



QUARTERLY REPORT BOTTLED WATER QUALITY

(January-March, 2018)



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

January-March, 2018



SUMMARY

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

Quarterly Monitoring of Bottled/Mineral Water (January-March, 2018)

Item	No.	% age
Total No. of Brands Collected	110	-
Overall Safe Brands	102	93
Overall Unsafe Brands	08	7
Chemically Safe Brands	106	96
Chemically Unsafe Brands	04	4
Microbiologically Safe Brands	106	96
Microbiologically Unsafe Brands	04	4

Name of Targeted Cities	Islamabad, Rawalpindi, Peshawar, Multan, Lahore, Bahawalpur, Tandojam, Quetta, Karachi.	
Chemically Unsafe Brands	Brand Name	Manufacturer(s)
	Edlen Premium	Reg No.338709 www.edlen-water.com
	Aqua Fine	Developed By: Combined Technology of Germany,Korea&Japan
	Pure Aqua	Head Office:ST-B-2,Block-19 Gulistan-e-ali Al-Noor More F.B Area, Karachi www.pureaqua.com.pk 0308-2416521
Microbiologically Unsafe Brands	Livon	A Product By Murtaza Traders Head Office: Suite No.2 Khizar Corner R-143, 2-4 Gulistan-e-Maymar, Karachi.
	Zam	Bottled By: New MHN Drinks & Food Makers(Pvt)Ltd 126-130,Sabzwari Town Multan, Pakistan Mnh.drinks@gmail.com
	Aqua Gold	A Product of M/s Aqua Gold Head Office: Abdullah Plaza Office#2,Opp.St#2 Ghouri Garden Islamabad
	Pure 18	Quality Drinking Water a Product of Bawany Group.
	Aab-e-Noor	A Product By: DP Foods Company. www.dpfoods.com.pk



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	110	
No. of Cities Targeted	09 (Islamabad, Rawalpindi, Peshawar, Multan, Lahore, Bahawalpur, Quetta, Tando Jam, Karachi)	
Composition of Sampling Team As per MoU Signed between PCRWR & PSQCA	One Research Officer and one Laboratory Assistants from PCRWR and Senior staff member and field officer from PSQCA.	
Sampling Procedure	Samples of 110 commercially available brands of mineral/bottled water were collected from local market of 9 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, 2018. A set of four bottles of each brand was collected and sealed on site. Identification codes were allotted to all the brands according to PCRWR Bottled Water Classification System.	
Transparency	Sample No. 1	Handed over to shopkeeper at the time of sample collection;
	Sample No. 2	Preserved in the National Water Quality Laboratory of PCRWR, Islamabad for future record.
	Sample No. 3	Used for Microbiological Analysis
	Sample No. 4	Used for Physico-chemical Analysis



PCRWR BOTTLED WATER CLASSIFICATION SYSTEM

Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
New Aqua Care	BWQ-01	Multan	05/03/2018	-	0.6 Liter	Jabbar Karyana Store Saddar Bazar, Multan Cantt.	Aqua Care Drinking Water D.G. Khan, Pakistan 0331-7402128
Vital Happy Life	BWQ-02	Multan	05/03/2018	-	0.6 Liter	Jabbar Karyana Store Saddar Bazar, Multan Cantt.	LALA Traders Consumer Products: 7 km Multan Road, Sahiwal Product
Pure Fresh Water	BWQ-03	Multan	05/03/2018	-	0.6 Liter	Imran drink Corner Nag Shah Chowk, Multan	Piran Ghaib Road, Multan E-mail: freshwater.pk@gmail.com 0300-4260465
Alfalah	BWQ-04	Multan	05/03/2018	-	0.6 Liter	Hasan Drink Corner Sher Shah Road Multan	Western Fort Commercial Area, Qasim Bela Multan Cantt. wateralfalah@gmail.com
Zam	BWQ-05	Multan	05/03/2018	-	0.6 Liter	Medicine City Nishtar Road.Opp.main Gate Multan	Bottled By: New MHN Drinks & Food Makers(Pvt)Ltd 126-130,Sabzwari Town Multan, Pakistan mnh.drinks@gmail.com
New Deep	BWQ-06	Multan	05/03/2018	06/2018	1.5 Liter	Bilal medical Store,Eid Gah Multan	Bottled By:S.B Food & Beverages Multan Bhutta Street Khanewal Road, Multan.
SN Pure Drinking Water	BWQ-07	Multan	05/03/2018	-	1.5 Liter	Bhutto General Store, Multan Cantt.	A Project of S.N Food & Beverages Multan Pakistan Cell:0331-6307600 Fk786504@gmail.com
Icelay Mineral Water	BWQ-08	Tandojam	14/03/2018	-	0.6 Liter	Discount Medical & General Store Latifabad 07 Hyderabad	A Quality Product ICELAY Food Stuff & Beverages: B.T Commercial 1, S.I.T.E Area, Near Fateh Chowk, Hyderabad.
Safe Water	BWQ-09	Tandojam	14/03/2018	-	0.6 Liter	Lodhi General Store, Near Badin Stop Hyderabad	Registered Trade Mark#308058
Pearl	BWQ-10	Tandojam	14/03/2018	-	0.6 Liter	Salwa Mart Gulistan-e-Sajjad.	Address: 144/6.8 km, Near Toll Plaza Super Highway Jamshoro. www.prarmineralwater.com.pk
NASEH Mineral Water	BWQ-11	Tandojam	14/03/2018	-	0.6 Liter	Super Mart M.Chowk Shell Pump Auto Bhan Road, Hyderabad.	-
Vey	BWQ-12	Tandojam	14/03/2018	-	0.6 Liter	Mehran Dairy & Bakers Jail Road Hyderabad.	Fluid Technology Int'l(Pvt)Ltd.424,Bhayani Center Block-N,North Nazimabad Karachi
Aquafina	BWQ-13	Tandojam	14/03/2018	-	0.6 Liter	Discount Medical & General Store Latifabad 07 Hyderabad	Purified and Filled by Pakistan Beverages Ltd, Survey #212, Deh Konkar, District Malir, Karachi. Under appointment from PepsiCo.
Oslo	BWQ-14	Tandojam	14/03/2018	-	0.5 Liter	Aarbish Medical & Super Store Opp.Asim Clinic	Oslo International: 14-Ramzan Chamber Dr.Bilmoria Street off 11,Chundighr, Karachi



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
New Aqua Water Fresh	BWQ-15	Tandojam	14/03/2018	-	0.6 Liter	Hyderi General Store T.Muhammad Khan Road, Hyderabad.	Aquatitue Water Bottler www.aquawaterfresh.com 03333-3935726
Edlen Premium	BWQ-16	Tandojam	14/03/2018	-	0.6 Liter	Hyderi General Store T.Muhammad Khan Road, Hyderabad.	Reg No.338709 www.edlen-water.com
NEO	BWQ-17	Tandojam	14/03/2018	12/2018	0.6 Liter	Al-Hamra Sweets Badin Stop Hyderabad.	NEO Vatten Product Pakistan Address: Suite 115,Glass Tower,3 Talwar Clifton, Karachi 021-35637773-4-5 www.neovattan.com
Gourmet	BWQ-18	Islamabad	03/04/2018	11/2018	0.6 Liter	Gourmet Saidpur Road Rawalpindi	Gourmet Foods: Gate#1,Plot 1-5,Sundar Industrial Estate, Raiwind Sundar Road,Lahore
Aqua Gold	BWQ-19	Islamabad	03/04/2018	03/2019	0.5 Liter	Chicks and Bull Karachi Company Islamabad	A Product of M/s Aqua Gold Head Office: Abdullah Plaza Office#2,Opp.St#2 Ghouri Garden Islamabad
Fresh Life	BWQ-20	Islamabad	03/04/2018	01/2019	0.5 Liter	Kashmir General Store Karachi Company Islamabad	A Project of T&S Enterprises,Pindorin Main Khana Dak, Islamabad freshlife786@gmail.com Islamabad
Nestle	BWQ-21	Islamabad	02/04/2018	06/2019	0.5 Liter	D-Pharmacy Pindora Rawalpindi	Bottled By Nestle Pakistan Ltd. 308-Upper Mall, Lahore Call:111-123-333
Water Empire	BWQ-22	Islamabad	03/04/2018	-	1.5 Liter	Collected from manufacturing point	Bottle By Water Empire(SMC.PVT)Ltd Plot#156,Bhandar Japan Road, Expressway Highway Islamabad www.waterempire.com.pk
Dasani	BWQ-23	Islamabad	03/04/2018	03/2019	1.5 Liter	Kashmir General Store Abpara Market Islamabad	Bottled Under Authority of The Coca Cola Company By coca-cola Beverages Pakistan Ltd.(CCBPL)26,FCC,Syed Maratab Ali Road, Gulberg IV,Lahore,Pakistan
Sparkling	BWQ-24	Islamabad	02/04/2018	04/2018	0.6 Liter	Malik Customer Pir Wadhai Rawalpindi	Manufactured By:Mehria Food Rawalpindi 0334-4373737
Nectar	BWQ-25	Islamabad	02/04/2018	02/2019	1.5 Liter	Paki Kashmir Medical Pir Wadhai Rawalpindi	Bottle By Nectar Water Islamabad Plot No.14/10 Markaz G-7, Islamabad. nectarenterprises@live.com
MANHAL	BWQ-26	Islamabad	02/04/2018	-	0.5 Liter	Kashmir Hazara General Store, Pindora Rawalpindi	A Project of A.S Traders H-13,Islamabad manhalpakistan@gmail.com 0333-9889880
Murree Sparkletts	BWQ-27	Islamabad	02/04/2018	01/2019	1.5 Liter	Kashmir General Store K.S.S Rawalpindi	Murree Sparkletts (A Division of Murree Brewery Co.) Plot No.10/2, Phase III Industrial Estate, Hattar. tops@comsats.net.pk
Volvic	BWQ-28	Islamabad	02/04/2018	07/2019	1.5 Liter	Dewaston Chemist Surgical & General Order Supplier Chandni Chowk Rawalpindi	Clairvic Spring Societe des eaux de Volvic, France. WWW.VOLVIC.CO.UK



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Sufi	BWQ-29	Islamabad	02/04/2018	11/2019	1.5 Liter	Sweet Palace Satellite Town Plaza Commercial Market, Rawalpindi	Hadayat Foods Stuff Industries (Pvt)Ltd 1-B Garden Block, Garden Town, Lahore.
Fresh Sprinkle	BWQ-30	Islamabad	02/04/2018	02/2019	0.5 Liter	Muhammadi Super Store Commercial Market Rawalpindi	A Bottled by Unify Enterprises(Private)Ltd.
Nestol	BWQ-31	Islamabad	27/03/2018	02/2019	1.5 Liter	Syed General Store	Khana Dak, Park Area Islamabad. 0300-5303135 0315-2340090
Net Water	BWQ-32	Islamabad	27/03/2018	01/2019	0.6 Liter	Pak Khyber General Store	Near Fatima School, Park Area Pindorian, Islamabad
Oxygen+	BWQ-33	Islamabad	27/03/2018	03/2019	0.5 Liter	Abbasi General Store Faizabad, Rawalpindi	Registered Trade Mark of Care Enterprises; Address: Plot#86, St#10 Sector I-9/2 Islamabad.
Kinley	BWQ-34	Islamabad	27/03/2018	08/2018	0.5 Liter	Insaf General Store	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-B Gulberg III, Lahore Pakistan.
Al-Saudia Water pack	BWQ-35	Islamabad	27/03/2018	12/2018	0.5 Liter	Marhaba General Store	Al-Saudia Foods: Burma Town Lehtar Road, Islamabad 051-2614446.
Mehr	BWQ-36	Islamabad	27/03/2018	12/2018	0.5 Liter	Collected from manufacturing point	Bottled by Pir MEHR Ali Shah Arid Agriculture University Murree Road, Rawalpindi
Aquafina	BWQ-37	Islamabad	02/04/2018	03/2019	0.5 Liter	Madina Hotel Commercial Market Rawalpindi	Haidri Beverages (Pvt)Ltd.CDA Industrial Triangle Kahuta Road, Islamabad
Moya Mineral water	BWQ-38	Peshawar	29/03/2018	12/2018	0.6 Liter	Collected from manufacturing point	Al-Saudia Enterprises: Plot#580/B, main Gulberg No.1 Peshawar.
Wah water	BWQ-39	Peshawar	29/03/2018	09/2018	0.6 Liter	Collected from manufacturing point	RG Enterprises: Plot#141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com
Atlantis water	BWQ-40	Peshawar	29/03/2018	-	0.6 Liter	Collected from manufacturing point	Bottled at Source by: SHIRKAT-E-ZARYAB 107-A, Industrial Estate, Hayatabad Peshawar
Top up	BWQ-41	Peshawar	29/03/2018	12/2018	0.6 Liter	Collected from manufacturing point	Top Up Industry:Plot#C-3, Industrial Estate Hayatabad Peshawar
Aqua splash	BWQ-42	Peshawar	29/03/2018	01/2019	0.6 Liter	Collected from manufacturing point	Euro International: 192-A Industrial Estate, Hayatabad, Peshawar.
Natural Aqwah	BWQ-43	Peshawar	29/03/2018	09/2018	0.6 Liter	Collected from manufacturing point	RG Enterprises: Plot # 141, 7-Industrial Estate, Hayatabad, Peshawar. Web:www.aqwah.com
One life	BWQ-44	Peshawar	29/03/2018	12/2018	0.6 Liter	Collected from manufacturing point	Frontier Botanical Research Laboratory(Pvt)Ltd 107-A, Hayatabad Small Industrial Estate, Peshawar www.onelife.pk



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Nebraska	BWQ-45	Peshawar	29/03/2018	01/2019	0.6 Liter	Collected from manufacturing point	Bottled at Dew Point Healthcare Water Purification and Processing Facility:12-C Industrial Estate, Hayatabad, Peshawar.
Aquatic Fresh	BWQ-46	Peshawar	29/03/2018	11/2018	0.6 Liter	Collected from manufacturing point	Royal Food Industries: Plot#1-C, Industrial Estate Hayatabad, Peshawar
Shiraz	BWQ-47	Peshawar	29/03/2018	12/2018	1.5 Liter	Collected from manufacturing point	Frontier Botanical Research Laboratory(Pvt)Ltd 107-A,Hayatabad Small Industrial Estate, Peshawar www.onelife.pk .
Smart Life	BWQ-48	Peshawar	29/03/2018	12/2018	1.5 Liter	Collected from manufacturing point	Top Up Industry:Plot#C-3,Industrial Estate Hayatabad Peshawar
Pure Next	BWQ-49	Bahawalpur	28/03/2018	12/2018	1.5 Liter	Huzefa general Store Sajid Awan Colony Bahawalpur.	Filled by:Mezan Beverages(Pvt)Ltd 45 km,Multan Road,Lahore
AQUA FINE	BWQ-50	Bahawalpur	28/03/2018	-	0.6 Liter	Shan Sweet and Bakers Railway Road, Bahawalpur.	Developed By: Combined Technology of Germany, Korea & Japan.
Aquas	BWQ-51	Bahawalpur	28/03/2018	01/2019	0.6 Liter	Shan Sweet and Bakers Railway Road, Bahawalpur.	Manufactured by:7-Km Airport Road, Bahawalpur yasirmunirrb@gmail.com 03006850895
Ever best	BWQ-52	Bahawalpur	28/03/2018	11/2018	0.5 Liter	Usman Pharmacy M.T.C Road, Bahawalpur.	Friends Beverages:Sukhail Road,Ahmedpur Pur East Bahawalpur Friendsbeverages1@gmail.com
Aqua Crystal Water	BWQ-53	Bahawalpur	28/03/2018	02/2019	0.6 Liter	Life Medical Store Opp.BVH Bahawalpur.	Aqua Platinum Manufactured by FB Food Industries: 0300-2846999 0300-9684407
National	BWQ-54	Bahawalpur	28/03/2018	01/2019	0.5 Liter	Shan Sweet and Bakers Railway Road, Bahawalpur.	Nazir Enterprises Dera Bakha Bahawalpur Nazirenterprises509@gmail.com
Nestle	BWQ-55	Bahawalpur	28/03/2018	06/2019	0.33 Liter	Usman Pharmacy M.T.C Road, Bahawalpur	Bottled By Nestle Pakistan Ltd. 308-Upper Mall, Lahore
Kinley	BWQ-56	Bahawalpur	28/03/2018	12/2018	0.5 Liter	Shan Sweet and Bakers Railway Road, Bahawalpur.	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-B Gulberg III, Lahore Pakistan.
Rahat Water	BWQ-57	Lahore	29/03/2018	01/2019	0.5 Liter	Rahat Bakers And Departmental Store.	Rahat Bakers & Departmental Stores Rahat Market, Aziz Bhatti Shaheed Road,Lahore Cantt.
Erie	BWQ-58	Lahore	29/03/2018	04/2019	0.6 Liter	99-C/2 PGECHS Lahore.	A Project of Sagacious (Pvt) Ltd Lahore. 99 CH PGECHS Lahore.
Fine Life Mineral Water	BWQ-59	Lahore	28/03/2018	03/2019	0.5 Liter	Metro Store Model Town Lahore.	Bottled & Sourced at: Energuide Beverages (Pvt) Ltd. Plot No.35-A,Small Industrial Estate Kot Lakhpat,Lahore
Doce	BWQ-60	Lahore	29/03/2018	03/2019	0.6 Liter	Al-Karim Chowk Township Lahore.	48-M, Quaid-e-Azam Industrial State, Kot Lakhpat, Lahore www.doce.pk 042-3555555



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Good water	BWQ-61	Lahore	29/03/2018	03/2019	0.6 Liter	Al-Karim Chowk Township Lahore.	554-2-A-II Chaudhry Road Al-Kareem Chowk Township Lahore. Goodwater848@gmail.com 0300-4295476
Seasly	BWQ-62	Lahore	28/03/2018	03/2019	0.6 Liter	16-Dilkishan Garden Town Lahore.	Manufactured By Seasly We make Water Pure: 3km,Multan Road,Lahore E-mail: Seaslypurewater@gmail.com 0333-2227744
Blue Ice	BWQ-63	Lahore	28/03/2018	03/2019	0.6 Liter	Collected from manufacturing point	Blue Ice Drinking Water International: 2B,XX Block,Khayaban-e-Iqbal Phase III,D.H.A Lahore Cantt 042-35072252
Omuse	BWQ-64	Lahore	29/03/2018	01/2019	0.6 Liter	Collected from manufacturing point	Omuse drinking Water P-1 Commercial Area Valencia Society Lahore.
Aab-e-khoob	BWQ-65	Lahore	28/03/2018	11/2018	0.6 Liter	Collected from manufacturing point	Aab-e-Khoob: Plot No.9-17, B-1, College Road, Near Akber Chowk Township, Lahore. 042-35214240
Aqua Super Life	BWQ-66	Lahore	29/03/2018	03/2019	0.6 Liter	Collected from manufacturing point	Aqua Super Life 30-C, Naz Town Lahore. 0336-777617
Pure it	BWQ-67	Lahore	29/03/2018	-	0.6 Liter	Palwasha Pharmacy, Rehmat Chowk Wapda Town Lahore.	73,FerozPur Road,Lahore.Pakistan www.pureitpk.com
Aqua Safe	BWQ-68	Lahore	29/03/2018	01/2019	0.6 Liter	Collected from manufacturing point	Aqua Safe Pakistan(Pvt)Ltd 96-Macleoard Road,Lahore
Aqua One Pure Water	BWQ-69	Lahore	29/03/2017	01/2019	0.6 Liter	Collected from manufacturing point	A Project of AQUA One Canada Aqua One Filtration (Pvt)Ltd 30-C,Naz Town Main Boulevard Lahore.
ZAMS Pure Drinking Water	BWQ-70	Lahore	29/03/2018	09/2019	0.6 Liter	Collected from manufacturing point	Zams Global Enterprises Pvt Ltd. Shop No.4, Block-A, Commercial Market Plaza PECHS Valancia Town Lahore.
Glacial	BWQ-71	Lahore	29/03/2018	01/2019	0.6 Liter	Collected from manufacturing point	358-E, Al-Johar Town Lahore. 03424522425 www.glacial.pk
Gourmet	BWQ-72	Lahore	28/03/2018	03/2019	0.6 Liter	Link Road, Near Metro Store Model Town Lahore.	Gourmet Foods: Gate # 1, Plot # 1-5, Sunder Industrial Estate, Raiwind Sunder Road, Lahore, Pakistan.
Aquafina	BWQ-73	Lahore	28/03/2018	02/2019	0.6 Liter	M.H Pan Shop, Khokhar Chowk Road, Lahore.	Riaz Brothers Pvt Ltd 32-N, Gulberg II, Lahore. Under appointment from PepsiCo.
Kinley	BWQ-74	Lahore	28/03/2018	03/2019	0.6 Liter	Metro Store Model Town Lahore.	Coca-Cola Beverages Pakistan Ltd (CCBPL) 5-E-B Gulberg III, Lahore Pakistan.
Nestle	BWQ-75	Lahore	28/03/2018	05/2019	0.6 Liter	EURO Store, M.A Chowk College Road Lahore.	Bottled By: Nestle Pakistan Limited:308-upper Mall,Lahore,Pakistan
Jami Water	BWQ-76	Lahore	28/03/2018	05/2019	6 Liter	Khokhar Chowk College Road, Lahore.	A Product of Jami Water Services: Khokhar Chowk, College Road, Township Lahore. www.jamiwater.com 042-35511699



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Aqua Shilling	BWQ-77	Lahore	28/03/2018	-	6 Liter	Collected from manufacturing point	Aqua Shilling Services 16-Dilkusha Garden, Model Town Lahore. 0342-4175095
Musafa	BWQ-78	Lahore	28/03/2018	01/2019	6 Liter	Rehmat General Store Bagrian Chowk Lahore.	Bottled by: Musaffa Water Services Shop No.61-62, Al-Kareem Garden main G.T Road Sotar Mill Stop Manawan Lahore. www.musafawater.com
Dasani	BWQ-79	Lahore	28/03/2018	03/2019	1.5 Liter	Hamza Store, Khokhar Chowk, Gulberg Road, Lahore.	Bottled Under Authority of The Coca Cola Company By coca-cola Beverages Pakistan Ltd.(CCBPL)26,FCC,Syed Maratab Ali Road, Gulberg IV,Lahore,Pakistan
Health Guard	BWQ-80	Lahore	29/03/2018	03/2019	1.5 Liter	Collected from manufacturing point	Head Office 16-km,Civic Centre Industrial Market, Model Town Ext.Lahore Plant:BRB Canal Bank Bhoja,Kasur Pakistan www.healthguard.pk
New Elixir Water	BWQ-81	Lahore	29/03/2018	03/2019	1.5 Liter	Collected from manufacturing point	Bottled By Hussain Enterprises 326-Eden Centre, Jail Road,Lahore
Trust Drinking Water	BWQ-82	Lahore	28/03/2018	-	1.5 Liter	Collected from manufacturing point	Trust Drinking Water 420(G) Block Q,Model Town(Ext) Lahore trustwater@gmail.com 0336-8241114
Cristalene	BWQ-83	Lahore	29/03/2018	12/2018	1.5 Liter	Collected from manufacturing point	A Product of Cristalene Pak Brothers: 30/A-1 Al-Feroz Plaza Commercial Area Valenica Society Lahore. www.cristalenepak.com
Miracle	BWQ-84	Karachi	03/04/2018	03/2019	0.5 Liter	Al-Noor General Store Rabia City Karachi	The Miracle Products (Pvt), Ltd. WSA-23, Block 14, FB Industrial Area, Karachi 021-36314779
Mag life	BWQ-85	Karachi	03/04/2018	-	0.5 Liter	Bukhari Super Store,Rabia city Karachi	Address: S-1, Ground Floor, West Land Trade Centre, Block7-b, Shaheed-e-Millat Road, K.C.H.S Karachi.
Pure Aqua	BWQ-86	Karachi	03/04/2018	12/2020	0.5 Liter	Dera Milkand General Store Natha Khan, Karachi	Head Office:ST-B-2,Block-19 Gulistan-e-ali Al-Noor More F.B Area, Karachi www.pureaqua.com.pk 0308-2416521
Florence	BWQ-87	Karachi	03/04/2018	-	0.5 Liter	MashaAllah Super Store,Rabia City Karachi	0331-2018880 0315-3007667 021-3667-9743
Masafi	BWQ-88	Karachi	03/04/2018	01/2019	0.5 Liter	Bin Hashim Gulistan-e-Johar, Near Safoora Churangi	Produced for Masafi Co. (LLC) P.O.BOX 5603, Dubai, UAE by Al-Ghadeer Mineral Water Bottling Factory.
Yes	BWQ-89	Karachi	02/04/2018	12/2018	0.5 Liter	Qadeer Khan General Store Check Post No.06 Malir Cantt Karachi	Mega Fine Industries: Plot A-79,Industrial Area, Malir Karachi
Al-Atash	BWQ-90	Karachi	02/04/2017	12/2018	1.5 Liter	Hamar Cold Shop Check Post No.06 Malir Cantt Karachi	A Product of HPE, PlotNo.60, Sec 51, Super Highway, Karachi.



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Crystal Maya	BWQ-91	Karachi	02/04/2018	-	1.5 Liter	Hamar Cold Shop Check Post No.06 Malir Cantt Karachi	A Product of Asghar and Sons
Aab-e-Dubai	BWQ-92	Karachi	02/04/2018	02/2019	1.5 Liter	Hamar Cold Shop Check Post No.06 Malir Cantt Karachi	Produced By: Alpha Pure Drinking Water L.L.C United Arab Emirates
Safe Life	BWQ-93	Karachi	03/04/2018	-	0.6 Liter	Swabi General Store, Shah Faisal Colony No.01, Karachi.	Head Office:Plot#411,M.Colony, Garden West, Karachi
Nurturmil water	BWQ-94	Karachi	03/04/2018	11/2018	1.5 Liter	Plot No.Sb-18-19,Block-7,Bin Hashim Gulistan-e-Johar, Karachi	Manufactured Mac & Rains Health Care(Pvt)Ltd 540-D,Sundar Industrial Estate, Raiwind Road,Lahore
Pure 18	BWQ-95	Karachi	02/04/2018	12/2018	0.5 Liter	Memon Pan Shop Block-04 Gulistan-e-Johar, Karachi	Quality Drinking Water a Product of Bawany Group.
NEO	BWQ-96	Karachi	03/04/2018	09/2019	0.5 Liter	Pakeeza Cold Drink Shah Faisal Karachi.	NEO Vatten Product Pakistan Address: Suite 115,Glass Tower,3 Talwar Clifton, Karachi
ABS Mineral	BWQ-97	Karachi	02/04/2018	-	0.5 Liter	Bhai Jan Karyana General Store Block-03 Gulistan-e-Johar, Karachi.	Bottled by: ABS Enterprises B-16, A, E.C.H.S Block-8, Gulistan-e-Johar, Karachi.
Aab-e-Noor	BWQ-98	Karachi	02/04/2018	-	0.5 Liter	Madina Shop Check Post No.06 Malir Cantt Karachi	A Product By: DP Foods Company. www.dpfoods.com.pk
Orion	BWQ-99	Karachi	02/04/2018	-	0.5 Liter	Al-Syed Hospital Malir Cantt No.06 Karachi	Madina Bottles(Pvt)Ltd 0/3 Elahi Ware house Sector,7-A Korangi Industrial Area Karachi
Dam	BWQ-100	Karachi	03/04/2018	-	0.6 Liter	MashaAllah Milk Shop Shah Faisal Colony, Karachi	Manufacturer Dam Waters 47/1 Siddiquabad Model Colony Karachi.
Douro	BWQ-101	Karachi	02/04/2018	06/2019	0.5 Liter	Mobile Market Shop No.24 Block No.4 Gulistan-e-Johar, Karachi	A Product of Douro International: Plot#C-14, Sultan Road, F.B Area Karachi 0314-3442577
Defence Mineral Water	BWQ-102	Karachi	03/04/2018	12/2018	0.5 Liter	Ali Baba Cold Drink Shah Faisal Colony No.04,Karachi	3/12 Block-3 S.F.C Industrial Area Karachi. 021-4684928
Livon	BWQ-103	Karachi	03/04/2018	12/2020	0.5 Liter	Monriso Water Selling Point Shah Faisal Colony No.04 Karachi	A Product By Murtaza Traders Head Office: Suite No.2 Khizar Corner R-143, 2-4 Gulistan-e-Maymar, Karachi.
Evan	BWQ-104	Karachi	02/04/2018	12/2019	0.6 Liter	Madina Medicine Shop No.29 Karachi	D-351,Block N,North Nazimabad Karachi
Springley	BWQ-105	Islamabad	12/04/2018	-	0.6 Liter	Happy Departmental Store I-8/1,Mughal Market Islamabad	Qarshi Industries (Pvt) Ltd.Plot No.56/1-4 Phase I&11 Hattar Industrial Estate Distt Haripur KPK.
Culligan	BWQ-106	Quetta	27/03/2018		1.5 Liter	Zam Zam Store Jinnah Town, Quetta	Culligan Water For Pakistan Johan(Pvt)Ltd.F-17/A, Hub River Road,S.I.T.E Karachi
Aqua One	BWQ-107	Quetta	27/03/2018		1.5 Liter	Quetta Medical Store ,Jinnah Road Quetta	Aqua One Filtration Pvt Ltd. 30-A Naaz Town, Lahore.
I Pure	BWQ-108	Quetta	27/03/2018		1.5 Liter	Quetta Medical Store ,Jinnah Road Quetta	S&G Brothers



Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Size	Name & Address of Seller/Shop Keeper	Manufacturer's Address
Chen Water	BWQ-109	Quetta	27/03/2018		1.5 Liter	Jamil Juice Centre, Jinnah Road Quetta.	Chen Industries Pvt Ltd.
JEL	BWQ-110	Quetta	27/03/2018		1.5 Liter	Sada Bahar Terminal Sariab Road, Quetta.	Mega Fine Industries: Plot No.A-92,Malir Industrial Area Malir Karachi E-mail: info@megafineindustries.com

WATER QUALITY PARAMETERS AND METHODS USED FOR ANALYSIS

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



Sr. #	PARAMETERS	ANALYTICAL METHOD
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



Sr. #	Parameter	Units	Permissible Limits		
			WHO	IBWA	PSQCA
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.	Aqua Fine	BWQ-50	Lahore	Ppb	20

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

Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	Edlen Premium	BWQ-16	Tandojam	Ppm	60
2.	Pure Aqua	BWQ-86	Karachi	Ppm	57
3.	Livon	BWQ-103	Karachi	Ppm	58

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.	Zam	BWQ-05	18	Nil
2.	Aqua Gold	BWQ-19	24	Nil
3.	Pure 18	BWQ-95	12	Nil
4.	Ab-e-Noor	BWQ-98	14	Nil



PCRWR TESTING: SAFE BRANDS

Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
1.	New Aqua Care	BWQ-01	Safe	Safe
2.	Vital Happy Life	BWQ-02	Safe	Safe
3.	Pure Fresh Water	BWQ-03	Safe	Safe
4.	Alfalah	BWQ-04	Safe	Safe
5.	New Deep	BWQ-06	Safe	Safe
6.	SN Pure Drinking Water	BWQ-07	Safe	Safe
7.	Iceland Mineral Water	BWQ-08	Safe	Safe
8.	Safe Water	BWQ-09	Safe	Safe
9.	Pearl	BWQ-10	Safe	Safe
10.	NASEH Mineral Water	BWQ-11	Safe	Safe
11.	Vey	BWQ-12	Safe	Safe
12.	Aquafina	BWQ-13	Safe	Safe
13.	Oslo	BWQ-14	Safe	Safe
14.	New Aqua Water Fresh	BWQ-15	Safe	Safe
15.	NEO	BWQ-17	Safe	Safe
16.	Gourmet	BWQ-18	Safe	Safe
17.	Fresh Life	BWQ-20	Safe	Safe
18.	Nestle	BWQ-21	Safe	Safe
19.	Water Empire	BWQ-22	Safe	Safe
20.	Dasani	BWQ-23	Safe	Safe
21.	Sparkling	BWQ-24	Safe	Safe
22.	Nectar	BWQ-25	Safe	Safe
23.	MANHAL	BWQ-26	Safe	Safe
24.	Murree Sparkletts	BWQ-27	Safe	Safe
25.	Volvic	BWQ-28	Safe	Safe
26.	Sufi	BWQ-29	Safe	Safe
27.	Fresh Sprinkle	BWQ-30	Safe	Safe
28.	Nestol	BWQ-31	Safe	Safe
29.	Net Water	BWQ-32	Safe	Safe
30.	Oxygen+	BWQ-33	Safe	Safe
31.	Kinley	BWQ-34	Safe	Safe
32.	Al-Saudia Water pack	BWQ-35	Safe	Safe
33.	Mehr	BWQ-36	Safe	Safe
34.	Aquafina	BWQ-37	Safe	Safe
35.	Moya Mineral water	BWQ-38	Safe	Safe
36.	Wah water	BWQ-39	Safe	Safe
37.	Atlantis water	BWQ-40	Safe	Safe
38.	Top up	BWQ-41	Safe	Safe
39.	Aqua splash	BWQ-42	Safe	Safe
40.	Natural Aqwah	BWQ-43	Safe	Safe
41.	One life	BWQ-44	Safe	Safe
42.	Nebraska	BWQ-45	Safe	Safe
43.	Aquatic Fresh	BWQ-46	Safe	Safe
44.	Shiraz	BWQ-47	Safe	Safe
45.	Smart Life	BWQ-48	Safe	Safe
46.	Pure Next	BWQ-49	Safe	Safe
47.	Aquas	BWQ-51	Safe	Safe
48.	Ever best	BWQ-52	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
49.	Aqua Crystal Water	BWQ-53	Safe	Safe
50.	National	BWQ-54	Safe	Safe
51.	Nestle	BWQ-55	Safe	Safe
52.	Kinley	BWQ-56	Safe	Safe
53.	Rahat Water	BWQ-57	Safe	Safe
54.	Erie	BWQ-58	Safe	Safe
55.	Fine Life Mineral Water	BWQ-59	Safe	Safe
56.	Doce	BWQ-60	Safe	Safe
57.	Good water	BWQ-61	Safe	Safe
58.	Seasly	BWQ-62	Safe	Safe
59.	Blue Ice	BWQ-63	Safe	Safe
60.	Omuse	BWQ-64	Safe	Safe
61.	Aab-e-khoob	BWQ-65	Safe	Safe
62.	Aqua Super Life	BWQ-66	Safe	Safe
63.	Pure it	BWQ-67	Safe	Safe
64.	Aqua Safe	BWQ-68	Safe	Safe
65.	Aqua One Pure Water	BWQ-69	Safe	Safe
66.	ZAMS Pure Drinking Water	BWQ-70	Safe	Safe
67.	Glacial	BWQ-71	Safe	Safe
68.	Gourmet	BWQ-72	Safe	Safe
69.	Aquafina	BWQ-73	Safe	Safe
70.	Kinley	BWQ-74	Safe	Safe
71.	Nestle	BWQ-75	Safe	Safe
72.	Jami Water	BWQ-76	Safe	Safe
73.	Aqua Shilling	BWQ-77	Safe	Safe
74.	Musafa	BWQ-78	Safe	Safe
75.	Dasani	BWQ-79	Safe	Safe
76.	Health Guard	BWQ-80	Safe	Safe
77.	New Elixir Water	BWQ-81	Safe	Safe
78.	Trust Drinking Water	BWQ-82	Safe	Safe
79.	Cristalene	BWQ-83	Safe	Safe
80.	Miracle	BWQ-84	Safe	Safe
81.	Mag life	BWQ-85	Safe	Safe
82.	Florence	BWQ-87	Safe	Safe
83.	Masafi	BWQ-88	Safe	Safe
84.	Yes	BWQ-89	Safe	Safe
85.	Al-Atash	BWQ-90	Safe	Safe
86.	Crystal Maya	BWQ-91	Safe	Safe
87.	Aab-e-Dubai	BWQ-92	Safe	Safe
88.	Safe Life	BWQ-93	Safe	Safe
89.	Nurturmil Water	BWQ-94	Safe	Safe
90.	NEO	BWQ-96	Safe	Safe
91.	ABS Mineral	BWQ-97	Safe	Safe
92.	Orion	BWQ-99	Safe	Safe
93.	Dam	BWQ-100	Safe	Safe
94.	Douro	BWQ-101	Safe	Safe
95.	Defence Mineral Water	BWQ-102	Safe	Safe
96.	Evan	BWQ-104	Safe	Safe
97.	Springley	BWQ-105	Safe	Safe



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
98.	Culligan	BWQ-106	Safe	Safe
99.	Aqua One	BWQ-107	Safe	Safe
100.	I Pure	BWQ-108	Safe	Safe
101.	Chen Water	BWQ-109	Safe	Safe
102.	JEL	BWQ-110	Safe	Safe

PCRWR TESTING: UNSAFE BRANDS

Sr. No	Brand Name	Code	Address/Manufacturer	Quality (Safe/Unsafe)	
				Chemical	Microbiological
1.	Zam	BWQ-05	Bottled By: New MHN Drinks & Food Makers(Pvt)Ltd 126-130,Sabzwari Town Multan, Pakistan Mnh.drinks@gmail.com	Safe	Unsafe
2.	Edlen Premium	BWQ-16	Reg No.338709 www.edlen-water.com	Unsafe	Safe
3.	Aqua Gold	BWQ-19	A Product of M/s Aqua Gold Head Office: Abdullah Plaza Office#2,Opp.St#2 Ghouri Garden Islamabad	Safe	Unsafe
4.	Aqua Fine	BWQ-50	Developed By: Combined Technology of Germany,Korea&Japan	Unsafe	Safe
5.	Pure Aqua	BWQ-86	Head Office:ST-B-2,Block-19 Gulistan-e-ali Al-Noor More F.B Area, Karachi www.pureaqua.com.pk 0308-2416521	Unsafe	Safe
6.	Pure 18	BWQ-95	Quality Drinking Water a Product of Bawany Group.	Safe	Unsafe
7.	Aab-e-Noor	BWQ-98	A Product By: DP Foods Company. www.dpfoods.com.pk	Safe	Unsafe
8.	Livon	BWQ-103	A Product By Murtaza Traders Head Office: Suite No.2 Khizar Corner R-143, 2-4 Gulistan-e-Maymar, Karachi.	Unsafe	Safe

MARKET CONSISTENCY IN TWO NEIGHBORING QUARTERS

Sr. No	Consistent Brands	New Brands	Unavailable Brands
1.	Alfalah	New Aqua Care	Aqua Stream
2.	Zam	Vital Happy Life	Valley
3.	New Deep	Pure Fresh Water	Venora
4.	SN Pure Drinking Water	Iceland Mineral Water	Deosai
5.	Pearl	Safe Water	Hydra
6.	Aquafina (3Time)	NASEH Mineral Water	Sunley Pure
7.	Oslo	Vey	Hayat
8.	NEO (02 Time)	New Aqua water Fresh	Aquax
9.	Gourmet (02 Time)	Edlen Premium	Happy Life
10.	Fresh Life	Aqua Gold	Marina
11.	Nestle (03 Time)	Water Empire	Aab-e-Khyber
12.	Murree Sparkletts	Dasani	Calci Dew
13.	Nestol	Sparkling	Maple Dew
14.	Oxygen+	Nectar	Elovina Water
15.	Kinley (03 Time)	MANHAL	Softine Pure Water
16.	Al-Saudia(Water Pack)	Volvic	Sea Pack
17.	Moya Mineral Water	Fresh Sprinkle	Bio Crystal
18.	Top Up	Net Water	Aqua Vita



Sr. No	Consistent Brands	New Brands	Unavailable Brands
19.	Natural Aqwah	Mehr	Limpid Fresh
20.	One Life	Wah Water	Water Icon
21.	Nebrasaka	Atlantis Water	Refresh Pure Water
22.	Aquatic Fresh	Aqua Splash	Aqua Value
23.	Shiraz	Smart Life	AQVINA
24.	Erie	Pure Next	Shafi
25.	Doce	Aqua Fine	Aquantus
26.	Omuse	Aquas	ORABEL Pure Water
27.	Pure It	Ever Best	Life Water
28.	Cristalene	Aqua Crystal Water	Hydr8
29.	Miracle	National	TWS
30.	Mag Life	Rahat Water	Fresh Drop
31.	Pure Aqua	Fine Life Mineral Water	Vina Fresh
32.	Yes	Good Water	Bake Master
33.	Al-Atash	Seasly	Isberg
34.	Safe Life	Blue Ice	Ice Well
35.	Pure 18	Aab-e-Khoob	ECO
36.	Aab-e-Noor	Aqua Super Life	Athar
37.	Orion	Aqua Safe	OASIS Plus
38.	Douro	Aqua One Pure Water	3 Star
39.	Springley	ZAMS Pure Drinking Water	Ziran
40.	Culligan	Glacial	Cool Aqua Cool
41.	JEL	Aqua Shilling	Filter Aqua King
42.	Jami Water	Health Guard	Aqua Hygienic
43.	Aqua One	New Elixer Water	Aqua Super Life
44.	I Pure	Trust Drinking water	Heaven H2O
45.	ABS Minerals	Florence	FINO
46.	Sufi	Masafi	Cool
47.	Musafa	Crystal Maya	Higen H2O
48.		Aab-e-Dubai	Dewan Water Express
49.		Nurturmil Water	Aqua National
50.		Dam	Aqua Saad
51.		Defence Mineral Water	H2O Life
52.		Livon	Sipley Water
53.		Evan	Kristil Aquas
54.		Chen Water	Pine'o
55.			Panee
56.			Aqua Crystal Water
57.			Eden Pure Water
58.			Classic
59.			Al-Zaid
60.			Eden
61.			Snow Dip
62.			Reliable
63.			Sunlay
64.			Aab-e-Sahat
65.			Crystal Maya
66.			Cottage Foods Drink Water
67.			Manahil
68.			Aquench
69.			MR.
70.			City Mineral Water
71.			Wasser
72.			Orish



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

CONCLUSIONS

Sr. No	Item	Conclusion	
		No.	% age
1.	Total No. of Brands Collected	110	-
2.	Overall Safe Brands	102	93
3.	No. of Overall Unsafe Brands	08	7
4.	No. of Chemically Safe Brands	106	96
5.	No. of Chemically Unsafe Brands	04	4
6.	No. of Microbiologically Safe Brands	106	96
7.	No. of Microbiologically Unsafe Brands	04	4
8.	No. of Consistent Brands in Market	47	43
9.	No. of Brands Disappeared/Unavailable	72	65
10.	No. of New Brands	54	49

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	NGV S	NGV S	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
New Aqua Care	BWQ-01	BDL	7.49	343	211	40	12	150	39	57	24	0.16	BDL	BDL	0.6	BDL	44	2	Negative	Negative
Vital Happy Life	BWQ-02	BDL	7.40	355	210	25	17	133	20	70	15	0.12	BDL	BDL	BDL	BDL	42	8	Negative	Negative
Pure Fresh Water	BWQ-03	BDL	7.06	516	284	20	12	100	160	24	32	0.3	BDL	BDL	3.6	0.8	56	0.5	Negative	Negative
Alfalsh	BWQ-04	BDL	7.49	336	190	39	12	147	40	70	19	0.06	BDL	BDL	0.2	0.6	45	BDL	Negative	Negative
Zam	BWQ-05	BDL	6.87	348	191	36	9	130	30	60	16	BDL	BDL	BDL	0.2	1.3	46	BDL	08	Negative
New Deep	BWQ-06	BDL	7.50	354	195	30	13	130	40	55	18	0.08	BDL	BDL	BDL	1.1	48	BDL	Negative	Negative
SN Pure Drinking Water	BWQ-07	BDL	7.61	362	199	32	13	135	40	64	19	0.16	BDL	BDL	BDL	0.8	42	9	Negative	Negative
Iceland Mineral Water	BWQ-08	BDL	6.60	594	327	40	31	230	50	134	27	0.08	BDL	BDL	0.5	BDL	50	1	Negative	Negative
Safe Water	BWQ-09	BDL	6.53	220	121	20	1	55	20	43	22	BDL	BDL	BDL	0.3	1.2	26	BDL	Negative	Negative
Pearl	BWQ-10	BDL	6.65	348	191	28	14	130	40	68	18	0.18	BDL	BDL	3.5	BDL	35	BDL	Negative	Negative
NASEH Mineral Water	BWQ-11	BDL	6.64	339	186	4	10	50	35	75	50	BDL	BDL	BDL	1.2	BDL	30	BDL	Negative	Negative
Vey	BWQ-12	BDL	6.60	322	177	32	5	100	30	65	20	BDL	BDL	BDL	9.0	BDL	30	BDL	Negative	Negative
Aquafina	BWQ-13	BDL	7.95	230	127	0	14	60	20	30	21	0.25	BDL	BDL	1.1	BDL	50	BDL	Negative	Negative
Oslo	BWQ-14	BDL	6.50	527	290	44	22	200	50	120	23	BDL	BDL	BDL	3.3	BDL	37	BDL	Negative	Negative
New Aqua Water Fresh	BWQ-15	BDL	6.72	437	240	10	6	50	40	92	35	0.08	BDL	BDL	2.2	0.5	38	0.3	Negative	Negative

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	-	-
Edlen Premium	BWQ-16	BDL	6.80	447	246	20	10	90	50	82	60	BDL	BDL	BDL	2.3	BDL	52	0.4	Negative	Negative
NEO	BWQ-17	BDL	6.58	349	192	20	17	120	40	72	22	BDL	BDL	BDL	6.3	1.2	30	BDL	Negative	Negative
Gourmet	BWQ-18	BDL	7.03	403	222	40	10	140	35	96	26	BDL	BDL	BDL	0.0	0.4	30	BDL	Negative	Negative
Aqua Gold	BWQ-19	BDL	7.03	354	195	20	12	100	50	70	37	BDL	BDL	BDL	0.2	BDL	28	0.3	24	Negative
Fresh Life	BWQ-20	BDL	7.05	309	170	40	10	140	130	10	9	BDL	BDL	BDL	0.9	BDL	14	0.4	Negative	Negative
Nestle	BWQ-21	BDL	7.10	430	237	40	12	150	50	96	25	BDL	BDL	BDL	0.2	1.3	20	BDL	Negative	Negative
Water Empire	BWQ-22	BDL	7.06	227	125	20	10	90	70	24	10	BDL	BDL	BDL	0.5	BDL	7	0.2	Negative	Negative
Dasani	BWQ-23	BDL	7.10	263	145	BDL	24	100	50	BDL	10	BDL	BDL	BDL	1.5	BDL	70	BDL	Negative	Negative
Sparkling	BWQ-24	BDL	7.06	440	242	40	22	190	180	20	18	0.04	BDL	BDL	0.7	0.3	20	0.24	Negative	Negative
Nectar	BWQ-25	BDL	7.01	393	216	40	16	165	130	20	15	BDL	BDL	BDL	0.9	BDL	36	BDL	Negative	Negative
MANHAL	BWQ-26	BDL	6.61	316	174	40	8	135	35	70	10	0.06	BDL	BDL	BDL	BDL	22	BDL	Negative	Negative
Murree Sparkletts	BWQ-27	BDL	7.45	366	201	40	12	150	140	18	15	BDL	BDL	BDL	1	0.6	18	BDL	Negative	Negative
Volvic	BWQ-28	BDL	7.10	240	132	16	12	90	40	20	9	0.15	BDL	BDL	5.8	BDL	50	BDL	Negative	Negative
Sufi	BWQ-29	BDL	7.02	352	194	40	12	150	40	77	12	BDL	BDL	BDL	BDL	BDL	24	BDL	Negative	Negative
Fresh Sprinkle	BWQ-30	BDL	6.99	323	178	40	10	140	135	12	12	0.08	BDL	BDL	1	1.3	19	0.3	Negative	Negative
Nestol	BWQ-31	BDL	7.05	343	189	20	14	110	50	60	23	BDL	BDL	BDL	BDL	BDL	23	0.2	Negative	Negative
Net Water	BWQ-32	BDL	7.03	288	158	20	18	125	70	32	9	BDL	BDL	BDL	0.4	BDL	28	BDL	Negative	Negative
Oxygen+	BWQ-33	BDL	6.84	356	196	18	15	110	50	60	25	BDL	BDL	BDL	0.2	BDL	28	BDL	Negative	Negative
Kinley	BWQ-34	BDL	7.90	303	167	BDL	32	130	70	25	8	0.11	BDL	BDL	2.6	BDL	45	BDL	Negative	Negative
Al-Saudia Water pack	BWQ-35	BDL	6.70	325	179	20	21	135	50	18	12	0.27	BDL	BDL	BDL	BDL	81	0.6	Negative	Negative
Mehr	BWQ-36	BDL	7.31	263	145	30	1.2	80	70	34	25	0.04	BDL	BDL	0.7	BDL	10	BDL	Negative	Negative
Aquafina	BWQ-37	BDL	6.96	202	111	BDL	12	50	20	26	19	0.08	BDL	BDL	1.1	BDL	36	BDL	Negative	Negative
Moya Mineral water	BWQ-38	BDL	6.67	284	156	20	14	110	90	29	15	BDL	BDL	BDL	1.2	BDL	10	0.26	Negative	Negative

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	-	-
Wah water	BWQ-39	BDL	6.76	393	216	40	12	150	50	82	24	BDL	BDL	BDL	BDL	0.4	35	BDL	Negative	Negative
Atlantis water	BWQ-40	BDL	7.02	496	273	40	29	220	200	20	20	0.28	BDL	BDL	1.9	BDL	31	0.3	Negative	Negative
Top up	BWQ-41	BDL	7.37	447	246	40	22	190	130	48	15	0.19	BDL	BDL	1.4	0.8	25	0.38	Negative	Negative
Aqua splash	BWQ-42	BDL	7.13	333	183	40	5	120	40	82	20	BDL	BDL	BDL	0.5	BDL	6	BDL	Negative	Negative
Natural Aqwah	BWQ-43	BDL	7.05	390	215	40	12	150	50	85	22	BDL	BDL	BDL	0.2	BDL	24	BDL	Negative	Negative
One life	BWQ-44	BDL	7.04	361	199	28	17	140	40	72	19	BDL	BDL	BDL	0.4	BDL	35	BDL	Negative	Negative
Nebraska	BWQ-45	BDL	7.04	384	211	40	10	140	45	76	23	0.23	BDL	BDL	0.2	BDL	35	BDL	Negative	Negative
Aquatic Fresh	BWQ-46	BDL	7.04	577	317	40	29	220	140	82	27	BDL	BDL	BDL	2.3	BDL	26	0.40	Negative	Negative
Shiraz	BWQ-47	BDL	7.06	374	206	40	12	150	50	75	19	BDL	BDL	BDL	0.4	BDL	33	0.30	Negative	Negative
Smart Life	BWQ-48	BDL	7.26	433	238	40	14	160	130	36	21	BDL	BDL	BDL	1.9	0.4	31	1	Negative	Negative
Pure Next	BWQ-49	BDL	7.86	356	196	12	12	80	50	60	42	0.19	BDL	BDL	0.4	BDL	36	0.9	Negative	Negative
AQUA FINE	BWQ-50	BDL	7.21	392	216	24	17	130	120	24	32	0.32	BDL	BDL	2.5	BDL	50	20	Negative	Negative
Aquas	BWQ-51	BDL	7.80	319	175	20	14	110	30	72	20	BDL	BDL	BDL	0.3	BDL	18	0.38	Negative	Negative
Ever best	BWQ-52	BDL	7.32	363	200	40	7	130	50	72	22	BDL	BDL	BDL	0.9	BDL	24	BDL	Negative	Negative
Aqua Crystal Water	BWQ-53	BDL	7.25	349	192	20	14	110	90	24	26	BDL	BDL	BDL	1.9	BDL	46	5.45	Negative	Negative
National	BWQ-54	BDL	7.27	298	164	28	10	110	45	60	18	0.01	BDL	BDL	BDL	BDL	20	0.35	Negative	Negative
Nestle	BWQ-55	BDL	7.26	420	231	40	17	170	35	96	13	BDL	BDL	BDL	BDL	BDL	30	0.20	Negative	Negative
Kinley	BWQ-56	BDL	7.04	201	111	BDL	20	84	8	0	5	BDL	BDL	BDL	BDL	BDL	88	BDL	Negative	Negative
Rahat Water	BWQ-57	BDL	7.25	338	186	28	12	120	50	60	20	BDL	BDL	BDL	0.4	2.4	31	0.22	Negative	Negative
Erie	BWQ-58	BDL	6.96	316	174	28	12	120	50	61	19	BDL	BDL	BDL	BDL	2.2	25	BDL	Negative	Negative
Fine Life Mineral Water	BWQ-59	BDL	7.09	353	194	24	13	115	50	64	27	BDL	BDL	BDL	0.2	BDL	35	3.08	Negative	Negative
Doce	BWQ-60	BDL	6.54	346	190	20	14	110	50	64	27	BDL	BDL	BDL	0.5	BDL	30	0.41	Negative	Negative
Good water	BWQ-61	BDL	6.70	382	210	40	6	125	50	70	30	0.01	BDL	BDL	BDL	BDL	40	0.23	Negative	Negative

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	-	-
Seasly	BWQ-62	BDL	6.67	368	202	20	17	120	60	72	30	0.03	BDL	BDL	BDL	BDL	24	5.98	Negative	Negative
Blue Ice	BWQ-63	BDL	6.54	393	216	20	14	110	60	72	36	0.02	BDL	BDL	0.2	BDL	27	0.25	Negative	Negative
Omuse	BWQ-64	BDL	6.75	380	209	20	14	110	60	70	35	BDL	BDL	BDL	BDL	1.2	31	0.67	Negative	Negative
Aab-e-khoob	BWQ-65	BDL	6.58	413	227	40	17	170	50	72	15	0.06	BDL	BDL	BDL	BDL	45	BDL	Negative	Negative
Aqua Super Life	BWQ-66	BDL	6.80	285	157	20	14	110	50	45	16	0.09	BDL	BDL	BDL	BDL	31	2.74	Negative	Negative
Pure it	BWQ-67	BDL	6.71	420	231	28	14	130	70	96	36	0.04	BDL	BDL	0.4	BDL	6	0.26	Negative	Negative
Aqua Safe	BWQ-68	BDL	6.68	303	167	20	17	120	50	55	13	BDL	BDL	BDL	BDL	BDL	20	0.27	Negative	Negative
Aqua One Pure Water	BWQ-69	BDL	6.91	398	219	40	10	140	60	72	25	0.14	BDL	BDL	0.5	BDL	30	0.23	Negative	Negative
ZAMS Pure Drinking Water	BWQ-70	BDL	6.81	285	157	20	14	110	30	48	14	0.17	BDL	BDL	BDL	1.5	40	0.34	Negative	Negative
Glacial	BWQ-71	BDL	6.73	356	196	24	22	150	45	75	11	0.06	BDL	BDL	BDL	BDL	25	0.68	Negative	Negative
Gourmet	BWQ-72	BDL	6.91	399	219	28	17	140	50	82	25	0.25	BDL	BDL	BDL	BDL	30	0.36	Negative	Negative
Aquafina	BWQ-73	BDL	7.09	228	125	BDL	14	60	20	38	20	0.02	BDL	BDL	1.1	BDL	33	BDL	Negative	Negative
Kinley	BWQ-74	BDL	7.09	328	180	20	22	140	75	BDL	7	0.36	BDL	BDL	1.9	BDL	80	1.10	Negative	Negative
Nestle	BWQ-75	BDL	6.97	435	239	36	17	160	50	86	20	0.19	BDL	BDL	0.1	BDL	32	0.9	Negative	Negative
Jami Water	BWQ-76	BDL	6.67	360	198	12	17	100	100	44	40	0.12	BDL	BDL	0.7	BDL	24	0.5	Negative	Negative
Aqua Shilling	BWQ-77	BDL	6.65	337	185	20	12	100	50	64	30	0.14	BDL	BDL	0.3	BDL	25	BDL	Negative	Negative
Musafa	BWQ-78	BDL	6.52	295	162	20	10	90	30	68	28	0.15	BDL	BDL	BDL	BDL	21	BDL	Negative	Negative
Dasani	BWQ-79	BDL	6.97	224	123	16	7	70	20	12	13	0.07	BDL	BDL	BDL	BDL	61	1	Negative	Negative
Health Guard	BWQ-80	BDL	7.80	340	187	16	22	130	120	10	14	0.29	BDL	BDL	7.6	BDL	33	BDL	Negative	Negative
New Elixir Water	BWQ-81	BDL	7.42	351	193	12	12	80	60	48	43	0.33	BDL	BDL	0.9	BDL	46	1	Negative	Negative

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	-	-
Trust Drinking Water	BWQ-82	BDL	6.52	385	212	40	7	130	70	60	27	0.12	BDL	BDL	0.7	BDL	34	BDL	Negative	Negative
Cristalene	BWQ-83	BDL	6.65	320	176	40	10	140	20	78	4	0.06	BDL	BDL	BDL	BDL	18	BDL	Negative	Negative
Miracle	BWQ-84	BDL	6.66	324	178	20	12	100	30	54	22	0.09	BDL	BDL	3.9	0.2	40	BDL	Negative	Negative
Mag life	BWQ-85	BDL	6.74	309	170	16	14	100	35	64	22	0.35	BDL	BDL	1.1	BDL	25	0.9	Negative	Negative
Pure Aqua	BWQ-86	BDL	6.91	373	205	12	3	44	40	75	57	0.36	BDL	BDL	0.1	BDL	24	0.5	Negative	Negative
Florence	BWQ-87	BDL	6.80	346	190	20	12	100	40	72	28	0.35	BDL	BDL	7.7	BDL	25	BDL	Negative	Negative
Masafi	BWQ-88	BDL	6.97	195	107	8	5	44	40	28	23	0.13	BDL	BDL	0.8	BDL	15	BDL	Negative	Negative
Yes	BWQ-89	BDL	6.71	245	135	16	12	90	30	48	15	0.12	BDL	BDL	BDL	BDL	26	0.78	Negative	Negative
Al-Atash	BWQ-90	BDL	6.73	349	192	28	7	100	60	60	33	0.22	BDL	BDL	1.2	BDL	30	BDL	Negative	Negative
Crystal Maya	BWQ-91	BDL	6.84	315	173	16	17	110	30	60	19	0.6	BDL	BDL	0.8	BDL	35	0.40	Negative	Negative
Aab-e-Dubai	BWQ-92	BDL	6.60	180	99	8	12	70	40	30	12	0.08	BDL	BDL	BDL	BDL	14	0.31	Negative	Negative
Safe Life	BWQ-93	BDL	6.65	469	258	20	14	110	60	98	50	0.25	BDL	BDL	0.5	BDL	34	BDL	Negative	Negative
Nurturmil water	BWQ-94	BDL	6.71	152	84	20	5	70	20	20	BDL	0.03	BDL	BDL	6.9	BDL	29	0.27	Negative	Negative
Pure 18	BWQ-95	BDL	6.53	325	179	20	12	100	30	72	28	0.09	BDL	BDL	0.2	BDL	26	BDL	12	Negative
NEO	BWQ-96	BDL	6.70	328	180	20	14	110	40	65	20	0.1	BDL	BDL	5.9	BDL	30	BDL	Negative	Negative
ABS Mineral	BWQ-97	BDL	7.19	320	176	16	17	110	35	60	21	0.16	BDL	BDL	0.9	BDL	35	BDL	Negative	Negative
Aab-e-Noor	BWQ-98	BDL	7.16	370	204	20	17	120	35	72	26	BDL	BDL	BDL	1.3	BDL	40	BDL	14	Negative
Orion	BWQ-99	BDL	7.12	258	142	20	7	80	30	56	22	0.32	BDL	BDL	0.9	1.3	20	BDL	Negative	Negative
Dam	BWQ-100	BDL	6.92	330	182	40	5	120	25	72	18	0.34	BDL	BDL	0.2	BDL	31	BDL	Negative	Negative
Douro	BWQ-101	BDL	7.02	323	178	20	3	65	75	36	42	0.32	BDL	BDL	2.0	BDL	30	BDL	Negative	Negative

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO ₃	Cl	Na	F	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	-	-
Defence Mineral Water	BWQ-102	BDL	6.79	478	263	20	17	120	56	120	48	0.3	BDL	BDL	8.0	BDL	10	BDL	Negative	Negative
Livon	BWQ-103	BDL	7.11	303	167	BDL	10	40	40	64	58	0.23	BDL	BDL	0.8	BDL	20	0.49	Negative	Negative
Evan	BWQ-104	BDL	6.65	340	187	20	5	70	55	60	44	0.13	BDL	BDL	2.6	BDL	28	0.58	Negative	Negative
Springley	BWQ-105	BDL	7.37	508	279	70	13	230	220	18	22	0.20	BDL	BDL	1.5	BDL	32	BDL	Negative	Negative
Culligan	BWQ-106	BDL	7.02	320	192	40	10	140	60	72	8	BDL	BDL	BDL	5	BDL	BDL	BDL	Negative	Negative
Aqua One	BWQ-107	BDL	6.62	357	195	36	12	140	100	48	15	0.9	BDL	BDL	1	BDL	18	0.2	Negative	Negative
I Pure	BWQ-108	BDL	6.90	520	286	44	17	180	180	28	32	1.4	BDL	BDL	1.4	BDL	30	0.5	Negative	Negative
Chen Water	BWQ-109	BDL	7.07	325	179	40	10	140	50	72	8	BDL	BDL	BDL	2.7	BDL	18	0.3	Negative	Negative
JEL	BWQ-110	BDL	6.55	225	124	28	BDL	70	40	34	15	BDL	BDL	BDL	5	BDL	20	BDL	Negative	Negative

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.