	Safe	Safe
10.	Glint Aqua	BWO-12	Safe	Safe
11.	A-Alfalah	BWO-13	Safe	Safe
12.	Zam	BWO-14	Safe	Safe
13.	SN Pure Drinking Water	BWO-15	Safe	Safe
14.	Purific	BWO-16	Safe	Safe
15.	Aqua Care	BWO-17	Safe	Safe
16.	New Deep	BWO-18	Safe	Safe
17.	Wah Water	BWO-19	Safe	Safe
18.	NEBRASAKA	BWO-20	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
19.	Aqua Splash	BWO-21	Safe	Safe
20.	Aquatic Fresh	BWO-22	Safe	Safe
21.	Top Up	BWO-23	Safe	Safe
22.	Natural Aqwah	BWO-24	Safe	Safe
23.	One Life	BWO-25	Safe	Safe
24.	Nobel	BWO-26	Safe	Safe
25.	AFRA	BWO-28	Safe	Safe
26.	Crystal Spring	BWO-29	Safe	Safe
27.	Pearl	BWO-31	Safe	Safe
28.	Nestle	BWO-32	Safe	Safe
29.	JEL	BWO-33	Safe	Safe
30.	Aqua Filter King	BWO-34	Safe	Safe
31.	Conway	BWO-35	Safe	Safe
32.	Aqua Hygienic	BWO-36	Safe	Safe
33.	Sav Life	BWO-37	Safe	Safe
34.	Cool Aqua Cool	BWO-38	Safe	Safe
35.	Aab e Dubai	BWO-39	Safe	Safe
36.	Kinley	BWO-40	Safe	Safe
37.	Tahoor	BWO-41	Safe	Safe
38.	New Nation	BWO-42	Safe	Safe
39.	Cool	BWO-43	Safe	Safe
40.	Aqua Dew	BWO-44	Safe	Safe
41.	Doce	BWO-45	Safe	Safe
42.	Zim Water	BWO-47	Safe	Safe
43.	Gourmet	BWO-48	Safe	Safe
44.	Aqua Lite Water	BWO-49	Safe	Safe
45.	Water Fresh	BWO-50	Safe	Safe
46.	FINO	BWO-51	Safe	Safe
47.	Glacial	BWO-53	Safe	Safe
48.	Klinz Pure Water	BWO-54	Safe	Safe
49.	Cristalene	BWO-55	Safe	Safe
50.	Jami Water	BWO-56	Safe	Safe
51.	Aqua Safe	BWO-57	Safe	Safe
52.	FINE Life	BWO-58	Safe	Safe
53.	ABSOLUTE Life	BWO-59	Safe	Safe
54.	Classic	BWO-60	Safe	Safe
55.	Aqua Gen	BWO-61	Safe	Safe
56.	Aqvana	BWO-62	Safe	Safe
57.	SUBLIME Water	BWO-64	Safe	Safe
58.	Blessings Drops	BWO-65	Safe	Safe
59.	DEJA Blue	BWO-66	Safe	Safe
60.	Aqua PRO	BWO-68	Safe	Safe
61.	Liquid Ice Arctic	BWO-69	Safe	Safe
62.	Aqua Seena	BWO-70	Safe	Safe
63.	Nice Natural	BWO-71	Safe	Safe
64.	ECO FINA	BWO-72	Safe	Safe
65.	Pine'o	BWO-73	Safe	Safe
66.	Panee	BWO-74	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
67.	Blu Water	BWO-75	Safe	Safe
68.	Aquafina	BWO-76	Safe	Safe
69.	Nectar	BWO-77	Safe	Safe
70.	Hydr8	BWO-78	Safe	Safe
71.	MEHR	BWO-79	Safe	Safe
72.	Bio Crystal	BWO-80	Safe	Safe
73.	Verbena	BWO-81	Safe	Safe
74.	Limpid Fresh	BWO-82	Safe	Safe
75.	Ripple	BWO-83	Safe	Safe
76.	Atlantis	BWO-84	Safe	Safe
77.	Deep Spring	BWO-85	Safe	Safe
78.	Maple Dew	BWO-86	Safe	Safe
79.	Fresh Life	BWO-87	Safe	Safe
80.	Seven Streams	BWO-88	Safe	Safe
81.	Vey	BWO-89	Safe	Safe
82.	NEO	BWO-90	Safe	Safe
83.	Crystal Hashmi	BWO-91	Safe	Safe
84.	Safe Way	BWO-92	Safe	Safe
85.	Safe Life	BWO-93	Safe	Safe
86.	Pure I8	BWO-94	Safe	Safe
87.	Mag Life	BWO-95	Safe	Safe
88.	Aab-e-Noor	BWO-96	Safe	Safe
89.	Al-Sahar	BWO-97	Safe	Safe
90.	Droplet	BWO-99	Safe	Safe
91.	ABS Minerals	BWO-100	Safe	Safe
92.	Al-ATASH	BWO-101	Safe	Safe
93.	MANAHIL	BWO-102	Safe	Safe
94.	Aqua King	BWO-103	Safe	Safe
95.	YAS	BWO-104	Safe	Safe

### PCRWR TESTING: UNSAFE BRANDS

Sr. No	Brand Name	Code	Address/Manufacturer	Quality (Safe/Unsafe)	
				Chemical	Microbiological
1.	Rise Water	BWO-05	Pure Foods Sialkot 3-KM Kingra Road Sialkot. 052-4602580	Safe	Unsafe
2.	Al-Shalal	BWO-11	Seokay, 14-KM Sialkot, Aimanabad Road, Sialkot-Pakistan.	Safe	Unsafe
3.	Al-Safia	BWO-27	Shop No.01 Al-Safia, Residency, Deeplai Colony, Hyderabad	Safe	Unsafe
4.	GEM Water	BWO-30	Near Habib P.S Sehwan Road Jamshoro	Safe	Unsafe
5.	Clean Plus	BWO-46	Bottled By: Clean Food (Pvt) Ltd. 46-J, Gulberg III, Lahore-Pakistan. <a href="http://www.cleanplus.com.pk">www.cleanplus.com.pk</a>	Unsafe	Safe
6.	NICE	BWO-52	Product By: Nice Mineral Water Civic Center Moon Market, Gulshan-e-Ravi, Lahore.	Unsafe	Safe



Sr. No	Brand Name	Code	Address/Manufacturer	Quality (Safe/Unsafe)	
				Chemical	Microbiological
7.	Blue Ice	BWO-63	2-B, XX Block, Khayaban-e-Iqbal Phase III, D.H.A Lahore Cantt.	Unsafe	Safe
8.	Pacific Pure	BWO-67	Bottled by: Pacific Water Engineer G.T Road Lahore Web:Pacificwaterengineers.com 042-38859992	Unsafe	Safe
9.	Do Aab Water	BWO-98	A product of: Raza Multination, Karachi.	Safe	Unsafe

### MARKET CONSISTENCY IN TWO NEIGHBORING QUARTERS

Sr. No	Consistent Brands	New Brands	Unavailable Brands
1.	Isberg	Athar	Definet
2.	ECO	Ice Well	Vital Happy Life
3.	Al-Haider	Al-Fajar	NN Water
4.	Nestol	Glint Aqua	Aquas Water
5.	Rise Water	SN Pure Drinking Water	Fresh Life(Peshawar)
6.	Bake Master	Purific	Aqua Stream
7.	Vina	Aqua Care	Sunley Pure
8.	Al-Shalal	Top Up	Hydra
9.	Al-Falah	One Life	Valley
10.	Zam	Nobel	Aqua RO7
11.	New Deep	Al-Safia	Ruwa
12.	Wah Water	AFRA	Pak Nation water
13.	NEBRASAKA	Aqua Filter King	New Premier
14.	Aqua Splash	Conway	Paak Pani
15.	Aquatic Fresh	Aqua Hygienic	Bling H2O
16.	Natural Aqwah	Safe Life	Murree Sparkletts
17.	GEM Water	Cool Aqua Cool	Natural Pure Water
18.	Nestle	Aab-e-Dubai	Royal Blue
19.	JEL	Tahoor	Sufi
20.	Kinley	New Nation	Kuality Water
21.	Doce	Cool	Orizon
22.	Gourmet	Aqua Dew	Mashmoom Aqua
23.	Jami Water	Clean Plus	Vividle
24.	Aqua Gen	Zim Water	SUJO
25.	Pine'o	Aqua Lite Water	Oslo
26.	Panee	FINO	Aqua Zam Zam
27.	Aquafina	NICE	Hoor Water
28.	Nectar	Glacial	Pure Aqua
29.	Hydr8	Klinz Pure Water	Evan
30.	MEHR	Cristalene	Smart Mineral Water
31.	Deep Spring	Aqua Safe	Culligan
32.	Vey	Fine Life	Livon
33.	Pure 18	ABBSSOLUTE Life	Al-Habib
34.	Al-Sahar	Classic	Aquench
35.	Do Aab Water	Aqvana	Riva
36.	Droplet	Blue Ice	Naafey Pure
37.	ABS Minerals	SUBLIME Water	Douro
38.	Water Fresh	Blessing Drops	
39.	Pearl	DEJA Blue	
40.	Crystal Spring	Pacific Pure	
41.		Aqua PRO	
42.		Liquid Ice Arctic	
43.		Aqua Seená	



44.		Nice Natural	
45.		ECO FINA	
46.		Blu water	
47.		Bio Crystal	
48.		Verbena	
49.		Limpid Fresh	
50.		Ripple	
51.		Atlantis	
52.		Maple Dew	
53.		Fresh Life	
54.		Seven Stream	
55.		NEO	
56.		Crystal Hashmi	
57.		Safe Way	
58.		Safe Life	
59.		Mag Life	
60.		Aab-e-Noor	
61.		Al-ATASH	
62.		MANAHIL	
63.		Aqua King	
64.		YAS	

### DISEASE POTENTIAL FROM CONTAMINATED BOTTLED WATER

Sr. No	Contaminant	Diseases Impacts
1.	<b>Bacteriological Contamination</b>	Cholera, Diarrhea, Dysentery, Hepatitis, Typhoid
2.	<b>Arsenic</b>	Cancer (lungs, bladder, skin, prostate, kidney, nose and liver), diabetes kidney diseases, hypertension, heart diseases, birth defects, black foot diseases.
3.	<b>Sodium</b>	Hypertension

### CONCLUSIONS

Sr. No	Item	Conclusion	
		No.	% age
1.	<b>Total No. of Brands Collected</b>	<b>104</b>	<b>-</b>
2.	<b>Overall Safe Brands</b>	<b>95</b>	<b>91</b>
3.	<b>No. of Overall Unsafe Brands</b>	<b>09</b>	<b>9</b>
4.	<b>No. of Chemically Safe Brands</b>	<b>100</b>	<b>96</b>
5.	<b>No. of Chemically Unsafe Brands</b>	<b>04</b>	<b>04</b>
6.	<b>No. of Microbiologically Safe Brands</b>	<b>99</b>	<b>95</b>
7.	<b>No. of Microbiologically Unsafe Brands</b>	<b>05</b>	<b>05</b>
8.	<b>No. of Consistent Brands in Market</b>	<b>40</b>	<b>38</b>
9.	<b>No. of Brands Disappeared from Market</b>	<b>37</b>	<b>35</b>
10.	<b>No. of New Brands</b>	<b>64</b>	<b>62</b>

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





**Chemical and Microbiological Quality of Bottled/Mineral Water Brands**

Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
																			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	0.03	0.2	0.06	0.4	0.1	-	-
Units	-	NTU		µS/cm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	MPN /100ml	MPN /100ml
<b>Isberg</b>	BWO-01	BDL	7.02	290	160	28	7	100	40	60	19	BDL	BDL	BDL	0.6	4.7	BDL	2.5	Nil	Nil
<b>ECO</b>	BWO-02	BDL	7.61	396	218	32	9	100	90	50	32	0.14	BDL	BDL	0.9	BDL	29	0.9	Nil	Nil
<b>Al-Haider</b>	BWO-03	BDL	7.71	261	148	20	12	100	120	10	20	0.13	BDL	BDL	0.7	BDL	10	2	Nil	Nil
<b>Nestor</b>	BWO-04	BDL	7.24	381	210	40	12	150	60	64	18	0.13	BDL	BDL	BDL	BDL	38	0.5	Nil	Nil
<b>Rise Water</b>	BWO-05	BDL	7.31	360	198	20	17	120	100	36	29	0.23	BDL	BDL	1	BDL	30	0.8	<b>12</b>	Nil
<b>Athar</b>	BWO-06	BDL	7.03	334	184	40	10	140	30	82	8	0.16	BDL	BDL	0.7	BDL	15	0.5	Nil	Nil
<b>Bake Master</b>	BWO-07	BDL	7.17	379	208	40	15	160	60	72	15	0.07	BDL	BDL	0.6	BDL	35	0.8	Nil	Nil
<b>Vina</b>	BWO-08	BDL	7.04	385	212	40	15	160	80	65	16	0.12	BDL	BDL	0.9	BDL	25	0.5	Nil	Nil
<b>ICE Well</b>	BWO-09	BDL	7.17	276	152	16	12	90	70	38	25	0.11	BDL	BDL	0.4	BDL	19	0.4	Nil	Nil
<b>Al-Fajar</b>	BWO-10	BDL	6.73	340	187	28	19	150	50	72	10	BDL	BDL	BDL	BDL	BDL	15	0.7	Nil	Nil
<b>Al-Shalal</b>	BWO-11	BDL	7.38	340	187	28	15	130	155	12	16	0.31	BDL	BDL	3.7	0.5	BDL	5	<b>16</b>	Nil
<b>Glint Aqua</b>	BWO-12	BDL	7.45	325	179	40	6	125	25	72	16	0.10	BDL	BDL	0.6	BDL	33	1	Nil	Nil
<b>A-Alfalah</b>	BWO-13	BDL	7.03	370	204	40	7	130	30	72	18	0.03	BDL	BDL	0.6	BDL	41	1	Nil	Nil
<b>Zam</b>	BWO-14	BDL	7.14	377	207	48	5	140	50	60	16	0.10	BDL	BDL	0.9	BDL	40	1	Nil	Nil

The highlighted results indicate the concentration level beyond the PSQCA Bottled Water Standards.

July-September, 2017

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	NGVS	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	0.03	0.2	0.06	0.4	0.1	-	-
SN Pure Drinking Water	BWO-15	BDL	7.25	360	198	40	5	120	40	60	21	BDL	BDL	BDL	0.3	BDL	37	7	Nil	Nil
Purific	BWO-16	BDL	7.16	360	198	36	12	130	40	64	13	0.18	BDL	BDL	0.5	BDL	37	1	Nil	Nil
Aqua Care	BWO-17	BDL	6.96	395	217	32	17	150	50	72	19	0.13	BDL	BDL	0.5	BDL	40	0.6	Nil	Nil
New Deep	BWO-18	BDL	6.86	369	203	40	9	136	50	65	18	0.12	BDL	BDL	0.4	BDL	31	8	Nil	Nil
Wah Water	BWO-19	BDL	7.01	429	236	40	15	160	80	76	25	0.04	BDL	BDL	0.6	BDL	26	0.3	Nil	Nil
NEBRASAKA	BWO-20	BDL	7.29	430	237	40	15	160	50	82	18	0.09	BDL	BDL	0.5	BDL	35	0.6	Nil	Nil
Aqua Splash	BWO-21	BDL	6.84	363	200	40	7	130	30	85	16	0.09	BDL	BDL	0.4	4.3	BDL	0.5	Nil	Nil
Aquatic Fresh	BWO-22	BDL	7.54	481	265	40	24	200	130	48	18	0.06	BDL	BDL	2.6	5.8	20	0.6	Nil	Nil
Top Up	BWO-23	BDL	7.63	360	198	32	19	160	100	48	12	0.23	BDL	BDL	2	BDL	15	0.6	Nil	Nil
Natural Aqwah	BWO-24	BDL	7.38	486	261	46	21	200	80	96	20	0.40	BDL	BDL	0.6	BDL	18	0.5	Nil	Nil
One Life	BWO-25	BDL	7.36	482	265	48	19	200	70	96	17	0.07	BDL	BDL	2.5	0.8	32	0.4	Nil	Nil
Nobel	BWO-26	BDL	7.51	427	235	36	24	190	50	96	14	0.11	BDL	BDL	0.3	BDL	28	0.4	Nil	Nil
Al-Safia	BWO-27	BDL	7.26	270	149	36	5	110	30	55	12	0.03	BDL	BDL	0.6	BDL	25	0.3	18	Nil
AFRA	BWO-28	BDL	7.39	425	234	46	18	190	70	86	14	0.07	BDL	BDL	0.6	BDL	21	0.4	Nil	Nil
GEM Spring	BWO-29	BDL	7.55	283	156	40	2	180	40	50	13	0.07	BDL	BDL	2.7	BDL	27	0.7	Nil	Nil
GEM Water	BWO-30	BDL	7.16	349	192	30	6	100	50	72	30	BDL	BDL	BDL	0.8	0.5	16	0.5	14	Nil
Pearl	BWO-31	BDL	7.32	353	194	32	17	150	40	72	10	0.18	BDL	BDL	4.5	BDL	32	0.5	Nil	Nil
Nestle	BWO-32	BDL	6.50	436	240	40	18	175	95	56	18	0.06	BDL	BDL	BDL	BDL	35	0.3	Nil	Nil
JEL	BWO-33	BDL	6.60	181	100	8	2	30	30	28	28	0.11	BDL	BDL	BDL	1.7	18	0.4	Nil	Nil

The highlighted results indicate the concentration level beyond the PSQCA Bottled Water Standards.

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PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	NGVS	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	0.03	0.2	0.06	0.4	0.1	-	-
Aqua Filter King	BWO-34	BDL	6.60	375	206	36	15	150	30	82	15	0.03	BDL	BDL	0.8	1.0	33	0.2	Nil	Nil
Conway	BWO-35	BDL	6.66	248	191	40	12	150	35	68	5	0.05	BDL	BDL	6.1	BDL	40	0.5	Nil	Nil
Aqua Hygienic	BWO-36	BDL	7.05	428	235	32	22	170	45	60	21	0.06	BDL	BDL	BDL	7.3	58	BDL	Nil	Nil
Sav Life	BWO-37	BDL	7.12	335	184	28	10	110	40	72	26	BDL	BDL	BDL	1.4	BDL	25	0.6	Nil	Nil
Cool Aqua Cool	BWO-38	BDL	7.62	360	198	40	12	150	50	80	9	BDL	BDL	BDL	0.8	1	10	0.3	Nil	Nil
Aab e Dubai	BWO-39	BDL	7.08	212	117	20	5	70	50	30	19	BDL	BDL	BDL	0.2	1.2	15	BDL	Nil	Nil
Kinley	BWO-40	BDL	7.13	290	290	BDL	27	110	35	10	8	BDL	BDL	BDL	3	0.6	81	1	Nil	Nil
Tahoor	BWO-41	BDL	6.98	227	125	20	10	90	40	36	9	BDL	BDL	BDL	3	BDL	20	0.7	Nil	Nil
New Nation	BWO-42	BDL	7.62	392	216	32	17	150	50	60	18	0.12	BDL	BDL	0.2	BDL	49	4	Nil	Nil
Cool	BWO-43	BDL	7.50	369	203	34	9	120	60	48	24	0.22	BDL	BDL	0.2	1.7	40	0.5	Nil	Nil
Aqua Dew	BWO-44	BDL	7.55	389	214	32	10	120	70	50	30	0.17	BDL	BDL	1	1.2	33	4	Nil	Nil
Doce	BWO-45	BDL	7.18	336	185	26	13	120	45	50	18	0.12	BDL	BDL	0.4	BDL	40	0.5	Nil	Nil
Clean Plus	BWO-46	BDL	7.73	357	196	20	5	70	100	32	48	0.35	BDL	BDL	1.2	BDL	30	15	Nil	Nil
Zim Water	BWO-47	BDL	7.55	375	206	20	22	140	60	65	20	0.19	BDL	BDL	0.2	BDL	34	3	Nil	Nil
Gourmet	BWO-48	BDL	7.53	402	221	40	12	150	50	84	22	0.18	BDL	BDL	0.2	BDL	24	0.6	Nil	Nil
Aqua Lite Water	BWO-49	BDL	7.61	394	217	32	7	110	100	50	36	0.09	BDL	BDL	0.2	BDL	20	0.9	Nil	Nil
Water Fresh	BWO-50	BDL	7.68	369	203	20	15	110	90	46	33	0.14	BDL	BDL	1.6	BDL	28	2	Nil	Nil
FINO	BWO-51	BDL	7.60	310	171	16	10	60	60	46	33	BDL	BDL	BDL	BDL	1.7	26	1	Nil	Nil
NICE	BWO-52	BDL	8.05	873	480	20	22	140	220	130	130	0.69	BDL	BDL	2.2	1.0	24	27	Nil	Nil

The highlighted results indicate the concentration level beyond the PSQCA Bottled Water Standards.

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PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	250	50	0.7	NGVS	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	0.03	0.2	0.06	0.4	0.1	-	-
Glacial	BWO-53	BDL	7.40	348	191	40	10	140	50	72	15	BDL	BDL	BDL	0.2	BDL	24	0.5	Nil	Nil
Klinz Pure Water	BWO-54	BDL	7.04	310	171	20	16	115	30	62	15	0.04	BDL	BDL	0.3	BDL	30	1	Nil	Nil
Cristalene	BWO-55	BDL	7.07	306	168	32	12	130	30	60	8	BDL	BDL	BDL	0.2	BDL	32	0.4	Nil	Nil
Jami Water	BWO-56	BDL	7.42	418	230	24	7	100	100	55	48	0.16	BDL	BDL	0.4	BDL	26	0.6	Nil	Nil
Aqua Safe	BWO-57	BDL	7.48	365	201	20	12	100	75	45	35	0.10	BDL	BDL	0.2	1.6	33	1	Nil	Nil
FINE Life	BWO-58	BDL	6.90	351	193	44	5	130	50	60	17	0.14	BDL	BDL	0.3	BDL	37	0.5	Nil	Nil
ABSOLUTE Life	BWO-59	BDL	6.98	455	250	36	15	150	80	82	33	0.12	BDL	BDL	0.4	BDL	29	0.4	Nil	Nil
Classic	BWO-60	BDL	6.70	356	196	28	12	120	68	70	25	0.28	BDL	BDL	1.0	BDL	9	5	Nil	Nil
Aqua Gen	BWO-61	BDL	6.64	476	262	32	22	170	70	82	27	0.08	BDL	BDL	0.2	BDL	39	0.3	Nil	Nil
Aqvana	BWO-62	BDL	7.30	245	135	20	10	90	50	36	16	0.06	BDL	BDL	1.0	BDL	25	5	Nil	Nil
Blue Ice	BWO-63	BDL	7.70	250	193	20	5	70	110	32	49	0.36	BDL	BDL	1.3	BDL	22	14	Nil	Nil
SUBLIME Water	BWO-64	BDL	7.02	220	121	20	10	90	30	30	9	0.05	BDL	BDL	0.2	BDL	28	1	Nil	Nil
Blessings Drops	BWO-65	BDL	6.75	381	210	32	17	150	50	80	20	BDL	BDL	BDL	0.2	0.9	14	0.4	Nil	Nil
DEJA Blue	BWO-66	BDL	6.96	295	162	20	15	110	56	40	15	0.09	BDL	BDL	0.2	1.3	27	0.7	Nil	Nil
Pacific Pure	BWO-67	BDL	7.94	506	278	20	5	70	200	16	82	0.31	BDL	BDL	1.8	BDL	30	21	Nil	Nil
Aqua PRO	BWO-68	BDL	7.41	219	120	20	10	90	40	31	9	0.07	BDL	BDL	0.2	BDL	26	1	Nil	Nil
Liquid Ice Arctic	BWO-69	BDL	6.98	344	189	36	13	100	30	24	11	0.20	BDL	BDL	BDL	BDL	10	0.5	Nil	Nil
Aqua Seena	BWO-70	BDL	7.35	340	187	20	12	100	70	56	30	0.21	BDL	BDL	0.3	BDL	10	1	Nil	Nil

The highlighted results indicate the concentration level beyond the PSQCA Bottled Water Standards.

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**PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY**



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
<b>PSQCA Bottled Water Standards</b>	-	<b>0.5</b>	<b>6.5 - 8.5</b>	<b>NGVS</b>	<b>500</b>	<b>100</b>	<b>50</b>	<b>NGVS</b>	<b>NGVS</b>	<b>250</b>	<b>50</b>	<b>0.7</b>	<b>NGVS</b>	<b>0.3</b>	<b>10</b>	<b>10</b>	<b>250</b>	<b>10</b>	<b>Total Coli forms 0/100ml</b>	<b>E-Coli 0/100ml</b>
<b>Detection Limits</b>	-	<b>0.2</b>	<b>0.02</b>	<b>0.287</b>	-	<b>2</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.2</b>	<b>0.06</b>	<b>0.4</b>	<b>0.1</b>	-	-
Nice Natural	BWO-71	BDL	7.44	411	226	40	12	150	80	86	28	0.09	BDL	BDL	0.3	BDL	10	0.3	Nil	Nil
ECO FINA	BWO-72	BDL	7.53	354	195	36	9	125	60	64	22	BDL	BDL	BDL	0.5	BDL	24	1	Nil	Nil
Pine'o	BWO-73	BDL	7.55	388	213	32	15	140	60	72	20	0.09	BDL	BDL	0.8	BDL	27	BDL	Nil	Nil
Panee	BWO-74	BDL	7.45	453	249	36	17	160	80	76	25	0.24	BDL	BDL	2.9	BDL	37	0.3	Nil	Nil
Blu Water	BWO-75	BDL	7.40	328	180	20	17	120	20	74	15	0.10	BDL	BDL	0.4	0.5	26	0.5	Nil	Nil
Aquafina	BWO-76	BDL	7.46	217	119	BDL	15	60	30	24	17	0.10	BDL	BDL	1.4	BDL	35	0.5	Nil	Nil
Nectar	BWO-77	BDL	7.42	420	264	64	12	210	170	24	16	0.18	BDL	BDL	1.4	3	27	0.3	Nil	Nil
Hydr8	BWO-78	BDL	6.88	505	278	60	15	210	150	24	21	0.10	BDL	BDL	1.3	2.7	60	BDL	Nil	Nil
MEHR	BWO-79	BDL	7.10	250	138	24	10	100	60	14	12	BDL	BDL	BDL	0.6	2.2	39	0.2	Nil	Nil
Bio Crystal	BWO-80	BDL	6.67	376	207	32	17	150	120	21	16	0.09	BDL	BDL	0.8	3.9	24	BDL	Nil	Nil
Verbena	BWO-81	BDL	6.94	463	255	40	15	160	90	80	24	BDL	BDL	BDL	0.3	BDL	18	0.3	Nil	Nil
Limpid Fresh	BWO-82	BDL	6.95	398	219	44	10	150	120	36	26	0.13	BDL	BDL	0.6	2.1	30	0.2	Nil	Nil
Ripple	BWO-83	BDL	7.08	333	183	24	19	140	50	60	8	0.06	BDL	BDL	3.5	0.8	30	0.2	Nil	Nil
Atlantis	BWO-84	BDL	7.09	312	172	40	12	150	80	58	6	BDL	BDL	BDL	0.4	0.9	30	BDL	Nil	Nil
Deep Spring	BWO-85	BDL	7.20	402	221	40	12	150	100	26	24	BDL	BDL	BDL	1.1	0.5	27	0.4	Nil	Nil
Maple Dew	BWO-86	BDL	7.29	484	266	20	19	130	145	31	42	BDL	BDL	BDL	1.0	1	26	0.4	Nil	Nil
Fresh Life	BWO-87	BDL	7.13	493	271	24	19	140	150	36	40	BDL	BDL	BDL	1.2	BDL	24	BDL	Nil	Nil
Seven Streams	BWO-88	BDL	7.15	410	225	28	17	140	100	30	30	BDL	BDL	BDL	1.3	BDL	29	0.2	Nil	Nil

The highlighted results indicate the concentration level beyond the PSQCA Bottled Water Standards.

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PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
<b>PSQCA Bottled Water Standards</b>	-	<b>0.5</b>	<b>6.5 - 8.5</b>	NGVS	<b>500</b>	<b>100</b>	<b>50</b>	NGVS	NGVS	<b>250</b>	<b>50</b>	<b>0.7</b>	NGVS	<b>0.3</b>	<b>10</b>	<b>10</b>	<b>250</b>	<b>10</b>	Total Coli forms 0/100ml	E-Coli 0/100ml
<b>Detection Limits</b>	-	<b>0.2</b>	<b>0.02</b>	<b>0.287</b>	-	<b>2</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.2</b>	<b>0.06</b>	<b>0.4</b>	<b>0.1</b>	-	-
<b>Vey</b>	BWO-89	BDL	7.19	306	168	28	17	140	30	66	2	BDL	BDL	BDL	8.6	BDL	29	0.3	Nil	Nil
<b>NEO</b>	BWO-90	BDL	7.12	327	180	20	19	130	50	62	15	BDL	BDL	BDL	5.2	1.5	25	0.2	Nil	Nil
<b>Crystal Hashmi</b>	BWO-91	BDL	6.50	423	233	28	13	120	50	86	40	BDL	BDL	BDL	2.1	1.2	34	BDL	Nil	Nil
<b>Safe Way</b>	BWO-92	BDL	6.73	270	149	20	15	110	50	53	25	BDL	BDL	BDL	1.9	BDL	38	BDL	Nil	Nil
<b>Safe Life</b>	BWO-93	BDL	6.69	502	276	16	29	160	70	100	41	BDL	BDL	BDL	5.3	2.2	35	BDL	Nil	Nil
<b>Pure I8</b>	BWO-94	BDL	6.84	320	176	40	2	110	70	48	26	BDL	BDL	BDL	0.5	0.9	25	BDL	Nil	Nil
<b>Mag Life</b>	BWO-95	BDL	6.50	404	222	28	24	170	30	96	12	BDL	BDL	BDL	1.8	BDL	26	BDL	Nil	Nil
<b>Aab-e-Noor</b>	BWO-96	BDL	7.09	52	29	BDL	0	BDL	10	8	12	BDL	BDL	BDL	0.5	BDL	5	BDL	Nil	Nil
<b>Al-Sahar</b>	BWO-97	BDL	6.50	489	269	40	15	160	50	110	24	BDL	BDL	BDL	10	BDL	26	BDL	Nil	Nil
<b>Do Aab Water</b>	BWO-98	BDL	6.50	349	192	40	10	140	30	80	20	BDL	BDL	BDL	0.6	0.9	31	0.2	<b>20</b>	Nil
<b>Droplet</b>	BWO-99	BDL	6.55	328	180	20	18	130	40	52	16	BDL	BDL	BDL	0.3	0.6	26	BDL	Nil	Nil
<b>ABS Minerals</b>	BWO-100	BDL	6.96	374	206	36	12	140	40	98	20	BDL	BDL	BDL	0.7	BDL	BDL	0.3	Nil	Nil
<b>Al-ATASH</b>	BWO-101	BDL	6.89	340	187	20	2	60	50	65	46	BDL	BDL	BDL	1.9	0.7	20	BDL	Nil	Nil
<b>MANAHIL</b>	BWO-102	BDL	6.96	249	137	10	4	40	60	38	39	BDL	BDL	BDL	0.7	1.2	20	BDL	Nil	Nil
<b>Aqua King</b>	BWO-103	BDL	6.85	429	236	20	10	90	90	56	50	BDL	BDL	BDL	1.6	0.8	40	BDL	Nil	Nil
<b>YAS</b>	BWO-104	BDL	7.13	260	143	30	9	110	40	60	12	BDL	BDL	BDL	0.4	BDL	20	BDL	Nil	Nil

NGVS =No Guideline Value Set

BDL = Below Detection Limits

\* Microbiological results have also been verified by IDEXX (Quanti-Tray/2000 USA) and Membrane Filtration (CFU/100ml, 9222-B&D APHA) Methods.

The highlighted results indicate the concentration level beyond the PSQCA Bottled Water Standards.

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