



# QUARTERLY REPORT BOTTLED WATER QUALITY

(July-September, 2013)



**PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES**  
Ministry of Science & Technology  
Khyban-e-johar, H-8/1, Islamabad.

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

July-September, 2013



## 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 are found selling contaminated water. To monitor and improve the quality of bottled water, the government of Pakistan through Ministry of Science and Technology has designated the task for quarterly monitoring of bottled/mineral water brands to PCRWR. According to the monitoring report for the quarter July-September, 2013 following is the brief overview of the findings.

### Summarized Findings of Quarterly Monitoring of Bottled/Mineral Water

Sr. No.	Items	No.	Detail
1.	<b>No. of Brands Collected</b>	84	List given at Page (3-9)
2.	<b>No. of Cities Targeted</b>	12	Islamabad, Sargodha, Bahawalpur, Rawalpindi, Lahore, Tandojam, Karachi, Faisalabad, Sialkot, Quetta, D.I Khan and Peshawar
3.	<b>No. of safe brands</b>	63	List given at Page (11-12)
4.	<b>No. of unsafe brands</b>	21	Crystal Pure Water, Kalash Pure Water, Sparkle, Kinley, Best Nation, Al-Saudia, Naimat, Lock, Aqua Nation, Cool, Bliss Water, Union, Classic, Active, A.R Water, Verbena, Khaleej, Best Water, Ideal Life, Miracle and Al-Habib.
5.	<b>No. of Chemically unsafe brands</b>	18	<b>(ARSENIC &gt;10 ppb)</b> <b>(SODIUM &gt;50 ppm)</b> Kalash Pure Water, Crystal Pure Water, Cool, Aqua National, Sparkle, Kinley, Al-Saudia, Lock, Best Nation, Classic, A.R.Water, Best Naimat, Bliss Water, Water, Ideal Life and AL-Union and Active Habib
6.	<b>No. of Microbiologically safe brands</b>	81	List given at Page (12-13)
7.	<b>No. of Microbiologically unsafe brands</b>	03	Verbena, Khaleej and Miracle



## 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 at source of production, publicize the results on a quarterly basis and follow up with punitive/legal action.
2. Ministry of Science & Technology has assigned the task of quality monitoring of bottled water and publicize the results to PCRWR Vide U.O. No.1(1)/2005-Secy (MoST) dated 8.12.2005.

## PCRWR SAMPLING METHODOLOGY

<b>No. of Brands Collected</b>	<b>84</b>	
<b>No. of Cities Targeted</b>	<b>12</b> (Islamabad, Rawalpindi, Lahore, Faisalabad, Sialkot, Sargodha, Bahawalpur, Tandojam, Karachi, Quetta, D.I Khan and Peshawar)	
<b>Composition of Sampling Team</b>	One Research Officer and Two Laboratory Assistants	
<b>Sampling Procedure</b>	Samples of eighty four commercially available brands of mineral/bottled water were collected from twelve cities of four Provinces of Pakistan. These samples were collected by the senior staff members of Head Office and Regional Offices of PCRWR from July-September, 2013. A set of four bottles of each brand was collected and sealed on site. Identification codes are allotted to all the brands according to PCRWR Bottled/Mineral Water Classification System.	
<b>Transparency</b>	<b>Sample No. 1</b>	Handed over to shopkeeper at the time of sample collection;
	<b>Sample No. 2</b>	Preserved in the National Water Quality Laboratory of PCRWR, Islamabad for future record,
	<b>Sample No. 3</b>	Used for Microbiological Analysis
	<b>Sample No. 4</b>	Used for Physico-chemical Analysis

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



**PCRWR BOTTLED WATER CLASSIFICATION SYSTEM**

Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
1	Khush Aab	BWY-01	Sargodha	03/07/2013	-	-	0.6 Liter	A Project Of Sargodha	A Project Of Sargodha
2	Hi-Fresh	BWY-02	Sargodha	03/07/2013	07/2014	-	0.6 Liter	Bismillah General Store Bus Stand Sargodha	NBFC Pakistan Madina Farms 84-N.B,Sargodha Pakistan
3	Crystal Pure Water	BWY-03	Sargodha	03/07/2013	05/2014	-	0.6 Liter	Bus Stand Sargodha	Crystal Pure Plot#24, Old Civil Line Mela mandi Road Sargodha
4	Blu Water	BWY-04	Sargodha	03/07/2013	-	-	0.6 Liter	Khattak Kirana Store Sargodha	Al-Hilal Industries(Pvt)Ltd Sultan Nagar Vehari Road Multan
5	Active Pure Drinking Water	BWY-05	Sargodha	03/07/2013	13/2013	-	1.5 Liter	Madni Bismillah G.Store Bus Stand Sargodha	Active Water Services Jandaren Plaza Canal Park 47 Pull Sargodha
6	Sparkle	BWY-06	Bahawalpur	17/07/2013	05/2014	-	1.5 Liter	Jalindar Sweets & Bakers Settlite Town Bahawalpur	Fajar Technical Trading Plot#11-12,Water Avenue Off Katcha jail Road Kot Lakhpat Lahore
7	Kinley	BWY-07	Bahawalpur	17/07/2013	05/2014	-	0.5 Liter	New Shan Sweets Railway Station Bahawalpur	Coca Cola Beverages Pakistan Limited (CCBPL) S-E-11 Gulberg -III Lahore
8	Aquafina	BWY-08	Bahawalpur	17/07/2013	06/2014	-	0.5 Liter	Life Medical Store Opp.B.V.H Bahawalpur	Riaz Bottlers (Pvt)Ltd,32-N Gulberg II,Lahore
9	Kalash Pure Water	BWY-09	Bahawalpur	17/07/2013	02/2014	-	0.6 Liter	New Shan Sweets Railway Station Bahawalpur	Al-Rahman Enterprises Ali Hijwari Arcade Kutchery Road Multan
10	Nestle	BWY-10	Bahawalpur	17/07/2013	06/2014	-	0.5 Liter	New Shan Sweets Railway Station Bahawalpur	308,Upper Mall,Lahore-54000 Pakistan
11	Springley	BWY-11	Bahawalpur	17/07/2013	12/2014	-	0.5 Liter	Madina Medical Store Opp B.V.H Bahawalpur	Qarshi Industries (Pvt)Ltd Hattar (N.W.F.P)Pakistan
12	Pineo	BWY-12	Bahawalpur	17/07/2013	07/2014	-	0.6 Liter	Hamdard Medical Store Opp B.V.H Bahawalpur	Gysing Pak PSIE,Bahawalpur Gysing@live.com
13	Aqua Hygienic	BWY-13	Quetta	15/07/2013	-	-	1.5 Liter	Laziz Pan House& Gen.Store Quetta	Plot#2,St#12 Faisal Town Brewery Road Quetta
14	Standard	BWY-14	Quetta	15/07/2013	-	-	1.5 Liter	Marhaba Gen.Store Quetta	Standard(Private) Industries Ltd.Plot#48-B Eastern Industries Area Pakistan

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
15	Pureza Water	BWY-15	Quetta	15/07/2013	-	-	1.5 Liter	Marhaba Gen.Store Quetta	A Product Of Pureza International TEL#021-36687013
16	AL-SHALAL	BWY-16	Sialkot	05/08/2013	08/2013	-	0.6 Liter	AZO Enterprises Seokay 14-km,Sialkot Aimanabad Road Sialkot	AZO Enterprises Seokay 14-km,Sialkot Aimanabad Road Sialkot
17	VINA	BWY-17	Sialkot	2/08/2013	07/2014	-	0.6 Liter	Al-Sultan Beverages Industries,Chaprar Road Gul Bahar Kalan Sialkot	Al-Sultan Beverages Industries,Chaprar Road Gul Bahar Kalan Sialkot
18	Isberg	BWY-18	Sialkot	02/08/2013	06/2014	-	0.6 Liter	Premier Water Refining Company Dhabola Roras Road Sialkot	Premier Water Refining Company Dhabola Roras Road Sialkot
19	Rise Water	BWY-19	Sialkot	02/08/2013	-	-	0.6 Liter	Pure Foods Sialkot 3-km Kingra Road Sialkot	Pure Foods Sialkot 3-km Kingra Road Sialkot
20	Aqua Save	BWY-20	Sialkot	02/08/2013	07/2014	-	0.6 Liter	SFS Mineral Water Company Wazirabad Road JalianWala Ugoki Sialkot	SFS Mineral Water Company Wazirabad Road JalianWala Ugoki Sialkot
21	ECO	BWY-21	Sialkot	05/08/2013	01/2014	-	1.5 Liter	&J Foods Beverages Roras Road Naul Chowk Sialkot	J&J Foods Beverages Roras Road Naul Chowk Sialkot
22	Athar	BWY-22	Sialkot	02/08/2013	072014	-	1.5 Liter	AjvaRice/Oil Mills Pakistan E-Mail:Ajva Rice@gmail.com/Ajva Rice Model Town Sialkot	AjvaRice/Oil Mills Pakistan E-Mail:Ajva Rice@gmail.com/Ajva Rice Model Town Sialkot
23	Gourmet Water	BWY-23	Faisalabad	23/07/2013	11/2013	-	0.6 Liter	Gourmet Shop PMC Jail Road Faisalabad	Gourmet Foods Gate#1,Plot#1-5,Sunder Industrial Estate Raiwind Sunder Road Lahore
24	Best Nation	BWY-24	Faisalabad	22/07/2013	06/2014	-	0.6 Liter	Madni Gen.Store Faisalabad	Hamza Brothers 9-km,G.T Road Rachna Town Shahdra Lahore
25	Al-Saudia	BWY-25	Faisalabad	22/07/2013	12/2013	-	0.6 Liter	Madni Gen.Store Faisalabad	Al-Saudia Water Industries 77-K, Gulistan Colony Faisalabad
26	Super Natural	BWY-26	Faisalabad	23/07/2013	-	-	0.6 Liter	Asif Kashif Karayana Gen.Store Faisalabad	WELL-O(Pvt)Ltd p-958 St#12 Muhammad A bad Faisalabad
27	Naimat	BWY-27	Lahore	21/08/2013	05/2014	-	0.6 Liter	Water World Boby Plaza Compound Opp.Govt.Munshi Hospital	Water World Boby Plaza Compound Opp.Govt.Munshi Hospital Bund Road Lahore

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
								Bund Road Lahore	
28	Lock	BWY-28	Lahore	30/07/2013	03/2014	-	0.6Liter	Imtiaz Cold Corner Besides Total Pump Lari Adda Lahore	Ali Enterprises Pakistan(Pvt)Ltd Multan Road 50-E Sabzazar Lahore
29	Aqua National	BWY-29	Lahore	30/07/2013	12/2014	-	0.6 Liter	Imtiaz Cold Corner Besides Total Pump Lari Adda Lahore	Milli Brothers 8-km,G.T Road Shahdra Lahore
30	Aqua Safe	BWY-30	Lahore	29/07/2013	04/2014	-	0.6 Liter	Aqua Safe Pakistan (Pvt)Ltd 96-Mcleod Road Lahore Pakistan	Aqua Safe Pakistan (Pvt)Ltd 96-Mcleod Road Lahore Pakistan
31	Doce	BWY-31	Lahore	26/07/2013	06/2014	-	0.6 Liter	Doce Bakers &Sweets Gulshan e Ravi Moon Market Ravi Lahore	48-M,Quaid-e-Azam Industrial Estate Kot Lakhpat Lahore
32	Aqua Mine	BWY-32	Lahore	05/08/2013	-	-	0.6 Liter	Prince Pan Shop Rehmat Chowk Wapda Town Lahore	Crown Foods 220 Ferozpur Road Lahore
33	Jami Water	BWY-33	Lahore	29/07/2013	07/2014	-	0.6 Liter	Khokar Chowk college Road Town Ship Lahore	Jami Water Services Thokar Chowk College Road Township Lahore
34	Cool	BWY-34	Lahore	30/07/2013	12/2014	-	0.6 Liter	Hameed Pan Shop Cold Corner Lari Adda Beside Shall Pump Lahore	M.T Mineral Water Co. B-7 Marghzar Housing Society Lahore
35	Sufi	BWY-35	Lahore	26/07/2013	05/2015	-	0.6 Liter	Dalda D Mart Moon Market Gulshan e Ravi Lahore	Hadayat Foods Stuffs Industries(Pvt)Ltd 1-B Garden Block Garden Town Lahore
36	Crystal Line	BWY-36	Lahore	26/07/2013	08/2014	-	0.6 Liter	Fancy Cold CornerAda plot Corner of Sharif Medical City Hospital Road Lahore	M.K Water Co.10-km Raiwind Road Lahore
37	Bliss Water	BWY-37	Lahore	26/07/2013	11/2013	-	0.6 Liter	Joolay Lal Cold Corner Besides Haroon Express Lahore	4,Country Road Opposite Jinnah Hospital Lahore
38	Union	BWY-38	Lahore	26/07/2013	-	-	0.5Liter	Data Cold Corner Besides PARCO Pump Opp.Niazi Express Band Road Lahore	Etehad Beverages Industries Ltd. www.etehadbeverages.com
39	Mashmoom Aqua	BWY-39	Lahore	26/07/2013	02/2014	-	0.6 Liter	Sher Khan Gen Store Besides Pak in Hotel Opp. Skyways National Express Band Road Lahore	Mashmoom (Pvt)Ltd 154/3,154/4 Pahse V Industrial Estate Hattar District Haripur KPK Pakistan

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Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
40	Al-Sana	BWY-40	Lahore	26/07/2013	06/2014	-	1.5 Liter	Ansar SweetAraian Gia bag Road Lahore	MZH Foods and Beverages, 2-Shamas Block Rizwan Garden Jalo Park Road Lahore
41	Classic	BWY-41	Lahore	29/07/2013	05/2014	-	1.5 Liter	Classic Needs Pakistan(Pvt)Ltd d 35- N.Industrial Area Gulberg	Classic Needs Pakistan(Pvt)Ltd 35-N.Industrial Area Gulberg 11,Lahore
42	Elixir	BWY-42	Lahore	30/07/2013	06/2014	-	1.5 Liter	Waqaf Photocopy &Gen.Store Dubai Town Raiwind Road Lahore	Hussain Enterprises 95-km Multan Road Lahore
43	Oxigzyzer	BWY-43	Lahore	29/07/2013	05/2014	-	1.5 Liter	Gule Daman Society College Road Lahore	Industrial Area College Road Lahore E- Mail:info@oxigzyzer. com, 042- 35146280
44	TOTAL	BWY-44	Lahore	30/07/2013	-	-	1.5 Liter	Hameed Cold Corner Besides New Khan Lari Adda Lahore	SJF A Product of S.J Foods 9-km Multan Road Lahore
45	Aqua RO7	BWY-45	Lahore	26/07/2013	06/2014	-	1.5 Liter	Nasir Sweets Adda Aaraian Raiwind Road Lahore	Waqar Haider Brother Qadir gaba market 78 Mcleod Road Lahore
46	Active	BWY-46	Lahore	26/07/2013	03/2014	-	0.6 Liter	Masha Allah Cold Corner Besides PARCO Pump Opp.Niazi Express Band Road Lahore	Ali Enterprises 50- E,Sabzazar Lahore
47	Moya Mineral Water	BWY-47	Peshawar	29/08/2013	04/2015	-	1.5 Liter	Al-Saudia Enterprises 580/B Main Gulberg Peshawar Cantt	Al-Saudia Enterprises 580/B Main Gulberg Peshawar Cantt
48	NEBRASKA	BWY-48	Peshawar	29/08/2013		-	1.5 Liter	12-C Industrial Estate Hayatabad Peshawar	12-C Industrial Estate Hayatabad Peshawar
49	Natural Aqwah	BWY-49	Peshawar	29/08/2013	03/2014	-	0.6 Liter	RG enterprises Plot#1 41-A Industrial Estate Hayatabad Peshawar	RG enterprises Plot#1 41-A Industrial Estate Hayatabad Peshawar
50	Aquatic Fresh	BWY-50	Peshawar	29/08/2013	06/2014	-	0.6 Liter	Royal Food Industries Plot#1-C Industrial Estate Jamrud Road Peshawar KPK Pakistan	Royal Food Industries Plot#1-C Industrial Estate Jamrud Road Peshawar KPK Pakistan
51	Khyber Aqua	BWY-51	Peshawar	29/08/2013	07/2014	-	0.6 Liter	Blokon Moya Services Plot#Sa 34,Industrial Estate Hayatabad	Blokon Moya Services Plot#Sa 34,Industrial Estate Hayatabad Peshawar

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
52	Aqua Splash	BWY-52	Peshawar	29/08/2013	07/2014	-	0.6 Liter	Peshawar (Euro International) A-7,Town Centre,Abdara Road University Town Peshawar	(Euro International) A-7,Town Centre,Abdara Road University Town Peshawar
53	Safi	BWY-53	D.I.Khan	09/09/2013	07/2014	-	1.5 Liter	Safi Water Plant Qurtaba University D.I.Khan	Safi Water Plant Qurtaba University D.I.Khan
54	A.R Water	BWY-54	Islamabad	4/09/2013	07/2014	-	0.5 Liter	Ahsan General Store Shop#4 G-9/4 Islamabad	Plot#18,main Road RCCI Industrial Estate Rawat Islamabad
55	Lite Wave	BWY-55	Islamabad	11/9/2013	-	-	0.6Liter	Skyways Centre Shop#4 Sakhawat Market Faizabad	LITE WAVE:051- 2517193
56	Al-Saudia (Water Pack)	BWY-56	Islamabad	11/09/2013	12/2015	-	0.5 Liter	Unique Bakers Bank Road Rawalpindi	Al-Saudia Foods:Barma Town Lehtrar Road Islamabad
57	Nectar	BWY-57	Islamabad	11/09/2013	-	-	0.5 Liter	Salman China Shoes Jacket Centre Main Road Peer Wadhai Near Shaheen CNG	Plot#14/10,Markaz G-7 Islamabad
58	BERG	BWY-58	Islamabad	09/09/2013	-	-	0.6 Liter	Tariq Medicos Near Holy Family Rawalpindi	M-1851/2,st#12 Iqbal Pura(Mittar Pura)Rawalpindi
59	IVA Pure	BWY-59	Islamabad	09/09/2013	05/2014	-	6 Liter	Delice Bakers Saidpur Road Pindora Rawalpindi	234/68,Tipu Road Rawalpindi
60	Water Plus	BWY-60	Islamabad	24/09/2013	09/2014	-	6 Liter	Kashif Nadeem Super Store Peshawar Mor Islamabad	Plot#235,st#6,I-9/2 Islamabad
61	OSLO	BWY-61	Tando Jam	23/09/2013	06/2014	-	0.6 Liter	Near Shah Bazar Tando Jam	Oslo International 14 Ramzan Chamber Dr.Bill Moria St.Off 1.1 Chundigar Road Karachi
62	Buxton	BWY-62	Tando Jam	23/09/2013	12/2015	-	0.6 Liter	New Pir Bux Petrol Pump Tando Jam	Haed Office: Tower Market Hyderabad
63	AFRA	BWY-63	Tando Jam	23/09/2013	12/2014	-	0.6 Liter	New Bismillah Bakery Bus Stop Tando Jam	Tower Market ,Hakeem Habib Road Hyderabad
64	Healthy Pure	BWY-64	Tando Jam	23/09/2013	-	-	0.6 Liter	New Pir Bux Petrol Pump Tando Jam	KK Water Company Tando Jam
65	Pearl	BWY-65	Tando Jam	23/09/2013	09/2014	-	1.5 Liter	S.Q.B.S Enterprises:144 /68 Km Near Toll Plaza Super Highway Jamshoro	S.Q.B.S Enterprises:144/68 Km Near Toll Plaza Super Highway Jamshoro



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Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
66	Deosai	BWY-66	Islamabad	30/09/2013	03/2014	-	1.5 Liter	Margalla Foods & Beverages Plot#32, Khayabane Johar Industrial Area Sector 1-9/2 Islamabad	Margalla Foods & Beverages Plot#32, Khayabane Johar Industrial Area Sector 1-9/2 Islamabad
67	Venora	BWY-67	Islamabad	30/09/2013	-	-	1.5 Liter	Plot#238, 1-9/3 Islamabad	Plot#238, 1-9/3 Islamabad
68	Hydra	BWY-68	Islamabad	30/09/2013	-	-	1.5 Liter	Plot#31-A, I-9, Industrial Area Islamabad	Plot#31-A, I-9, Industrial Area Islamabad
69	Water Empire	BWY-69	Islamabad	30/09/2013	09/2014	-	0.5 Liter	Bottle by Water Empire Ltd Islamabad E-mail: info@waterempire.com	Bottle by Water Empire Ltd Islamabad E-mail: info@waterempire.com
70	Hayat	BWY-70	Islamabad	30/09/2013	-	-	0.5 Liter	Plot#140, St#9, 1-10/3 Islamabad	Plot#140, St#9, 1-10/3 Islamabad
71	Valley	BWY-71	Islamabad	30/09/2013	12/2013	-	1.5 Liter	Plot#27, St#11-9/3 Industrial Area Islamabad	Plot#27, St#11, 1-9/3 Industrial Area Islamabad
72	Verbena	BWY-72	Rawalpindi	30/09/2013	05/2014	-	1.5 Liter	Vizor Pharma (Pvt)Ltd 82, Lalazar Estate Rawalpindi	Vizor Pharma (Pvt)Ltd 82, Lalazar Estate Rawalpindi
73	Khaleej	BWY-73	Karachi	26/09/2013	09/2014	-	1.5 Liter	Akhter Super General Store Gulistan-e-Johar Karachi	Maaza Pakistan(Pvt) Limited Plot#701,702,703 Shah Murad Road Thatta Pakistan
74	Orion	BWY-74	Karachi	27/09/2013	12/2014	-	1.5 Liter	Danish Bakery& G. Store Indus Mehran Malir Karachi	Orion Foods Site E-1, Suite #2, Defance View Phase-11, Karachi
75	Al-Masafi	BWY-75	Karachi	27/09/2013	12/2014	-	1.5 Liter	Bismillah Bakery, RCD Ground Malir Karachi	Al-Masafi Foods Plot#S-3, S-4, Malir City Karachi
76	Best Water	BWY-76	Karachi	27/09/2013	-	-	1.5 Liter	Bismillah Bakery, RCD Ground Malir Karachi	4/33, Sector 21, Korangi Industrial Area Karachi
77	Ideal Life	BWY-77	Karachi	27/09/2013	12/2014	-	0.6 Liter	Sho#36,37 Pot#17 Main Road Landhi Karachi	Plot#B-9/B-1 Office# 37.5 p Chamber Site Karachi
78	Matrah	BWY-78	Karachi	27/09/2013	12/2014	-	0.6 Liter	Danish Bakery& G. Store Indus Mehran Malir Karachi	Matrah.water1@hotmail.com cell#0305-2206622
79	Grace	BWY-79	Karachi	26/09/2013	12/2014	-	0.6 Liter	Haroon Medical Store Landhi Karachi#22	Baig Enterprises Plot#A-119, Block1, F.B Area Sharifabad Karachi
80	Miracle	BWY-80	Karachi	26/09/2013	08/2014	-	0.5 Liter	Sho#36,37 Pot#17 Main Road Landhi Karachi	The Miracle Product(Pvt)Ltd Plot#WSA-23, Block-14, F.B Area Karachi
81	Crystal Maya	BWY-81	Karachi	26/09/2013	-	-	0.6 Liter	Haroon Medical Store Landhi	Tilon Global Off: B-221, 226 Hub

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Sr. No	Brand Name	PCRWR Code	City	Date of Collection	Date of Expiry	Claimed Bottled Water Type	Size	Name & Address of Seller/Shop Keeper	Manufacturer
								Karachi#22	Balochistan
82	Jel	BWY-82	Karachi	26/09/2013	12/2015	-	0.6 Liter	Ibrahim General Store Abdullah Goth Near Landhi Hospital Karachi	Mega Fine Industries Plot#A-92 Malir Industrial Area Malir Karachi
83	Vey	BWY-83	Karachi	26/09/2013	09/2015	-	0.6 Liter	Ibrahim General Store Abdullah Goth Near Landhi Hospital Karachi	Fluid Technology Int'l(Pvt)Ltd 424,Bhayani Center Block M,North Nazimabad Karachi
84	Al-Habib	BWY-84	Karachi	27/09/2013	06/2015	-	0.6 Liter	Sweet& Nimko Shop#23,24 Safora Chorangi Karachi	E-10 Al-Azam Square F.B Block-1 Karachi

**WATER QUALITY PARAMETERS AND METHODS USED FOR ANALYSIS**

Sr. #	PARAMETERS	ANALYTICAL METHOD
1.	Alkalinity (mg/l as CaCO <sub>3</sub> )	2320, Standard method (2005) APHA
2.	Arsenic (ppb)	AAS Vario 6, Analytik Jena AG
3.	Bicarbonate	2320, Standard method (2005) APHA
4.	Calcium (mg/l)	3500-Ca-D, Standard Method (2005) APHA
5.	Carbonate (mg/l)	2320, Standard method (2005)
6.	Chloride (mg/l)	Titration (Silver Nitrate), Standard Method (2005) 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 (2005) APHA
10.	Magnesium (mg/l)	2340-C, Standard Method (2005) 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 (2005) 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 (2005) APHA
24.	E. Coli (MPN/100ml)	9221-B,C&D, Standard Methods (2005) 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	(µS/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**

**CONTAMINANTS OF POTENTIAL CONCERNS FOUND IN BOTTLED WATER BRANDS**

Arsenic ( Safe Limit : 10ppb)					
Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	Kalash Pure Water	BWY-09	Multan	ppb	21
2.	Best Nation	BWY-24	Lahore	ppb	40
3.	Naimat	BWY-27	Lahore	ppb	13
4.	Lock	BWY-28	Lahore	ppb	30
5.	Aqua National	BWY-29	Lahore	ppb	68
6.	Cool	BWY-34	Lahore	ppb	58
7.	Bliss Water	BWY-37	Lahore	ppb	17
8.	Union	BWY-38	-	ppb	24
9.	Active	BWY-46	Lahore	ppb	27



<b>Sodium ( Safe Limit : 50ppm)</b>					
Sr. No	Brand Name	Code	City of Manufacturing	Unit	Results
1.	Crystal Pure Water	BWY-03	Sargodha	ppm	56
2.	Sparkle	BWY-6	Lahore	ppm	75
3.	Kinley	BWY-7	Lahore	ppm	58
4.	Al-Saudia	BWY-25	Faisalabad	ppm	86
5.	Classic	BWY-41	Lahore	ppm	63
6.	A.R Water	BWY-54	Islamabad	ppm	74
7.	Best Water	BWY-76	Karachi	ppm	56
8.	Ideal Life	BWY-77	Karachi	ppm	61
9.	Al-Habib	BWY-84	Karachi	ppm	58

<b>BACTERIOLOGICAL: (Total Coliforms &amp; E Coli) (Safe Limit: 0/100ml)</b>				
Sr. No	Brand Name	Code	Results	
			Total Coliforms (MPN/100ml)	E. Coli (MPN/100ml)
1.	Verbena	BWY-72	4	Nil
2.	Khaleej	BWY-73	7	Nil
3.	Miracle	BWY-80	4	Nil

**PCRWR TESTING: SAFE BRANDS**

Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
1.	Khush Aab	BWY-01	Safe	Safe
2.	Hi-Fresh	BWY-02	Safe	Safe
3.	Blu Water	BWY-04	Safe	Safe
4.	Active Pure Drinking Water	BWY-05	Safe	Safe
5.	Aquafina	BWY-08	Safe	Safe
6.	Nestle	BWY-10	Safe	Safe
7.	Springley	BWY-11	Safe	Safe
8.	Pineo	BWY-12	Safe	Safe
9.	Aqua Hygienic	BWY-13	Safe	Safe
10.	Standard	BWY-14	Safe	Safe
11.	Pureza Water	BWY-15	Safe	Safe
12.	AL-SHALAL	BWY-16	Safe	Safe
13.	VINA	BWY-17	Safe	Safe
14.	Isberg	BWY-18	Safe	Safe
15.	Rise Water	BWY-19	Safe	Safe
16.	Aqua Save	BWY-20	Safe	Safe
17.	ECO	BWY-21	Safe	Safe
18.	Athar	BWY-22	Safe	Safe
19.	Gourmet Water	BWY-23	Safe	Safe
20.	Super Natural	BWY-26	Safe	Safe
21.	Aqua Safe	BWY-30	Safe	Safe

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
22.	Doce	BWY-31	Safe	Safe
23.	Aqua Mine	BWY-32	Safe	Safe
24.	Jami Water	BWY-33	Safe	Safe
25.	Sufi	BWY-35	Safe	Safe
26.	Crystal Line	BWY-36	Safe	Safe
27.	Mashmoom Aqua	BWY-39	Safe	Safe
28.	Al-Sana	BWY-40	Safe	Safe
29.	Elixir	BWY-42	Safe	Safe
30.	Oxigzyer	BWY-43	Safe	Safe
31.	TOTAL	BWY-44	Safe	Safe
32.	Aqua RO7	BWY-45	Safe	Safe
33.	Moya Mineral Water	BWY-47	Safe	Safe
34.	NEBRASKA	BWY-48	Safe	Safe
35.	Natural Aqwah	BWY-49	Safe	Safe
36.	Aquatic Fresh	BWY-50	Safe	Safe
37.	Khyber Aqua	BWY-51	Safe	Safe
38.	Aqua Splash	BWY-52	Safe	Safe
39.	Safi	BWY-53	Safe	Safe
40.	Lite Wave	BWY-55	Safe	Safe
41.	Al-Saudia (Water Pack)	BWY-56	Safe	Safe
42.	Nectar	BWY-57	Safe	Safe
43.	BERG	BWY-58	Safe	Safe
44.	IVA Pure	BWY-59	Safe	Safe
45.	Water Plus	BWY-60	Safe	Safe
46.	OSLO	BWY-61	Safe	Safe
47.	Buxton	BWY-62	Safe	Safe
48.	AFRA	BWY-63	Safe	Safe
49.	Healthy Pure	BWY-64	Safe	Safe
50.	Pearl	BWY-65	Safe	Safe
51.	Deosai	BWY-66	Safe	Safe
52.	Venora	BWY-67	Safe	Safe
53.	Hydra	BWY-68	Safe	Safe
54.	Water Empire	BWY-69	Safe	Safe
55.	Hayat	BWY-70	Safe	Safe
56.	Valley	BWY-71	Safe	Safe
57.	Orion	BWY-74	Safe	Safe
58.	Al-Masafi	BWY-75	Safe	Safe
59.	Matrah	BWY-78	Safe	Safe
60.	Grace	BWY-79	Safe	Safe

## PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Sr. No	Brand Name	Code	Quality (Safe/Unsafe)	
			Chemical	Microbiological
61.	Crystal Maya	BWY-81	Safe	Safe
62.	Jel	BWY-82	Safe	Safe
63.	Vey	BWY-83	Safe	Safe

**PCRWR TESTING: UNSAFE BRANDS**

Sr. No	Brand Name	Code	Address/ Manufacturer	Quality (Safe/Unsafe)	
				Chemical	Micro-biological
1.	Crystal Pure Water	BWY-03	Crystal Group Plot#24,Old Civil Line Mela mandi Road Sargodha	Unsafe	Safe
2.	Kalash Pure Water	BWY-09	Fajar Technical Trading Plot#11-12,Water Avenue Off Katcha jail Road Kot Lakhpat Lahore	Unsafe	Safe
3.	Sparkle	BWY-06	Coca Cola Beverages Pakistan Limited (CCBPL) S-E-11 Gulberg -III Lahore	Unsafe	Safe
4.	Kinley	BWY-07	Al-Rahman Enterprises Ali Hijwari Arcade Kutchery Road Multan	Unsafe	Safe
5.	Best Nation	BWY-24	Hamza Brothers 9-km,G.T Road Rachna Town Shahdra Lahore	Unsafe	Safe
6.	Al-Saudia	BWY-25	Al-Saudia Water Industries 77-K, Gulistan Colony Faisalabad	Unsafe	Safe
7.	Naimat	BWY-27	Water World Boby Plaza Compound Opp.Govt.Munshi Hospital Bund Road Lahore	Unsafe	Safe
8.	Lock	BWY-28	Ali Enterprises Pakistan(Pvt)Ltd Multan Road 50-E Sabzazar Lahore	Unsafe	Safe
9.	Aqua National	BWY-29	Milli Brothers 8-km,G.T Road Shahdra Lahore	Unsafe	Safe
10.	Cool	BWY-34	M.T Mineral Water Co. B-7 Marghzar Housing Society Lahore	Unsafe	Safe
11.	Bliss Water	BWY-37	4,Country Road Opposite Jinnah Hospital Lahore	Unsafe	Safe
12.	Union	BWY-38	Etehad Beverages Industries Ltd. www.etehadbeverages.com	Unsafe	Safe
13.	Classic	BWY-41	Classic Needs Pakistan(Pvt)Ltd 35-N.Industrial Area Gulberg 11,Lahore	Unsafe	Safe
14.	Active	BWY-46	Ali Enterprises 50-E,Sabzazar Lahore	Unsafe	Safe
15.	A.R Water	BWY-54	Plot#18,main Road RCCI Industrial Estate Rawat Islamabad	Unsafe	Safe
16.	Verbena	BWY-72	Vizor Pharma (Pvt)Ltd 82, Lalazar Estate Rawalpindi	Safe	Unsafe
17.	Khaleej	BWY-73	Maaza Pakistan(Pvt) Limited Plot#701,702,703 Shah Murad Road Thatta Pakistan	Safe	Unsafe
18.	Best Water	BWY-76	4/33,Sector 21,Korangi Industrial Area Karachi	Unsafe	Safe
19.	Ideal Life	BWY-77	Plot#B-9/B-1 Office# 37.5 p Chamber Site Karachi	Unsafe	Safe
20.	Miracle	BWY-80	The Miracle Product(Pvt)Ltd Plot#WSA-23,Block-14,F.B Area Karachi	Safe	Unsafe
21.	Al-Habib	BWY-84	E-10 Al-Azam Square F.B Block-1 Karachi	Unsafe	Safe



**MARKET CONSISTENCY IN TWO NEIGHBORING QUARTERS**

Sr. No	Consistent Brands	New Brands	Unavailable Brands
1.	Biu Water	Khush Aab	Natur Aqua
2.	Kinley	Hi-Fresh	Qaswa
3.	Aquafina	Crystal Pure Water	Premier
4.	Kalash Pure Water	Active Pure Drinking	Natural Dew
5.	Nestle	Sparkle	Kallan Water
6.	Springley	Aqua Hygienic	Pan Pura
7.	Pineo	Standard	Panee
8.	VINA	Pureza Water	Bless
9.	Isberg	Al-Shalal	Ultra Pack
10.	Rise Water	Naimat	Atlantis Water
11.	Aqua Save	Aqua Mine	Aqua Classic
12.	ECO	Sufi	Sunlay
13.	Athar	Crystal Line	Lite Aqua
14.	Gourmet Water	Union	Aqua 7
15.	Best Nation	TOTAL	NN Welfare
16.	Al-Saudia	Khyber Aqua	Sip
17.	Super Natural	A.R Water	Indus Water
18.	Lock	Al-Saudia(Water Pack)	Aqua Royal
19.	Aqua National	Buxton	Murree Sparkletts
20.	Aqua Safe	AFRA	Abr-e-Rehmat
21.	Doce	Healthy Pure	Aqua Sky Drop
22.	Jami Water	Pearl	Masafi
23.	Cool	Deosai	ARROW Head
24.	Bliss Water	Venora	Evian
25.	Mashmoom Aqua	Hydra	Volvic
26.	Al-Sana	Hayat	KIRRK LAND
27.	Classic	Valley	Via
28.	Elixir	Verbena	Zindagi
29.	Oxigyzer	Khaleej	Snow Drop
30.	Aqua RO7	Ideal Life	Sea Breeze
31.	Active	Grace	
32.	Moya Mineral Water	IVA Pure	
33.	NEBRAKSA		
34.	Natural Aqwah		
35.	Aquatic Fresh		
36.	Aqua Splash		
37.	Safi		
38.	OSLO		
39.	Nectar		
40.	BERG		
41.	Water Plus		
42.	Lite Wave		
43.	Water Empire		
44.	Orion		
45.	AL-Masafi		
46.	Best Water		
47.	Matrah		
48.	Miracle		
49.	Crystal Maya		
50.	Jel		
51.	Vey		
52.	Al-Habib		



### DISEASE POTENTIAL FROM CONTAMINATED BOTTLED WATER

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

### CONCLUSIONS

Sr. No	Item	Conclusion	
		No.	% age
1.	<b>Total No. of Brands Collected</b>	<b>84</b>	<b>-</b>
2.	<b>Overall Safe Brands</b>	<b>63</b>	<b>75</b>
3.	<b>No. of Overall Unsafe Brands</b>	<b>21</b>	<b>25</b>
4.	<b>No. of Chemically Safe Brands</b>	<b>66</b>	<b>79</b>
5.	<b>No. of Chemically Unsafe Brands</b>	<b>18</b>	<b>21</b>
6.	<b>No. of Microbiologically Safe Brands</b>	<b>81</b>	<b>96</b>
7.	<b>No. of Microbiologically Unsafe Brands</b>	<b>03</b>	<b>4</b>
8.	<b>No. of Consistent Brands in Market</b>	<b>52</b>	<b>62</b>
9.	<b>No. of Brands Disappeared from Market</b>	<b>30</b>	<b>36</b>
10.	<b>No. of New Brands</b>	<b>32</b>	<b>38</b>

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 <sub>3</sub>	CO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
																				Total Coli forms 0/100 ml	E-Coli 0/100 ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	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	ppm	ppb	MPN /100ml	MPN /100ml
Khush Aab	BWY-01	BDL	7.25	330	182	40	6	125	30	BDL	72	10	0.18	0.04	BDL	0.2	BDL	21	BDL	Nil	Nil
Hi-Fresh	BWY-02	BDL	7.50	240	132	20	12	100	25	BDL	34	15	0.20	BDL	BDL	BDL	1	43	BDL	Nil	Nil
Crystal Pure Water	BWY-03	BDL	7.31	482	265	28	17	140	45	BDL	104	56	0.36	BDL	BDL	0.5	4	32	BDL	Nil	Nil
Blu Water	BWY-04	BDL	7.26	256	141	20	15	110	25	BDL	55	13	BDL	BDL	BDL	0.3	BDL	24	BDL	Nil	Nil
Active (Pure Drinking Water)	BWY-05	BDL	7.38	349	192	40	12	150	25	BDL	77	11	0.28	0.03	BDL	0.2	5	22	BDL	Nil	Nil
Sparkle	BWY-06	BDL	7.39	538	296	32	10	120	105	BDL	46	75	0.34	0.05	BDL	2.2	1	39	BDL	Nil	Nil
Kinley	BWY-07	BDL	7.60	655	360	40	15	160	115	BDL	169	58	0.54	BDL	BDL	2.4	BDL	32	BDL	Nil	Nil
Aquafina	BWY-08	BDL	7.60	193	106	BDL	12	50	15	BDL	24	18	0.28	BDL	BDL	1.0	BDL	48	BDL	Nil	Nil
Kalash Pure Water	BWY-09	BDL	7.30	748	411	84	22	300	145	BDL	43	42	0.30	BDL	BDL	4.7	4	172	21	Nil	Nil
Nestle	BWY-10	BDL	7.26	358	197	52	5	150	25	BDL	86	11	BDL	BDL	BDL	0.2	BDL	44	2	Nil	Nil
Springley	BWY-11	BDL	7.65	510	281	56	27	250	245	BDL	11	21	BDL	0.04	BDL	1.2	3	16	BDL	Nil	Nil
Pineo	BWY-12	BDL	7.70	360	198	48	5	140	140	BDL	29	26	BDL	0.03	BDL	2.3	0.5	22	10	Nil	Nil
Aqua Hygienic	BWY-13	BDL	7.34	349	192	40	12	150	25	BDL	87	13	0.20	BDL	BDL	BDL	BDL	17	BDL	Nil	Nil
Standard	BWY-14	BDL	7.65	172	95	16	7	70	20	BDL	35	10	0.19	BDL	BDL	5.0	BDL	18	BDL	Nil	Nil
Pureza Water	BWY-15	BDL	7.58	235	129	20	12	100	75	BDL	13	15	0.28	BDL	BDL	0.5	2	20	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 <sub>3</sub>	CO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
																				Total Coli forms 0/100 ml	E-Coli 0/100 ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	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	ppm	ppb	MPN /100ml	MPN /100ml
AL-SHALAL	BWY-16	BDL	7.55	420	231	56	15	200	240	BDL	3	18	0.38	BDL	BDL	4.5	BDL	16	9	Nil	Nil
VINA	BWY-17	BDL	7.45	282	155	40	10	140	10	BDL	27	3	BDL	0.03	BDL	0.2	BDL	90	0.1	Nil	Nil
Isberg	BWY-18	BDL	7.49	260	143	36	5	110	70	BDL	34	9	BDL	0.05	BDL	2.7	0.4	19	6	Nil	Nil
Rise Water	BWY-19	BDL	7.14	352	194	48	7	150	40	BDL	81	12	BDL	0.03	BDL	0.2	BDL	15	2	Nil	Nil
Aqua Save	BWY-20	BDL	7.14	280	154	44	7	140	25	BDL	57	4	0.29	BDL	BDL	BDL	BDL	37	BDL	Nil	Nil
ECO	BWY-21	BDL	7.50	352	194	40	12	150	140	BDL	24	13	0.35	BDL	BDL	1.5	BDL	1	1	Nil	Nil
Athar	BWY-22	BDL	7.60	440	242	48	15	180	245	BDL	5	36	0.16	BDL	BDL	4.1	BDL	3	1	Nil	Nil
Gourmet Water	BWY-23	BDL	7.19	368	202	48	7	150	40	BDL	79	16	0.14	BDL	BDL	BDL	BDL	20	BDL	Nil	Nil
Best Nation	BWY-24	BDL	7.75	475	261	40	15	160	185	BDL	13	44	BDL	BDL	BDL	2.4	0.5	37	40	Nil	Nil
Al-Saudia	BWY-25	BDL	7.35	554	305	40	2	110	45	BDL	121	86	BDL	BDL	BDL	1.2	1	49	0.2	Nil	Nil
Super Natural	BWY-26	BDL	7.32	262	144	28	10	110	20	BDL	69	18	BDL	0.04	BDL	0.5	1	16	BDL	Nil	Nil
Naimat	BWY-27	BDL	7.69	308	169	32	17	150	150	BDL	9	20	0.38	0.03	BDL	1.8	0.3	14	13	Nil	Nil
Lock	BWY-28	BDL	7.52	285	157	38	9	130	135	BDL	5	17	0.50	BDL	BDL	2.3	BDL	15	30	Nil	Nil
Aqua National	BWY-29	BDL	7.40	262	144	50	2	135	130	BDL	04	8	0.46	BDL	BDL	1.7	BDL	17	68	Nil	Nil
Aqua Safe	BWY-30	BDL	7.31	276	152	36	2	100	55	BDL	36	24	0.21	BDL	BDL	1.2	0.4	33	5.5	Nil	Nil
Doce	BWY-31	BDL	7.31	380	209	52	10	170	45	BDL	74	19	0.18	0.04	BDL	0.3	BDL	42	BDL	Nil	Nil
Aqua Mine	BWY-32	BDL	7.35	212	117	32	2	90	40	BDL	42	15	0.08	0.05	BDL	BDL	BDL	11	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 <sub>3</sub>	CO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
																				Total Coli forms 0/100 ml	E-Coli 0/100 ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	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	ppm	ppb	MPN /100ml	MPN /100ml
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	NGVS	250	50	0.7	NGVS	0.3	10	10	250	10		
Jami Water	BWY-33	BDL	7.44	318	175	40	7	130	65	BDL	46	23	0.05	0.03	BDL	BDL	1	28	BDL	Nil	Nil
Cool	BWY-34	BDL	7.52	518	285	48	19	200	205	BDL	24	40	0.04	BDL	BDL	4.1	BDL	16	58	Nil	Nil
Sufi	BWY-35	BDL	7.20	330	182	38	10	135	25	BDL	74	8	0.09	BDL	BDL	BDL	BDL	18	BDL	Nil	Nil
Crystal Line	BWY-36	BDL	7.45	326	179	18	11	90	90	BDL	25	42	0.14	BDL	BDL	0.8	0.5	37	10	Nil	Nil
Bliss Water	BWY-37	BDL	7.08	392	216	48	12	170	125	BDL	44	21	0.13	0.03	BDL	1.6	BDL	14	17	Nil	Nil
Union	BWY-38	BDL	7.42	282	155	40	7	130	130	BDL	4	19	BDL	BDL	BDL	2.3	BDL	22	24	Nil	Nil
Mashmoom Aqua	BWY-39	BDL	7.62	436	240	70	9	210	200	BDL	9	16	0.24	BDL	BDL	1.2	3	11	0.4	Nil	Nil
Al-Sana	BWY-40	BDL	7.10	280	154	28	17	140	110	BDL	31	12	0.36	0.06	BDL	2.3	BDL	18	3.4	Nil	Nil
Classic	BWY-41	BDL	7.19	394	217	20	10	90	155	BDL	27	63	0.41	BDL	BDL	2.1	BDL	27	10	Nil	Nil
Elixir	BWY-42	BDL	7.15	299	164	40	2	110	30	BDL	39	16	0.23	BDL	BDL	0.2	BDL	43	BDL	Nil	Nil
Oxigzyzer	BWY-43	BDL	7.10	350	193	36	2	100	95	BDL	63	44	0.12	BDL	BDL	0.2	BDL	7	0.2	Nil	Nil
TOTAL	BWY-44	BDL	7.30	254	140	20	12	100	75	BDL	31	20	0.18	0.05	BDL	0.6	BDL	26	5	Nil	Nil
Aqua RO7	BWY-45	BDL	7.35	408	224	32	13	135	70	BDL	52	28	0.19	0.03	BDL	BDL	BDL	54	10	Nil	Nil
Active	BWY-46	BDL	7.30	306	168	40	12	150	150	BDL	4	18	0.38	BDL	BDL	2.3	BDL	21	27	Nil	Nil
Moya Mineral Water	BWY-47	BDL	7.08	193	106	40	2	110	50	BDL	33	4	0.20	0.04	BDL	0.4	1	7	0.4	Nil	Nil
NEBRAKSA	BWY-48	BDL	7.30	375	206	40	12	150	30	BDL	74	12	0.41	0.06	BDL	BDL	BDL	34	BDL	Nil	Nil
Natural Aqwah	BWY-49	BDL	7.26	460	253	40	29	220	180	BDL	10	17	0.42	BDL	BDL	1.5	5	42	1	Nil	Nil
Aquatic Fresh	BWY-50	BDL	7.50	515	283	60	22	240	175	BDL	32	15	0.38	0.03	BDL	1.9	6.5	32	0.2	Nil	Nil
Khyber Aqua	BWY-51	BDL	7.16	472	260	60	24	250	185	BDL	12	17	0.48	BDL	BDL	1.7	6	42	BDL	Nil	Nil
Aqua Splash	BWY-52	BDL	7.50	380	209	60	5	190	50	BDL	78	16	0.14	BDL	BDL	0.5	3	19	BDL	Nil	Nil

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

July-September, 2013

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	CO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
																				Total Coli forms 0/100 ml	E-Coli 0/100 ml
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	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	ppm	ppb	MPN /100ml	MPN /100ml
Safi	BWY-53	BDL	7.10	340	187	32	7	110	105	BDL	21	31	0.20	BDL	BDL	2.2	0.4	47	BDL	Nil	Nil
A.R Water	BWY-54	BDL	7.31	630	347	40	7	130	15	BDL	157	74	0.21	0.04	BDL	BDL	BDL	27	BDL	Nil	Nil
Lite Wave	BWY-55	BDL	7.30	652	359	80	12	250	280	BDL	22	32	0.31	0.06	BDL	1.4	5	23	0.2	Nil	Nil
Al-Saudia (Water Pack)	BWY-56	BDL	6.76	428	235	44	15	170	25	BDL	58	9	0.25	BDL	BDL	0.6	3	91	BDL	Nil	Nil
Nectar	BWY-57	BDL	7.38	280	154	40	7	130	100	BDL	12	13	0.23	BDL	BDL	0.6	4	13	BDL	Nil	Nil
BERG	BWY-58	BDL	7.48	565	311	80	12	250	155	BDL	41	24	0.64	0.04	BDL	1.1	6	59	0.3	Nil	Nil
IVA Pure	BWY-59	BDL	7.32	516	284	60	24	250	215	BDL	23	25	0.27	BDL	BDL	1.0	5	24	BDL	Nil	Nil
Water Plus	BWY-60	BDL	7.20	340	187	50	4	140	150	BDL	12	14	0.15	BDL	BDL	0.6	3	12	BDL	Nil	Nil
OSLO	BWY-61	BDL	7.09	362	199	24	17	130	65	BDL	59	22	0.23	BDL	BDL	5.3	BDL	18	BDL	Nil	Nil
Buxton	BWY-62	BDL	7.05	199	109	32	2	90	30	BDL	48	9	0.10	BDL	BDL	4.4	BDL	3	BDL	Nil	Nil
AFRA	BWY-63	BDL	6.80	360	198	44	12	160	95	BDL	15	19	0.31	0.03	BDL	4.5	2	67	0.5	Nil	Nil
Healthy Pure	BWY-64	BDL	7.10	235	129	40	2	110	70	BDL	20	11	0.15	0.05	BDL	3.1	BDL	25	BDL	Nil	Nil
Pearl	BWY-65	BDL	7.09	346	190	40	12	150	35	BDL	61	9	0.15	BDL	BDL	3.8	BDL	45	BDL	Nil	Nil
Deosai	BWY-66	BDL	6.65	355	195	40	12	150	40	BDL	65	16	0.60	BDL	BDL	BDL	0.5	32	BDL	Nil	Nil
Venora	BWY-67	BDL	7.25	426	234	60	15	210	160	BDL	30	12	0.28	BDL	BDL	0.8	2	31	BDL	Nil	Nil
Hydra	BWY-68	BDL	7.04	435	239	56	15	200	205	BDL	10	23	0.32	0.04	BDL	0.7	1.5	18	BDL	Nil	Nil
Water Empire	BWY-69	BDL	6.98	412	227	60	7	180	90	BDL	65	21	0.20	0.05	BDL	0.3	0.5	24	BDL	Nil	Nil
Hayat	BWY-70	BDL	7.15	373	205	50	9	160	155	BDL	12	17	0.31	BDL	BDL	0.6	2.7	17	BDL	Nil	Nil
Valley	BWY-71	BDL	6.88	282	155	44	7	140	130	BDL	9	10	0.04	BDL	BDL	0.6	1.5	13	BDL	Nil	Nil
Verbena	BWY-72	BDL	7.18	412	227	44	15	170	40	BDL	83	9	0.24	0.04	BDL	BDL	BDL	33	BDL	4	Nil
Khaleej	BWY-73	BDL	7.98	306	168	20	4	65	70	BDL	42	33	0.18	BDL	BDL	6.2	BDL	19	0.4	7	Nil

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

July-September, 2013

PCRWR QUARTERLY REPORT-BOTTLED WATER QUALITY



Brand Name	Brand Code	Turbidity	pH	EC	TDS	Ca	Mg	Hard	HCO <sub>3</sub>	CO <sub>3</sub>	Cl	Na	F	PO <sub>4</sub>	Fe	K	NO <sub>3</sub>	SO <sub>4</sub>	As	* Microbiological Contaminants	
																				Total Coli forms 0/100 ml	E-Coli 0/100 ml
PSQCA Bottled Water Standards	-	0.5	6.5 - 8.5	NGVS	500	100	50	NGVS	NGVS	NGVS	250	50	0.7	NGVS	0.3	10	10	250	10	-	-
Detection Limits	-	0.2	0.02	0.287	-	2	1	5	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	ppm	ppb	MPN /100ml	MPN /100ml
Orion	BWY-74	BDL	7.45	504	277	8	16	85	65	BDL	81	73	0.08	BDL	BDL	3.2	5	37	BDL	Nil	Nil
Al-Masafi	BWY-75	BDL	7.38	346	189	20	19	130	35	BDL	78	19	0.08	0.05	BDL	3.4	2	6	BDL	Nil	Nil
Best Water	BWY-76	BDL	7.15	560	308	45	9	150	100	BDL	71	56	0.10	BDL	BDL	5.1	8	45	BDL	Nil	Nil
Ideal Life	BWY-77	BDL	7.70	450	248	24	6	85	80	BDL	57	61	0.55	0.03	BDL	2.2	1	50	BDL	Nil	Nil
Matrah	BWY-78	BDL	7.25	335	184	44	7	140	20	BDL	74	7	0.05	BDL	BDL	3.0	1	17	BDL	Nil	Nil
Grace	BWY-79	BDL	7.45	276	152	20	12	100	60	BDL	32	23	0.08	BDL	BDL	1.5	2	27	BDL	Nil	Nil
Miracle	BWY-80	BDL	7.45	345	190	24	12	110	65	BDL	49	30	BDL	0.04	BDL	6.2	1	31	BDL	4	Nil
Crystal Maya	BWY-81	BDL	7.41	280	154	27	10	100	55	BDL	33	20	0.04	0.05	BDL	1.7	2	26	BDL	Nil	Nil
Jel	BWY-82	BDL	7.65	339	186	12	9	65	35	BDL	69	45	BDL	BDL	BDL	1.1	4	16	BDL	Nil	Nil
Vey	BWY-83	BDL	7.31	299	164	24	12	110	30	BDL	62	14	BDL	BDL	BDL	6.7	1	16	BDL	Nil	Nil
Al-Habib	BWY-84	BDL	7.41	510	281	30	9	110	85	BDL	71	58	0.05	BDL	BDL	2.4	3	52	BDL	Nil	Nil

NGVS =No Guideline Value Set

BDL = Below Detection Limits

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

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

July-September, 2013