



QUARTERLY REPORT BOTTLED WATER QUALITY

(January-March, 2017)



PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES

Ministry of Science & Technology

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

www.pcrwr.gov.pk

January-March, 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 January-March, 2017 following is the brief overview of the findings.

Quarterly Monitoring of Bottled/Mineral Water (January-March, 2017)

Item	No.	% age
Total No. of Brands Collected	103	-
Overall Safe Brands	93	90
Overall Unsafe Brands	10	10
Chemically Safe Brands	93	90
Chemically Unsafe Brands	10	10
Microbiologically Safe Brands	99	96
Microbiologically Unsafe Brands	04	4

Name of Targeted Cities	Islamabad, Rawalpindi, Sialkot, Swat, Peshawar, Muzaffarabad, Sargodha, Multan, Lahore, Bahawalpur, TandoJam, Karachi.	
Chemically Unsafe Brands	Brand Name	Manufacturer(s)
	CLEAN PLUS	Bottled By: CLEAN FOODS (Pvt) Ltd.46-J Gulberg III, Lahore www.cleanplus.com.pk
	Royal BLUE	IRIS Foods (Pvt) Ltd. 424-A, Tajpura LDA Scheme, Lahore
	Aqua Health	A Product By:SFS FOODS: 90 km, Multan Road, Habibabad Pakistan saffoods@outlook.com
	New Premier	Manufactured by: Zafir Industries: 19-KM, Near Highnoon Laboratories, Multan Road, Lahore
	Pacific Pure	Bottled by: Pacific Water Engineer G.T Road Lahore Web: pacificwaterengineers.com 042-3885992
	Active Life	Bottled by: Ali Brother 109-M/11-A,Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore 0342-7728119
	FINO Pure Water	Mansha Enterprises: 549-E, New Commercial Market, EME Sector, DHA Multan Road, Lahore.
	Crystal Maya	Bottled By: Tilon Global Off:B-221,226, Hub, Baluchistan
	Miracle	The Miracle Products (Pvt) Ltd, Plot No.WSA-23,Block 14,F.B Area Karachi
PURE AQUA	ST-B-2,Block 19,Gulshan-e-Ali,Alnoor More F.B Area Karachi www.pureaqua.com.pk	
Microbiologically Unsafe Brands	Aqua Health	A Product By: SFS FOODS: 90 km, Multan Road, Habibabad Pakistan saffoods@outlook.com
	Pacific Pure	Bottled by: Pacific Water Engineer G.T Road Lahore Web: pacificwaterengineers.com 042-3885992
	New Premier	Manufactured by: Zafir Industries: 19-KM, Near Highnoon Laboratories, Multan Road, Lahore
	FINO Pure Water	Mansha Enterprises: 549-E, New Commercial Market EME Sector DHA Multan Road, Lahore.



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	103	
No. of Cities Targeted	12 (Islamabad, Rawalpindi, Sialkot, Swat, Peshawar, Muzafarabad, Sargodha, Multan, Lahore, Bahawalpur, Tando Jam, Karachi)	
Composition of Sampling Team	One Research Officer and Two Laboratory Assistants	
Sampling Procedure	Samples of 103 commercially available brands of mineral/bottled water were collected from local market of 12 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 January-March, 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.	
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
ECO	BWM-01	Sialkot	05/1/2017	-	0.6 Liter	Collected from manufacturing point	Product of J&J Foods & Beverages: Roras Road Naul Chowk, Sialkot Pakistan www.jjfoods.bev.com
Isberg	BWM-02	Sialkot	04/1/2017	08/2017	0.6 Liter	Collected from manufacturing point	Premier Water Refining Company, Dhabola, Roras Road, Sialkot info@pwrc.com.pk
Vina Fresh	BWM-03	Sialkot	05/1/2017	01/2018	0.6 Liter	Collected from manufacturing point	Al-Sultan Beverages industries: Chaprar Road Gul Bahar Kalan Sialkot
Bake Master	BWM-04	Sialkot	05/1/2017	09/2017	0.6 Liter	Bake Master Bakery Kashmir Road Sialkot	0342-6661666 0333-8656666
AQUA Save	BWM-05	Sialkot	06/1/2017	01/2018	0.6 Liter	Collected from manufacturing point	Bottled By: SFS Mineral Water Company Wazirabad Road Jalianwala Ugoki Sialkot mineralwatercompany@yahoo.com
Athar	BWM-06	Sialkot	05/1/2017	12/2017	0.5 Liter	Collected from manufacturing point	Manufactured By Ajva Rice Mill Pakistan Haji Pura Road Sialkot E-mail: Ajva Rice@gmail.com.
JERS	BWM-07	Sialkot	05/1/2017	08/2017	0.6 Liter	Faisal Pan Shop Shah Pura Road, Sialkot 0300-6153253	Manufactured By: JERS Traders
PORFAVOR	BWM-08	Sialkot	05/1/2017	12/2017	0.6 Liter	Mitho Tea Stall Sabzi Mandi Sialkot 0305-6112062	Bottled By: Porfavor Pakistan Propatria Enterprises 3/368 Paris Road Sialkot Porfavor9969@gmail.com
Rise Water	BWM-09	Sialkot	06/1/2017	12/2017	0.6 Liter	Collected from manufacturing point	Pure Foods Sialkot 3-km Kingra Road Sialkot 052-4602580
Coral Water	BWM-10	Sialkot	06/1/2017	09/2017	0.6 Liter	A-One Fruit Chaat Sialkot 0300-9622878	Bottled By: Combine Brothers Traders Adda Khrana Sialkot www.coralwater.com.pk 0333-8606644
ICE Well	BWM-11	Sialkot	05/1/2017	12/2017	0.5 Liter	Tarir Tea Stall Lari Adda, Sialkot	Bottled by: Quaint Beverages Industries Baghwal Awan, P.O. Khas Sialkot E-mail quaint.beverages@att.net
Al-Haider	BWM-12	Sialkot	06/1/2017	03/2017	0.5 Liter	Bismillah Pan Shop Imam Sahib Road Sialkot	Al-Haider Pure, A Purified Water with essential Minerals Gulshan Iqbal Park China Chowk Sialkot
MEHR	BWM-13	Rawalpindi	14/2/2017	02/2018	0.5 Liter	Collected from manufacturing point	Bottled By: Pir MEHR Ali Shah Arid Agriculture University Rawalpindi
Fresh Life	BWM-14	Islamabad	14/2/2017	12/2017	0.5 Liter	Collected from manufacturing point	T&S Enterprises office No.1 Main Hall Pindori Road ,Main Khana Dak, Islamabad freshlife786@gmail.com
HYDR8	BWM-15	Islamabad	14/2/2017	12/2017	0.5 Liter	Collected from manufacturing point	T-7, Sardar Arcade 2, G-11 Markaz, Islamabad



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Atlantic	BWM-16	Islamabad	14/2/2017	12/2017	1.5 Liter	Collected from manufacturing point	Ayza Society, Near Yamaha Factory, Sihala Industrial Area, Islamabad
Nectar	BWM-17	Islamabad	14/2/2017	10/2017	0.5 Liter	Collected from manufacturing point Sialkot	Islamabad Express, Near Paradise Complex, Kurri Road, Islamabad
White Gold	BWM-18	Islamabad	17/3/2017	12/2017	0.5 Liter	Collected from manufacturing point	Global Enterprises: Office 9, 2 nd Floor, Lord Trade Centre, F-11 Markaz, Islamabad
Deosai	BWM-19	Islamabad	17/3/2017	12/2017	1.5 Liter	Collected from manufacturing point	Margalla Foods&Beverages:Plot#32,Khayaban-e-johar,Industrial Area 1-9/2 Islamabad
Hydra	BWM-20	Islamabad	17/3/2017	12/2017	1.5 Liter	Collected from manufacturing point	Bottled By: Pakistan PVC Limited (Food Division), 31-A, Sector I-9, Islamabad.
Sunley Pure	BWM-21	Islamabad	17/3/2017	12/2017	1.5 Liter	Collected from manufacturing point	Bottled By: Pakistan PVC Limited (Food Division), 31-A, Sector I-9, Islamabad.
Maple Dew	BWM-22	Islamabad	17/3/2017	12/2017	1.5 Liter	Collected from manufacturing point	Maple Dew Purification Plant Sohan Islamabad
Hi-Fresh	BWM-23	Sargodha	17/2/2017	-	0.6 Liter	General Bus Stand Sargodha 0345-7747249	Product of NBFC Pakistan Madina Farm, 84-N.B Sargodha. www.hi_freshwater.com
INFINITY	BWM-24	Sargodha	17/2/2017	-	0.5 Liter	Hassan General Store ,Khayam Chowk Sargodha	Musaffa drops (Pvt) Ltd. Japan Road, Sihala Khurd Islamabad 051-4486631
Ziran	BWM-25	Sargodha	17/2/2017	-	0.6 Liter	M.Waqas Railway Station Sargodha	Ziran Water (Pvt) Ltd. Office#04, A-Block Model Town Lahore Ziran Water (Pvt) Ltd. www.ziranwater.com.pk
Blu Water	BWM-26	Sargodha	7/12/2016	12/2017	0.6 Liter	Naseer Ahmed Railway Station Sargodha	Al-Hilal Industries(Pvt)Ltd. Sultan Nagar, Vehari Road, Multan
New Deep	BWM-27	Multan	20/2/2017	08/2017	1.5 Liter	Kousar Medicine Company Nishtar Road, Multan	Bottled by:S.B Food &Beverages Zakriya Town Bosan Road Multan
IDEAL Premium Water	BWM-28	Multan	21/2/2017	-	1.5 Liter	Paramount Tuck Shop, Chowk Dera Adda, Multan	New Blue Worlds Associates Zakriya Town, Multan
Aqua7	BWM-29	Multan	20/2/2017	12/2017	0.6 Liter	Souk Super Store Bosan Road, Multan	Processed and Bottled by: Pluse International (Water Company)11 km,Sadiq A bad Bosan Road, Multan
New Classic	BWM-30	Multan	21/2/2017	02/2018	0.6 Liter	Malik Medical Store, Chaungi No.09,Multan	Bottled by Classic Consumables: Plot no.74-B,Industrial Estate Phase II,Multan
Happy Vital Life	BWM-31	Multan	22/2/2017	-	0.6 Liter	Jabbar General Store, Al-Mustafa Road, Multan	Lala Traders: Consumer Products, 7km Multan Road, Sahiwal.
SN Pure Drinking Water	BWM-32	Multan	22/2/2017	-	0.6 Liter	Raza Tuck Shop General Bus Stand Multan	A Product of S.N Food &Beverages Multan
Eden Pure Water	BWM-33	Multan	22/2/2017	12/2017	0.6 Liter	Ali General Hospital Khanewal Road, Multan	Sadaf Canal, Bahawalpur 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	BWM-34	Multan	22/2/2017	-	0.6 Liter	Fatima Medical Store Nishtar Road, Multan	Aqua Care Drinking Water D.G. Khan, Pakistan 0331-7402128
Zam Water	BWM-35	Multan	21/2/2017	-	0.6 Liter	APV Tuck Shop, APV Stand ,Vehari Chowk, Multan	Bottled By: New MHN Drinks & Foods Makers (Pvt) Ltd. 129/130 Sabzwari Town, Multan E-mail: mhn drinks@gmail.com
Aquafina	BWM-36	Bahawalpur	01/3/2017	02/2018	0.5 Liter	Time Pharmacy M.T.C Bahawalpur	Purified and Filled by Riaz Brothers(Pvt)Ltd32-N, GulbergII,Lahore
Pine'o	BWM-37	Bahawalpur	01/3/2017	-	1.5 Liter	New Awan Medical M.T.C Bahawalpur	Under Licence: Gysing Pak DDR-1, PSIE Bahawalpur. gysing@live.com
Nestle	BWM-38	Bahawalpur	01/3/2017	-	0.5 Liter	Al-Haram Super Store, Commercial Area Bahawalpur	Bottled By Nestle Pakistan Ltd.308-Upper Mall, Lahore
Panee	BWM-39	Bahawalpur	29/11/2016	11/2017	0.6 Liter	Life Medical Store Opp.DHQ Bahawalpur	SUALEH SONS FOODS Room#2/32,Al Abid Chamber Shahrh-e-Liaquat Karachi Factory:1/2km,BahawalpurRoad , Ahmedpur East
NN Water	BWM-40	Bahawalpur	01/3/2017	06/2017	0.5 Liter	Shan Sweet & Bakers Railway Station Road, Bahawalpur	Purified& Packed By:NN Premium Water Factory, Khanewal
KINLEY	BWM-41	Bahawalpur	01/3/2017	10/2017	0.5 Liter	Subhan Medical Store B.V.H Bahawalpur	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-B Gulberg III, Lahore Pakistan.
National	BWM-42	Bahawalpur	01/3/2017	11/2017	1.5 Liter	New Awan Medical M.T.C Bahawalpur	Nazir Enterprises Dera Bakha Bahawalpur Nazirenterprises509@gmail.com
CLEAN PLUS	BWM-43	Lahore	16/3/2017	-	0.6 Liter	Noshai Pan Store Mohanwal Chowk Multan Road, Lahore	Bottled By: CLEAN FOODS(Pvt)Ltd.46-J Gulberg III, Lahore www.cleanplus.com.pk
Royal BLUE	BWM-44	Lahore	17/3/2017	-	0.5 Liter	Sarhad General Store Opp. Skyways Adda Lahore	IRIS Foods (Pvt) Ltd. 424-A, Tajpura LDA Scheme, Lahore
Dewan Water Express	BWM-45	Lahore	16/3/2017	-	0.6 Liter	Chief General Store Bhata Pind Raiwind Road, Lahore	Bottled By: Dewan Foods:168,Shah Jamal, Lahore www.dewanfoods.com
SUFI	BWM-46	Lahore	20/3/2017	-	0.5 Liter	Green Plus Pharmacy Faisal Town Opp Jinnah Hospital Lahore	Hadayat Foods Stuffs Industries(Pvt)Ltd.,1-B Garden Block, Garden Town, Lahore
ASKARI Water	BWM-47	Lahore	16/3/2017	-	0.6 Liter	Ghosia Pan Shop Chowk Thokar Niaz Baig Lahore	Bottled By: ASKARI Water Pakistan Ltd. Manufactured By:9 km, Shahdra Lahore Cinnamon78620@gmail.com
Royal Water	BWM-48	Lahore	16/3/2017	12/2017	0.5 Liter	Mr. Bakers and Sweets Chowk Shah Kam Near Bahria Town Lahore	Royal Hayat Beverages (Pvt)Ltd.Factory:1-km,Multan Road, Defance Road Lahore
Blue Ice	BWM-49	Lahore	16/3/2017	-	0.6 Liter	Al-Makkah General Store Bhata Pind Raiwind Road, Lahore	2-B, XX Block, Khayaban-e-Iqbal Phase III, D.H.A Lahore Cantt.



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Cool	BWM-50	Lahore	16/3/2017	-	0.6 Liter	Noshai Pan Store Mohanwal Chowk Multan Road, Lahore	M.T Mineral Water Co .599-Air Line Society Khayaban-e-Jinnah Road, Lahore
Butt Water	BWM-51	Lahore	15/3/2017	02/2018	0.5 Liter	Butt Sweets & Bakery PIA Society, Lahore	Manufactured by: Butt Sweets & Bakers www.buttsweets.com
Gourmet	BWM-52	Lahore	15/3/2017	-	0.6 Liter	Gourmet Shop, Town Ship Lahore	Gourmet Foods: Gate#1, Plot1-5,Sunder Industrial Estate, Rawind Sunder Road ,Lahore.
Smart Dew	BWM-53	Lahore	15/3/2017	10/2017	0.6 Liter	Bismillah General Store Town Ship Lahore	Address:104-Gul-e-Daman Society, Opp Quality Super Store College Road, Lahore
Aqua Health	BWM-54	Lahore	15/3/2017	-	0.6 Liter	BABA Jani Pan Shop Town Ship Lahore	A Product By:SFS FOODS: 90 km, Multan Road,Habibabad Pakistan saffoods@outlook.com
Bling H2O	BWM-55	Lahore	15/3/2017	-	0.5 Liter	Turab Hospital Pharmacy, Town Ship Lahore	A product of 3-N Foods, 18-Km Ferozapur Road, Opp. Suflabad Lahore 042-35923593
MASHMOOM AQUA	BWM-56	Lahore	15/3/2017	-	0.6 Liter	Karachi Biryani Town Ship Lahore	MASHMOOM AQUA (Pvt) Ltd. Plot#154/3,154/4 Phase V, Industrial Estate, Hattar Distt Haripur
New Premier	BWM-57	Lahore	15/3/2017	-	0.6 Liter	Zam Zam Cafeteria Jinnah Hospital Lahore	Manufactured by: Zafir Industries: 19-KM, Near Highnoon Laboratories, Multan Road, Lahore
AQUEOUS	BWM-58	Lahore	15/3/2017	-	0.5 Liter	Asam General Store Town Ship Lahore	Jaam M, Road, Near Architect Society, Lahore.www.gcg.com.pk 0334-2300006
Aqua Gen	BWM-59	Lahore	15/3/2017	03/2018	1.5 Liter	Zam Zam Cafeteria Jinnah Hospital Lahore	A Product of AQUA Gen Services Water Treatment Company,36-Civic Centre Liaquat Chowk Sabzazar Scheme ,Lahore www.aquagen.net.pk
Pacific Pure	BWM-60	Lahore	16/3/2017	-	1.5 Liter	Noshai Pan Store Mohanwal Chowk Multan Road, Lahore	Bottled by: Pacific Water Engineer G.T Road Lahore Web:Pacificwaterengineers.com 042-38859992
Water Drop	BWM-61	Lahore	16/3/2017	-	1.5 Liter	Ansar Dogar Pan Shop Bhata Pind Raiwind Road Lahore	Manufactured by: Water Drop(Pvt)Ltd Raiwind Road Near Lal Kothi Lahore 03214606636
Effort	BWM-62	Lahore	15/3/2017	-	1.5 Liter	Turab Hospital Pharmacy, Town Ship Lahore	Bottled by: Effort Corporation 83-A,Shadman II,Lahore Effort_corp@gmail.com
DOCE Water	BWM-63	Lahore	15/3/2017	01/2018	1.5 Liter	Doce Shop PIA Society Johar Town Lahore	48-M, Quaid-e-Azam Industrial State, Kot Lakhpat, Lahore www.doce.pk 042-3555555
Active Life	BWM-64	Lahore	17/3/2017	-	1.5 Liter	Mashallah Cold Corner Opp. Niazi Express Lahore	Bottled by: Ali Brother 109-M/11-A,Quaid-e-Azam Industrial Estate Kot Lakhpat Lahore 0342-7728119



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Jami Water	BWM-65	Lahore	15/3/2017	-	1.5 Liter	Jami Water Khokhar Chowk, Town Ship Lahore	A Product of Jami Water Services:356-E, PIA Housing Society, PIA Road, Lahore. 042-35446800
FINO Pure Water	BWM-66	Lahore	16/3/2017	-	1.5 Liter	Shahbaz Cold Corner Bhata Pind Raiwind Road, Lahore	Mansha Enterprises: 549-E, New Commercial Market EME Sector DHA Multan Road, Lahore.
AQUATIC FRESH	BWM-67	Peshawar	14/3/2017	12/2017	0.6 Liter	Collected from manufacturing point	Royal Food Industries: Plot#1-C, Industrial Estate Hayatabad Peshawar
WAH Water	BWM-68	Peshawar	14/3/2017	02/2018	0.6 Liter	Collected from manufacturing point	RG Enterprises: Plot#141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com
Natural Aqwah	BWM-69	Peshawar	14/3/2017	03/2018	0.6 Liter	Collected from manufacturing point	RG Enterprises: Plot#141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com
Fresh Life	BWM-70	Peshawar	14/3/2017	02/2018	0.6 Liter	Collected from manufacturing point	3km, Communication (Shirkat-e-Zaryab) 107,A-SIE, Hayatabad, Peshawar
AQUA Splash	BWM-71	Peshawar	9/12/2016	02/2018	0.6 Liter	Collected from manufacturing point	Euro International: 192-A Industrial Estate, Hayatabad, Peshawar
Moya Mineral Water	BWM-72	Peshawar	20/3/2017	02/2018	1.5 Liter	Collected from manufacturing point	Processed by: Al- Saudia Enterprises, 580/B Main Gulberg, Peshawar Cantt
NEBRASAKA	BWM-73	Peshawar	14/3/2017	03/2018	0.6 Liter	Collected from manufacturing point	Bottled at Dew Point Healthcare Water Purification and Processing Facility:12-C Industrial Estate, Hayatabad, Peshawar
Hydromel	BWM-74	Swat	15/3/2017	08/2017	0.5 Liter	Collected from manufacturing point	F&F Pakistan:Panr,Kokaray Road, Mangora Swat
Aqua Spring	BWM-75	Swat	15/3/2017	02/2018	0.6 Liter	Collected from manufacturing point	Police Line By Pass Fiza Ghot Road Mingora www.aquaspringsw.com
Deep Spring	BWM-76	Islamabad	16/3/2017	10/2018	1.5 Liter	Collected from manufacturing point	A Product of BNK(Pvt)Ltd. Plot No.226,St#7, Sector I-9/2,Islamabad
CALCI DEW	BWM-77	Islamabad	16/3/2017	10/2017	1.5 Liter	Collected from manufacturing point	Maple Dew Purification Plant Sohan Islamabad
Verbena	BWM-78	Rawalpindi	16/3/2017	12/2017	0.5 Liter	Collected from manufacturing point	Vizor Pharma Pvt. (Ltd), Lalazar Estate, Rawalpindi. vizorpharma@hotmail.com
Valley	BWM-79	Islamabad	16/3/2017	12/2017	1.5 Liter	Collected from manufacturing point	Plot # 277, St.1, I-9/3, Industrial Area, Islamabad
Ripple	BWM-80	Rawalpindi	16/3/2017	12/2017	1.5 Liter	Collected from manufacturing point	Main Mirpur Road, Al-Noor Colony Sector #3, Corner of St. No.6,Behind Fazaia Colony, Rawalpindi
YAS	BWM-81	Muzaffarabad	17/3/2017	03/2018	1.5 Liter	Collected from manufacturing point	Kashmir Natural Resources(Pvt)Ltd., Muzaffarabad yas@neelum.pk



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Crystal Springs	BWM-82	Tando Jam	05/4/2017	-	0.6 Liter	Collected from manufacturing point	Plot#28 Phase-II, Qasimabad, Hyderabad www.crystalspringspk
Aqua Blue Drops	BWM-83	Tando Jam	05/4/2017	-	0.6 Liter	Kirshan/Sunel Shop Keeper Refused to Give N.I.C & Cell Number	Bottled By: So-Safe Water Technology, Karachi
OSLO	BWM-84	Tando Jam	05/4/2017	12/2017	0.6 Liter	New Rehmat Sweets & Bakers&Nimko Tando Jam	OSIO International: 14-Ramzan Chamber Dr.Billmorla Street # off 1.1 Chandigarh Road, Karachi
Pearl	BWM-85	Tando Jam	05/4/2017	03/2018	0.6 Liter	Collected from manufacturing point	S.Q.B S Enterprises: Address:144/6.8 km,Near Toll Plaza Super Highway Jamshoro
Dua Water	BWM-86	Tando Jam	05/4/2017	-	0.6 Liter	Workshop Main Stop Tando Jam	Bottled By: NEW WASSAN PVT.Ltd.
Healthy Water	BWM-87	Tando Jam	05/4/2017	-	0.6 Liter	Kirim General Store, Tando Jam Town	C/S 1914 Near Fareed Plaza, Liaquat Colony Industrial Area, Hyderabad
JEL	BWM-88	Tando Jam	05/4/2017	12/2018	0.6 Liter	Mohsin Karyana Shahi Bazar Tando Jam	Bottle By: MEGA FINA Industries: Plot No.A-92,Malir Industrial Area, Malir Karachi
AQUENCH	BWM-89	Karachi	12/4/2017	-	0.6 Liter	Rajpoot Super Store Qalandarabad Block-10,Karachi	Shop#A/2,A/3 Foundation Blessing Block-2,Gulistan-e-Johar Near Sara Banquet, University Road, Karachi
Evan	BWM-90	Karachi	11/4/2017	12/2017	0.6 Liter	Muree General Store,S/B-2,North Karachi	D-351,Block N, North Nazimabad, Karachi
Al-SAHAR	BWM-91	Karachi	11/4/2017	-	0.6 Liter	Irfan Pharmacy Cosmatic&Cold Print Kamran Chorangi Gulistan-e-Johar,Block-10,Karachi	Al-SAFRAT INTERNATIONAL:Plot No.C-68,SITE Super Highway Industrial Area Karachi
Pure 18	BWM-92	Karachi	11/4/2017	12/2018	0.6 Liter	Milk Shop General Store And Bakers Block E Gulistan-e-Johar Karachi	Quality Drinking Water a Product of Bawany Group.
Water Plus	BWM-93	Karachi	14/4/2017	12/2018	0.6 Liter	Mashallah General and Kiryana Store PIA housing society blocks 9 Gulistan-e-Johar Karachi.	Bottle By: MEGA FINA Industries: Plot No.A-92,Malir Industrial Area, Malir Karachi
Crystal Maya	BWM-94	Karachi	14/4/2017	-	0.6 Liter	Syed super store Rabia city Gulistan-e-Johar near al Habib University.	Bottled By: Tilon Global Off:B-221,226,Hub Baluchistan
Vey	BWM-95	Karachi	11/4/2017	03/2019	0.6 Liter	Shan Bakari S/B-3 North Karachi	Fluid Technology Int'l(Pvt)Ltd.424,Bhayani Center Block-N.North Nazimabad Karachi
Miracle	BWM-96	Karachi	11/4/2017	03/2018	0.5 Liter	Makka Bakari S/B-1 North Karachi 0306-2399646	The Miracle Products(Pvt)Ltd,Plot No.WSA-23,Block 14,F.B Area Karachi



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
PARADISE	BWM-97	Karachi	11/4/2017	12/2018	0.6 Liter	Makka Bakari S/B-1 North Karachi 0306-2399646	Paradise Food Industry Paradise-food@outlook.com
Al-Habib	BWM-98	Karachi	11/4/2017	12/2017	0.6 Liter	Zafar Store Qalandarabad Gulistan-e-Johar Block-10, Karachi	E-10, Al-azam Square F.B Area, Block-1, Karachi E-mail: al-habib1@cyber.net.pk
Naafey Pure	BWM-99	Karachi	12/4/2017	-	0.6 Liter	Mashallah Milk Shop Qalandarabad Block-10, Karachi	Bottled By: NAFFY PURE Karachi E-mail: nafeypure@gmail.com
Livon	BWM-100	Karachi	11/4/2017	12/2018	0.6 Liter	Malik Store Sun View Store Block 02 Karachi	A Product By: MURTAZA TRADERS: Suite 2, Khizaar Corner, R-143, Z-4, Gulshan-e-Maymar Karachi
Yes	BWM-101	Karachi	12/4/2017	12/2018	0.6 Liter	Mashallah New Rahimdad General Store Qalandarabad Karachi	Bottle By: MEGA FINA Industries: Plot No.A-79, Malir Industrial Area, Malir Karachi
PURE AQUA	BWM-102	Karachi	11/4/2017	12/2018	0.6 Liter	Gilgit Baltistan General Super Store Kamran Chorangi Gulistan-e-Johar, Block-10, Karachi	ST-B-2, Block 19, Gulshan-e-Ali, Alnoor More F.B Area Karachi www.pureaqua.com.pk
Murree Sparkletts	BWM-103	Karachi	11/4/2017	12/2017	0.5 Liter	Data Super Store Kamran Chorangi Gulistan-e-Johar, Block-10, Karachi	Murree Sparkletts (A division of Murree Brewery Co. Ltd), Plot No.10/2, Phase-III Industrial Estate, Hatter.



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

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

Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	CLEAN PLUS	BWM-43	Lahore	ppb	17
2.	Royal BLUE	BWM-44	Lahore	ppb	24
3.	New Premier	BWM-57	Lahore	ppb	12
4.	Pacific Pure	BWM-60	Lahore	ppb	30
5.	Active Life	BWM-64	Lahore	ppb	69
6.	FINO Pure Water	BWM-66	Lahore	ppb	12

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

Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	Aqua Health	BWM-54	Lahore	ppm	78
2.	Pacific Pure	BWM-60	Lahore	ppm	77
3.	Crystal Maya	BWM-94	Hub Balochistan	ppm	58
4.	PURE AQUA	BWM-102	Karachi	ppm	60

Potassium : Safe Limit : 10 parts per million (ppm)

Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	Miracle	BWM-96	Karachi	ppm	25

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.	Aqua Health	BWM-54	02	Nil
2.	New Premier	BWM-57	18	Nil
3.	Pacific Pure	BWM-60	23	Nil
4.	FINO Pure Water	BWM-66	10	Nil



PCRWR TESTING: SAFE BRANDS

Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
1.	ECO	BWM-01	Safe	Safe
2.	Isberg	BWM-02	Safe	Safe
3.	Vina Fresh	BWM-03	Safe	Safe
4.	Bake Master	BWM-04	Safe	Safe
5.	AQUA Save	BWM-05	Safe	Safe
6.	Athar	BWM-06	Safe	Safe
7.	JERS	BWM-07	Safe	Safe
8.	PORFAVOR	BWM-08	Safe	Safe
9.	Rise Water	BWM-09	Safe	Safe
10.	Coral Water	BWM-10	Safe	Safe
11.	ICE Well	BWM-11	Safe	Safe
12.	Al-Haider	BWM-12	Safe	Safe
13.	MEHR	BWM-13	Safe	Safe
14.	Fresh Life	BWM-14	Safe	Safe
15.	HYDR8	BWM-15	Safe	Safe
16.	Atlantic	BWM-16	Safe	Safe
17.	Nectar	BWM-17	Safe	Safe
18.	White Gold	BWM-18	Safe	Safe
19.	Deosai	BWM-19	Safe	Safe
20.	Hydra	BWM-20	Safe	Safe
21.	Sunley Pure	BWM-21	Safe	Safe
22.	Maple Dew	BWM-22	Safe	Safe
23.	Hi-Fresh	BWM-23	Safe	Safe
24.	INFINITY	BWM-24	Safe	Safe
25.	Ziran	BWM-25	Safe	Safe
26.	Blu Water	BWM-26	Safe	Safe
27.	New Deep	BWM-27	Safe	Safe
28.	IDEAL Premium Water	BWM-28	Safe	Safe
29.	Aqua7	BWM-29	Safe	Safe
30.	New Classic	BWM-30	Safe	Safe
31.	Happy Vital Life	BWM-31	Safe	Safe
32.	SN Pure Drinking Water	BWM-32	Safe	Safe
33.	Eden Pure Water	BWM-33	Safe	Safe
34.	AQUA CARE	BWM-34	Safe	Safe
35.	Zam Water	BWM-35	Safe	Safe
36.	Aquafina	BWM-36	Safe	Safe
37.	Pine'o	BWM-37	Safe	Safe
38.	Nestle	BWM-38	Safe	Safe
39.	Panee	BWM-39	Safe	Safe
40.	NN Water	BWM-40	Safe	Safe
41.	KINLEY	BWM-41	Safe	Safe
42.	National	BWM-42	Safe	Safe
43.	Dewan Water Express	BWM-45	Safe	Safe
44.	SUFI	BWM-46	Safe	Safe
45.	ASKARI Water	BWM-47	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
46.	Royal Water	BWM-48	Safe	Safe
47.	Blue Ice	BWM-49	Safe	Safe
48.	Cool	BWM-50	Safe	Safe
49.	Butt Water	BWM-51	Safe	Safe
50.	Gourmet	BWM-52	Safe	Safe
51.	Smart Dew	BWM-53	Safe	Safe
52.	Bling H2O	BWM-55	Safe	Safe
53.	MASHMOOM AQUA	BWM-56	Safe	Safe
54.	AQUEOUS	BWM-58	Safe	Safe
55.	Aqua Gen	BWM-59	Safe	Safe
56.	Water Drop	BWM-61	Safe	Safe
57.	Effort	BWM-62	Safe	Safe
58.	DOCE Water	BWM-63	Safe	Safe
59.	Jami Water	BWM-65	Safe	Safe
60.	AQUATIC FRESH	BWM-67	Safe	Safe
61.	WAH Water	BWM-68	Safe	Safe
62.	Natural Aqwah	BWM-69	Safe	Safe
63.	Fresh Life	BWM-70	Safe	Safe
64.	AQUA Splash	BWM-71	Safe	Safe
65.	Moya Mineral Water	BWM-72	Safe	Safe
66.	NEBRASAKA	BWM-73	Safe	Safe
67.	Hydromel	BWM-74	Safe	Safe
68.	Aqua Spring	BWM-75	Safe	Safe
69.	Deep Spring	BWM-76	Safe	Safe
70.	CALCI DEW	BWM-77	Safe	Safe
71.	Verbena	BWM-78	Safe	Safe
72.	Valley	BWM-79	Safe	Safe
73.	Ripple	BWM-80	Safe	Safe
74.	YAS	BWM-81	Safe	Safe
75.	Crystal Springs	BWM-82	Safe	Safe
76.	Aqua Blue Drops	BWM-83	Safe	Safe
77.	OSLO	BWM-84	Safe	Safe
78.	Pearl	BWM-85	Safe	Safe
79.	Dua Water	BWM-86	Safe	Safe
80.	Healthy Water	BWM-87	Safe	Safe
81.	JEL	BWM-88	Safe	Safe
82.	AQUENCH	BWM-89	Safe	Safe
83.	Evan	BWM-90	Safe	Safe
84.	Al-SAHAR	BWM-91	Safe	Safe
85.	Pure 18	BWM-92	Safe	Safe
86.	Water Plus	BWM-93	Safe	Safe
87.	Vey	BWM-95	Safe	Safe
88.	PARADISE	BWM-97	Safe	Safe
89.	Al-Habib	BWM-98	Safe	Safe
90.	Naafey Pure	BWM-99	Safe	Safe
91.	Livon	BWM-100	Safe	Safe
92.	Yes	BWM-101	Safe	Safe
93.	Murree Sparkletts	BWM-103	Safe	Safe



PCRWR TESTING: UNSAFE BRANDS

Sr. No	Brand Name	Code	Address/Manufacturer	Quality (Safe/Unsafe)	
				Chemical	Microbiological
1.	CLEAN PLUS	BWM-43	Bottled By: CLEAN FOODS(Pvt)Ltd.46-J Gulberg III, Lahore www.cleanplus.com.pk	Unsafe	Safe
2.	Royal BLUE	BWM-44	IRIS Foods (Pvt) Ltd. 424-A, Tajpura LDA Scheme, Lahore	Unsafe	Safe
3.	Aqua Health	BWM-54	A Product By:SFS FOODS: 90 km,Multan Road,Habibabad Pakistan saffoods@outlook.com	Unsafe	Unsafe
4.	New Premier	BWM-57	Manufactured by: Zafir Industries: 19-KM, Near Highnoon Laboratories, Multan Road, Lahore	Unsafe	Unsafe
5.	Pacific Pure	BWM-60	Bottled by: Pacific Water Engineer G.T Road Lahore Web:Pacificwaterengineers.com 042-38859992	Unsafe	Unsafe
6.	Active Life	BWM-64	Bottled by: Ali Brother 109-M/11-A,Quaid-e-Azam Industrial Estate Kot Lakhpat Lahore 0342-7728119	Unsafe	Safe
7.	FINO Pure Water	BWM-66	Mansha Enterprises: 549-E, New Commercial Market EME Sector DHA Multan Road, Lahore.	Unsafe	Unsafe
8.	Crystal Maya	BWM-94	Bottled By: Tilon Global Off:B- 221,226,Hub Baluchistan	Unsafe	Safe
9.	Miracle	BWM-96	The Miracle Products(Pvt)Ltd,Plot No.WSA-23,Block 14,F.B Area Karachi	Unsafe	Safe
10.	PURE AQUA	BWM-102	ST-B-2,Block 19,Gulshan-e-Ali,Alnoor More F.B Area Karachi www.pureaqua.com.pk	Unsafe	Safe

MARKET CONSISTENCY IN TWO NEIGHBORING QUARTERS

Sr. No	Consistent Brands	New Brands	Unavailable Brands
1.	ECO	JERS	RACHNA
2.	Isberg	PORFAVOR	Elixir
3.	Vina Fresh	Deosai	AQUWA Plus
4.	Bake Master	Maple Dew	OXEN
5.	AQUA Save	New Deep	Oxygen Plus
6.	Athar	IDEAL Premium Water	Aqua Hygienic
7.	Rise Water	Aqua7	Aqua Filter King
8.	Coral Water	New Classic	Well Care
9.	ICE Well	SN Pure Drinking Water	Lite Aqua
10.	Al-Haider	Eden Pure Water	Pure Fresh Water
11.	MEHR	Pine'o	Noble
12.	Fresh Life	Panee	NG Fresh Water
13.	Hydr8	NN Water	Naseeb
14.	Atlantic	National Water	Nurturmil Water
15.	Nectar	CLEAN Plus	Bliss Water
16.	White Gold	ASKARI Water	Aqua Safe



17.	Hydra	Royal Water	Naimat
18.	Sunley Pure	Blue Ice	Aab-e-Rahat
19.	Hi-Fresh	Cool	Aqua Drink Pure
20.	Infinity	Butt Water	Aqua PRO
21.	Ziran	Smart Dew	Rahat
22.	Blu Water	Aqua Health	Bling
23.	Happy Vital Life	Bling H2O	Aina Aab-e-Hayat
24.	Aqua Care	Aqua Mashmoom	Zin Water
25.	Zam Water	Aqua Gen	Kuality Water
26.	Aquafina	Pacific Pure	Xychil Pure Drinking Water
27.	Nestle	Water Drop	Ola
28.	Kinley	Effort	Aab-e-Khoob
29.	Royal Blue	Active Life	
30.	Dewan Water Express	FINO Pure Water	
31.	Sufi	Wah Water	
32.	Gourmet	Hydromel	
33.	New Premier	Aqua Spring	
34.	AQUEOUS	CALCI Dew	
35.	Doce Water	Aqua Blue Drops	
36.	Jami Water	Pearl	
37.	Aquatic Fresh	Dua Water	
38.	Natural Aqwah	Healthy Water	
39.	Fresh Life	JEL	
40.	Aqua Splash	AQUENCH	
41.	Moya Mineral Water	Evan	
42.	NEBRASAKA	Al-SAHAR	
43.	Deep Spring	Pure 18	
44.	Verbena	Water Plus	
45.	Valley	Crystal Maya	
46.	Ripple	Vey	
47.	YAS	Miracle	
48.	Crystal Springs	PARADISE	
49.	OSLO	Al-Habib	
50.	Murree Sparkletts	Nafey Pure	
51.		Livon	
52.		Yes	
53.		Pure Aqua	

DISEASE POTENTIAL FROM CONTAMINATED BOTTLED WATER

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



CONCLUSIONS

Sr. No	Item	Conclusion	
		No.	% age
1.	Total No. of Brands Collected	103	-
2.	Overall Safe Brands	93	90
3.	No. of Overall Unsafe Brands	10	10
4.	No. of Chemically Safe Brands	93	90
5.	No. of Chemically Unsafe Brands	10	10
6.	No. of Microbiologically Safe Brands	99	96
7.	No. of Microbiologically Unsafe Brands	04	4
8.	No. of Consistent Brands in Market	50	49
9.	No. of Brands Disappeared from Market	28	27
10.	No. of New Brands	53	51

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	PO ₄	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	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	-	-
Units	-	NTU		µS/cm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	MPN /100ml	MPN /100ml
ECO	BWM-01	BDL	7.71	380	209	28	10	110	50	60	28	0.57	BDL	BDL	0.6	BDL	35	BDL	Nil	Nil
Isberg	BWM-02	BDL	7.76	270	149	32	2	90	65	48	20	0.40	BDL	BDL	0.5	BDL	BDL	3	Nil	Nil
Vina Fresh	BWM-03	BDL	7.67	326	179	40	10	140	45	60	8	0.69	BDL	BDL	0.5	BDL	22	BDL	Nil	Nil
Bake Master	BWM-04	BDL	7.66	403	222	36	15	150	55	60	15	0.49	BDL	BDL	0.5	BDL	61	BDL	Nil	Nil
AQUA Save	BWM-05	BDL	7.62	340	187	40	10	140	30	72	9	0.62	BDL	BDL	0.4	BDL	26	BDL	Nil	Nil
Athar	BWM-06	BDL	7.65	389	214	36	10	130	50	72	22	0.10	BDL	BDL	0.4	BDL	32	BDL	Nil	Nil
JERS	BWM-07	BDL	7.56	352	194	40	09	135	50	72	17	0.31	BDL	BDL	1.5	BDL	25	1	Nil	Nil
PORFAVOR	BWM-08	BDL	7.64	612	337	52	27	240	270	14	36	0.51	BDL	BDL	3.6	BDL	18	3	Nil	Nil
Rise Water	BWM-09	BDL	7.63	317	174	20	15	110	100	23	21	0.46	BDL	BDL	0.8	BDL	25	BDL	Nil	Nil
Coral Water	BWM-10	BDL	7.64	302	166	28	10	110	60	50	16	0.55	BDL	BDL	BDL	BDL	15	BDL	Nil	Nil
ICE Well	BWM-11	BDL	7.75	214	118	8	07	50	50	20	24	0.26	BDL	BDL	1.5	BDL	22	BDL	Nil	Nil
Al-Haider	BWM-12	BDL	7.86	116	64	8	7	50	40	18	9	0.7	BDL	BDL	0.7	BDL	BDL	BDL	Nil	Nil
MEHR	BWM-13	BDL	7.29	547	301	68	15	230	180	50	25	0.07	BDL	BDL	0.7	2.7	14	BDL	Nil	Nil
Fresh Life	BWM-14	BDL	7.59	377	207	30	26	180	150	16	10	0.06	BDL	BDL	1.6	1.4	24	BDL	Nil	Nil
HYDR8	BWM-15	BDL	7.35	420	231	44	19	190	150	24	13	0.08	BDL	BDL	0.9	2.2	30	1	Nil	Nil
Atlantic	BWM-16	BDL	7.35	371	204	40	19	180	140	18	9	0.06	BDL	BDL	0.9	1.4	20	BDL	Nil	Nil

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

January-March, 2017

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	PO ₄	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	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	-	-
Nectar	BWM-17	BDL	7.48	393	219	40	22	190	150	18	11	0.06	BDL	BDL	0.9	3.1	22	BDL	Nil	Nil
White Gold	BWM-18	BDL	7.86	298	164	26	7	95	90	30	28	0.04	BDL	BDL	1.1	1.6	15	BDL	Nil	Nil
Deosai	BWM-19	BDL	6.98	377	207	40	5	120	60	65	30	0.09	BDL	BDL	0.2	BDL	27	BDL	Nil	Nil
Hydra	BWM-20	BDL	7.66	422	232	44	11	155	160	20	26	0.1	BDL	BDL	0.9	1.0	24	BDL	Nil	Nil
Sunley Pure	BWM-21	BDL	7.62	421	232	44	10	150	160	19	28	0.20	BDL	BDL	0.9	1.0	24	BDL	Nil	Nil
Maple Dew	BWM-22	BDL	7.12	340	187	40	5	120	50	60	21	0.21	BDL	BDL	BDL	BDL	26	BDL	Nil	Nil
Hi-Fresh	BWM-23	BDL	7.49	272	150	18	10	85	60	36	26	0.23	BDL	BDL	BDL	1.7	19	BDL	Nil	Nil
INFINITY	BWM-24	BDL	7.45	344	189	28	15	130	45	60	18	0.23	BDL	BDL	0.4	1.8	30	BDL	Nil	Nil
Ziran	BWM-25	BDL	7.28	425	234	48	12	170	60	92	20	0.28	BDL	BDL	0.2	BDL	19	BDL	Nil	Nil
Blu Water	BWM-26	BDL	7.42	397	218	34	18	160	60	78	18	0.45	BDL	BDL	0.7	BDL	21	2	Nil	Nil
New Deep	BWM-27	BDL	7.30	338	186	34	15	142	50	60	21	0.15	BDL	BDL	0.2	BDL	38	4	Nil	Nil
IDEAL Premium Water	BWM-28	BDL	7.20	397	220	50	13	170	40	77	19	0.64	BDL	BDL	0.2	BDL	42	1	Nil	Nil
Aqua7	BWM-29	BDL	7.84	341	188	35	18	155	40	56	21	0.17	BDL	BDL	0.2	0.3	74	1	Nil	Nil
New Classic	BWM-30	BDL	7.57	389	214	36	15	150	90	68	22	0.13	BDL	BDL	0.3	BDL	19	2	Nil	Nil
Happy Vital Life	BWM-31	BDL	7.10	286	157	30	14	130	30	68	13	0.38	BDL	BDL	BDL	0.20	23	2.5	Nil	Nil
SN Pure Drinking Water	BWM-32	BDL	7.30	355	196	39	13	155	40	64	22	0.23	BDL	BDL	0.2	0.35	49	3	Nil	Nil
Eden Pure Water	BWM-33	BDL	7.64	334	184	20	12	100	45	48	12	0.44	BDL	BDL	BDL	BDL	11	BDL	Nil	Nil
AQUA CARE	BWM-34	BDL	7.40	370	202	32	12	143	46	60	25	0.35	BDL	BDL	0.3	BDL	52	BDL	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 ₃	Cl	Na	F	PO ₄	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	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	-	-
Zam Water	BWM-35	BDL	7.40	331	182	34	14	145	40	55	21	0.16	BDL	BDL	0.2	0.36	42	1	Nil	Nil
Aquafina	BWM-36	BDL	7.89	192	106	BDL	17	70	30	32	13	0.49	BDL	BDL	0.8	BDL	26	BDL	Nil	Nil
Pine'o	BWM-37	BDL	7.35	375	266	36	15	140	70	86	18	0.70	BDL	BDL	0.6	BDL	5	BDL	Nil	Nil
Nestle	BWM-38	BDL	7.47	445	245	44	19	190	70	96	14	0.62	BDL	BDL	0.2	BDL	18	BDL	Nil	Nil
Panee	BWM-39	BDL	7.39	422	232	36	17	160	65	82	20	0.59	BDL	BDL	1.5	BDL	18	BDL	Nil	Nil
NN Water	BWM-40	BDL	7.48	352	194	24	10	100	70	60	32	0.48	BDL	BDL	0.4	BDL	18	BDL	Nil	Nil
KINLEY	BWM-41	BDL	7.69	201	111	BDL	22	90	30	20	5	0.37	BDL	BDL	BDL	BDL	40	BDL	Nil	Nil
National Water	BWM-42	BDL	7.64	306	168	30	13	130	50	82	18	0.38	BDL	BDL	BDL	BDL	BDL	BDL	Nil	Nil
CLEAN PLUS	BWM-43	BDL	8.04	338	186	12	10	70	75	64	46	0.30	BDL	BDL	1.2	BDL	3	17	Nil	Nil
Royal BLUE	BWM-44	BDL	7.64	501	276	24	2	150	200	34	44	0.16	BDL	BDL	4.2	BDL	6	24	Nil	Nil
Dewan Water Express	BWM-45	BDL	7.84	342	188	40	05	120	50	74	18	0.10	BDL	BDL	BDL	BDL	06	1	Nil	Nil
SUFI	BWM-46	BDL	7.89	351	193	40	07	130	48	84	18	0.06	BDL	BDL	BDL	BDL	BDL	1	Nil	Nil
ASKARI Water	BWM-47	BDL	7.53	394	219	40	10	140	70	74	28	0.08	BDL	BDL	0.2	BDL	22	0.9	Nil	Nil
Royal Water	BWM-48	BDL	7.06	392	216	44	10	150	50	82	20	0.14	BDL	BDL	0.5	BDL	28	BDL	Nil	Nil
Blue Ice	BWM-49	BDL	6.98	368	202	20	12	100	30	72	35	0.30	BDL	BDL	0.3	2.6	28	BDL	Nil	Nil
Cool	BWM-50	BDL	7.33	405	223	40	10	140	80	78	30	0.39	BDL	BDL	0.3	BDL	8	BDL	Nil	Nil
Butt Water	BWM-51	BDL	7.47	306	168	36	10	130	48	65	15	0.53	BDL	BDL	0.4	BDL	19	9	Nil	Nil
Gourmet	BWM-52	BDL	7.48	394	217	40	12	150	60	92	20	0.49	BDL	BDL	0.1	BDL	BDL	BDL	Nil	Nil
Smart Dew	BWM-53	BDL	7.18	453	249	40	10	140	96	70	41	0.54	BDL	BDL	0.3	BDL	30	1	Nil	Nil
Aqua Health	BWM-54	BDL	8.20	418	230	BDL	10	40	140	20	78	0.49	BDL	BDL	0.2	BDL	38	BDL	02	Nil
Bling H2O	BWM-55	BDL	6.90	112	62	BDL	7	30	30	5	13	0.14	BDL	BDL	BDL	BDL	20	2	Nil	Nil

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

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Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	PO ₄	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	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	-	-
MASHMOOM AQUA	BWM-56	BDL	8.02	440	242	54	12	185	160	20	15	0.36	BDL	BDL	1.4	2.4	19	BDL	Nil	Nil
New Premier	BWM-57	BDL	7.40	383	183	14	4	50	100	26	50	0.69	BDL	BDL	1.2	BDL	29	12	18	Nil
AQUEOUS	BWM-58	BDL	7.24	344	189	20	12	100	80	48	39	0.29	BDL	BDL	0.3	BDL	31	BDL	Nil	Nil
Aqua Gen	BWM-59	BDL	6.52	269	143	20	7	80	50	38	23	0.25	BDL	BDL	BDL	BDL	27	BDL	Nil	Nil
Pacific Pure	BWM-60	BDL	8.12	502	276	20	12	100	190	24	77	0.17	BDL	BDL	1.9	BDL	36	30	23	Nil
Water Drop	BWM-61	BDL	7.20	335	184	24	15	120	70	50	23	0.05	BDL	BDL	0.1	BDL	30	0.6	Nil	Nil
Effort	BWM-62	BDL	7.30	355	195	40	12	150	50	70	15	BDL	BDL	BDL	0.5	BDL	30	2	Nil	Nil
DOCE Water	BWM-63	BDL	6.52	350	193	40	12	150	50	70	15	0.10	BDL	BDL	0.3	BDL	36	BDL	Nil	Nil
Active Life	BWM-64	BDL	7.98	310	171	48	5	140	120	17	9	0.13	BDL	BDL	2.9	BDL	19	69	Nil	Nil
Jami Water	BWM-65	BDL	7.15	370	204	24	10	100	90	50	40	0.03	BDL	BDL	0.7	2.5	20	BDL	Nil	Nil
FINO Pure Water	BWM-66	BDL	7.29	371	204	40	12	150	45	78	15	0.06	BDL	BDL	BDL	BDL	28	12	10	Nil
AQUATIC FRESH	BWM-67	BDL	7.72	453	249	40	19	180	120	36	18	0.16	BDL	BDL	1.7	6.1	33	BDL	Nil	Nil
WAH Water	BWM-68	BDL	7.43	402	221	40	12	150	60	82	23	BDL	BDL	BDL	0.1	BDL	26	BDL	Nil	Nil
Natural Aqwah	BWM-69	BDL	7.37	374	206	48	12	150	55	74	17	0.07	BDL	BDL	0.1	BDL	24	BDL	Nil	Nil
Fresh Life	BWM-70	BDL	7.33	449	247	44	10	150	45	96	24	0.06	BDL	BDL	0.9	BDL	31	BDL	Nil	Nil
AQUA Splash	BWM-71	BDL	7.14	289	159	28	12	120	20	68	13	0.10	BDL	BDL	0.5	3.6	17	BDL	Nil	Nil
Moya Mineral Water	BWM-72	BDL	7.20	261	144	40	0	100	70	22	14	0.23	BDL	BDL	1.1	3.7	19	BDL	Nil	Nil
NEBRASAKA	BWM-73	BDL	7.61	375	206	40	12	150	40	72	12	0.17	BDL	BDL	BDL	BDL	32	BDL	Nil	Nil

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PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	PO ₄	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	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	-	-
Hydromel	BWM-74	BDL	7.50	291	160	18	6	70	55	42	30	0.07	BDL	BDL	1.1	1.2	17	BDL	Nil	Nil
Aqua Spring	BWM-75	BDL	6.64	116	64	14	2	45	40	10	6	0.07	BDL	BDL	0.2	BDL	9	BDL	Nil	Nil
Deep Spring	BWM-76	BDL	7.29	467	257	6	9	190	170	24	22	0.18	BDL	BDL	0.6	3.3	19	BDL	Nil	Nil
CALCI DEW	BWM-77	BDL	6.90	369	203	40	10	150	50	72	20	0.06	BDL	BDL	BDL	BDL	25	BDL	Nil	Nil
Verbena	BWM-78	BDL	7.81	459	252	40	15	160	130	50	29	0.16	BDL	BDL	2.6	0.8	20	BDL	Nil	Nil
Valley	BWM-79	BDL	8.24	266	146	22	16	120	80	10	9	0.21	BDL	BDL	1.4	0.6	40	BDL	Nil	Nil
Ripple	BWM-80	BDL	7.59	354	195	36	10	130	50	60	15	0.07	BDL	BDL	1.7	BDL	30	BDL	Nil	Nil
YAS	BWM-81	BDL	7.35	468	263	60	15	210	190	26	20	0.09	BDL	BDL	0.8	3.3	19	BDL	Nil	Nil
Crystal Springs	BWM-82	BDL	8.12	236	130	18	2	54	30	42	16	BDL	BDL	BDL	2.7	BDL	28	BDL	Nil	Nil
Aqua Blue Drops	BWM-83	BDL	7.70	413	227	20	12	100	60	70	48	0.13	BDL	BDL	4.4	1.2	40	BDL	Nil	Nil
OSLO	BWM-84	BDL	7.71	266	146	22	10	95	30	50	16	0.02	BDL	BDL	4.7	BDL	32	BDL	Nil	Nil
Pearl	BWM-85	BDL	8.10	366	201	40	12	150	30	72	9	BDL	BDL	BDL	6.8	BDL	41	BDL	Nil	Nil
Dua Water	BWM-86	BDL	7.69	494	272	60	17	220	30	130	10	BDL	BDL	BDL	1.0	BDL	32	BDL	Nil	Nil
Healthy Water	BWM-87	BDL	7.99	430	237	20	12	100	80	45	48	0.09	BDL	BDL	2.9	1.8	56	BDL	Nil	Nil
JEL	BWM-88	BDL	7.37	198	109	8	7	50	20	42	23	BDL	BDL	BDL	1.0	0.8	15	BDL	Nil	Nil
AQUENCH	BWM-89	BDL	7.40	361	199	28	7	100	40	72	34	BDL	BDL	BDL	3.8	BDL	32	BDL	Nil	Nil
Evan	BWM-90	BDL	7.26	316	174	22	9	90	50	48	30	0.26	BDL	BDL	2.6	BDL	35	BDL	Nil	Nil

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PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	PO ₄	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	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	-	-
Al-SAHAR	BWM-91	BDL	8.05	457	251	20	15	110	60	96	48	0.08	BDL	BDL	8.6	BDL	30	BDL	Nil	Nil
Pure 18	BWM-92	BDL	7.35	412	227	20	12	100	40	88	48	0.02	BDL	BDL	1.8	0.8	35	BDL	Nil	Nil
Water Plus	BWM-93	BDL	7.84	215	118	12	10	70	30	45	17	BDL	BDL	BDL	1.5	0.9	14	BDL	Nil	Nil
Crystal Maya	BWM-94	BDL	8.30	503	277	20	15	110	90	74	58	0.10	BDL	BDL	4.2	BDL	40	BDL	Nil	Nil
Vey	BWM-95	BDL	7.45	300	165	20	12	100	35	60	18	BDL	BDL	BDL	7.6	BDL	26	BDL	Nil	Nil
Miracle	BWM-96	BDL	8.08	326	179	20	12	100	60	48	16	BDL	BDL	BDL	25	BDL	34	BDL	Nil	Nil
PARADISE	BWM-97	BDL	8.18	353	194	BDL	29	120	50	28	23	0.03	BDL	BDL	0.1	0.5	75	BDL	Nil	Nil
Al-Habib	BWM-98	BDL	7.75	423	233	44	12	160	40	82	15	0.08	BDL	BDL	1.8	2.8	30	BDL	Nil	Nil
Naafey Pure	BWM-99	BDL	7.91	339	186	20	10	70	30	85	35	BDL	BDL	BDL	1.3	BDL	20	BDL	Nil	Nil
Livon	BWM-100	BDL	7.96	340	187	8	7	50	30	82	50	0.16	BDL	BDL	0.9	1.8	19	BDL	Nil	Nil
Yes	BWM-101	BDL	7.79	188	103	12	7	60	30	32	16	BDL	BDL	BDL	0.6	0.8	19	BDL	Nil	Nil
PURE AQUA	BWM-102	BDL	7.85	500	275	20	12	100	50	80	60	0.09	BDL	BDL	0.4	2.0	50	BDL	Nil	Nil
Murree Sparkletts	BWM-103	BDL	8.30	352	194	40	12	150	140	12	13	0.11	BDL	BDL	1.0	1.9	17	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.

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