

AlkaViva, LLC 8745 Technology Way | Suite C Reno, NV 89521 Office Phone: 775-324-2400 Fax: 775-201-1188

User Friendly Summary of Perfect Pitcher Test Results

performed by:







All tests performed in a NELAP Accredited laboratory environment to the proper EPA Standards.

Abstract: An off-the shelf Perfect Pitcher was used for all testing. The Perfect Pitcher was flushed according to product directions. After flushing, the filter had 12 gallons of tap water passed through it under normal operating conditions. Effluent samples were drawn under normal operating conditions using the actual gravity flow rate and contact times made possible by the Perfect Pitcher filter (approx. 1 liter / 5 minutes).

All control water samples, influent samples, were created using distilled water spiked with certified contaminant samples from ERA Labs and scanned separately for accurate starting values without passing through the Perfect Pitcher filter.

Testing for a sample group of heavy metals, disinfectants, anions group were performed by Silver State Labs on December 17, 2014. VOC testing was managed by Silver State Labs and performed under contract by Anatek Labs on November 10, 2014. PPCP (Pharmaceuticals and Personal Care Products) testing was managed by Silver State Labs and performed under contract by Eurofins Labs on October 22, 2014.

Original lab reports available upon request.

Influent = The levels found in the control sample prior to passing through the UltraWater Filtration System.

Effluent = The levels found in the collected sample after passing through the UltraWater Filtration System.

mg/L = Milligrams per liter, or Parts Per Million (PPM)

ug/L = Nanograms per Liter, or Parts Per Billion (PPB)

ND = Nondetectable levels were found in testing. ND is an indicator if the lowest level of accurate reporting based on the equipments capabilities and the type of tests performed.

Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Efluent)	Percentage Reduction	Reporting Limits		
Disinfectants and other Anions							
Total Residual Chlorine	0.67	mg/L	Not Detected	99.99%	0.1		
Free Chlorine	0.53	mg/L	Not Detected	99.99%	0.1		
Fluoride	0.79	mg/L	0.17	78.48%	0.1		
Nitrate as N	0.68	mg/L	0.16	76.47%	0.2		
Nitrite as N	0.54	mg/L	0.13	75.93%	0.2		
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<u>Heavy Metals</u> Aluminum	0.655	mg/L	0.1	84.73%	0.05		
	0.055		0.1	04.7570	0.05		
Antimony	0.032	mg/L	0.001	96.88%	0.001		
Arsenic	0.023	mg/L	0.002	91. 30 %	0.001		
Barium	2.84	mg/L	0.22	92.25%	0.01		
Beryllium	0.009	mg/L	Not Detected	99.99%	0.001		
Boron	0.8	mg/L	Not Detected	99.99%	0.05		
Cadmium	0.005	mg/L	Not Detected	99.99%	0.001		
Chromium	0.046	mg/L	0.005	89.13%	0.01		
Chromium VI	0.06	mg/L	Not Detected	99.99%	0.01		
Copper	0.18	mg/L	0.037	79.44%	0.01		
Iron	0.41	mg/L	Not Detected	99.99%	0.01		
Lead	0.052	mg/L	Not Detected	99.99%	0.05		
Manganese	0.47	mg/L	0.061	87.02%	0.01		

			UltraWater		
Drinking Water	Influent Contaminant	Unit of	Results	Percentage	Reporting
Contaminant	Level	Measure	(Efluent)	Reduction	Limits
Molybdenum	0.022	mg/L	0.002	90.91%	0.001
Mercury	0.008	mg/L	Not Detected	99.99%	0.002
Nickle	0.458	mg/L	0.05	89.08%	0.01
Selenium	0.05	mg/L	0.001	98.00%	0.01
Silver	0.022	mg/L	Not Detected	99.99%	0.001
Thalium	0.024	mg/L	Not Detected	99.99%	0.05
Vanadium	0.76	mg/L	0.008	98.95%	0.01
Zinc	1.11	mg/L	0.45	59.46%	0.05
<u>Volitile Organics</u> 1,1,1,2-Tetrachloethane	214	ug/L	36	83.18%	0.5
1,1,1-Trichlorethane	112	ug/L	27.2	75.71%	0.5
1,1,2,2-Tetrachloroethane	292	ug/L	58	80.14%	0.5
1,1,2-Trichloroethane	286	ug/L	72.7	74.58%	0.5
1,1-Dichlorethane	169	ug/L	59	65.09%	0.5
1,1-dichloropropene	114	ug/L	15.5	86.40%	0.5
1,2,3-Trichloropropane	300	ug/L	65.5	78.17%	0.5
1,2,4-Trichlorobenzene	123	ug/L	3.96	96.78%	0.5
1,2,4-Trimethylbenzene	96.2	ug/L	4.89	94.92%	0.5
1,2-Dichloroethane	273	ug/L	79.6	70.84%	0.5
1,3,5-Trimethylbenzene	98.2	ug/L	4.97	94.94%	0.5

Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Efluent)	Percentage Reduction	Reporting Limits
1,3-Dichloropropene	278	ug/L	68.3	75.43%	0.5
2,2-Dichloropropane	85	ug/L	26.8	68.47%	0.5
Benzene	169	ug/L	34.3	79.70%	0.5
Bromobenzene	161	ug/L	8.5	94.72%	0.5
Carbon Tetrachloride	106	ug/L	20.2	80.94%	0.5
cis-1,2-dichloroethene	204	ug/L	45.9	77.50%	0.5
Dibromomethane	293	ug/L	75.6	74.20%	0.5
Dichlorodifluoromethane	125	ug/L	54.7	56.24%	0.5
Ethylbenzene	121	ug/L	8.86	92.68%	0.5
Hexachlorobutadiene	83.8	ug/L	5.54	93.39%	0.5
Isopropylbenzene	101	ug/L	6.21	93.85%	0.5
m+p-Xylene	363	ug/L	25.5	92.98%	0.5
Napthalene	181	ug/L	8.27	95.43%	0.5
n-Propylbenzene	91.8	ug/L	3.92	95.73%	0.5
p-isopropyltoluene	82.8	ug/L	3.37	95.93%	0.5
Styrene	122	ug/L	6.8	94.43%	0.5
tert-Butylbenzene	94.5	ug/L	5.4	94.29%	0.5
Vinyl Chloride	218	ug/L	70.6	67.61%	0.5

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Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percentage Reduction	Reporting Limit (ng/L)
<u>Hormones</u>					
Contraceptive Hormone	EE2 (17 Alpha- ethynylestradiol)	140	6.9	95.07%	5
Estrogenic Hormone	E2 (17 Beta-Estradiol)	140	8.2	94.14%	5
Estrogenic Hormone	Estrone	250	Not Detected	99.99%	5
Steroid Hormone	Andorostenedione	310	22	92.90%	5
Steroid Hormone	Norethisterone	590	94	84.07%	5
Steroid Hormone	Progesterone	220	9.3	95.77%	5
Steroid Hormone <u>Over the Counter</u>	Testosterone	350	26	92.57%	10
Analgesic	Acetaminophen	170	49	71.18%	5
Analgesic	Phenazone	130	31	76.15%	5
Analgesic-NSAID <u>Prescription Drugs</u>	Ibuprofen	450	180	60.00%	10
Analgesic	Lidocaine	130	24	81.54%	5
Analgesic-NSAID	Butalbital	180	44	75.56%	5
Anti anxiety	Meprobamate	110	15	86.36%	5
Anti Asthmatic	Albuterol	110	16	85.45%	5
Anti Asthmatic	Theophylline	440	100	77.27%	10
Anti Convulsant	Primidone	5.8	Not Detected	99.99%	5
Anti Inflammatory	Diclofenac	340	83	75.59%	5
Anti Inflammatory	Ketoprofen	130	43	66.92%	5
Anti Inflammatory	Ketorolac	100	39	61.00%	5

Compounds Action Anti Inflammatory	Compound Name Meclofenamic Acid	Influent Compound Level (ng/L) 430	AlkaViva UltraWater Results 43	Percentage Reduction 90.00%	Reporting Limit (ng/L)
	Corbomozonino		62		-
Anti seizure	Carbamazepine	210	63	70.00%	5
Antibiotic	Amoxicillin	4200	2000	52.38%	20
Antibiotic	Erythromycin	210	Not Detected	99.99%	5
Antibiotic	Flumeqine	120	32	73.33%	10
Antibiotic	Lincomycin	150	65	56.67%	10
Antibiotic	Oxolinic acid	520	160	69.23%	10
Antibiotic	Trimethoprim	150	5.6	96.27%	5
Anti-cholesterol	Clofibric acid	170	48	71.76%	5
Anticoagulant	Warfarin	230	99	56.96%	5
Antidepressant	Fluoxetine (Prozac)	170	Not Detected	99.99%	10
Anti-Seizure	Dilantin	1200	280	76.67%	20
Beta Blocker	Atenolol	160	23	85.63%	5
Beta Blocker	Lopressor	1700	150	91.18%	20
Blood thinner	Pentoxifylline	130	21	83.85%	5
Calcium Blocker	Nifedipine	1600	150	90.63%	20
Enzyme	Chloridazon	76	6.9	90.92%	5
H2 Blocker	Cimetidine	280	11	96.07%	5
Heart Medication	Dehydronifedipine	170	41	75.88%	5
Lipid Regulator	Bezafibrate	280	84	70.00%	5

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		Influent	AlkaViva		
		Compound	UltraWater	Percentage	Reporting
Compounds Action	Compound Name	Level (ng/L)	Results	Reduction	Limit (ng/L)
Lipid Regulator	Gemfibrozil	210	40	80.95%	5
Muscle Relaxant	Carisoprodol	250	87	65.20%	5
Sulfa Antibiotic	Sulfadimethoxine	180	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfamerazine	270	59	78.15%	5
Sulfa Antibiotic	Sulfadiazine	160	73	54.38%	5
Sulfa Antibiotic	Sulfamethazine	230	83	63.91%	5
Sulfa Antibiotic	Sulfamethizole	4400	1200	72.73%	5
Sulfa Antibiotic	Sulfathiazole	290	43	85.17%	5
Sulfa Antibiotic	Sulfamethoxazole	300	73	75.67%	5
Valium- Antianxiety	Diazepam	210	29	86.19%	5
<u>Stimulants</u> Caffeine Degradate	1,7-dimethylxanthine	260	61	76.54%	5
Caffeine Degradate	Theobromine	220	97	55.91%	5
Nicotine Degradate	Cotinine	440	160	63.64%	10
Stimulant	Caffeine	200	160	20.00%	5
Analgesic-NSAID	Naproxen	440	110	75.00%	10
<u>Personal Care Products</u> Antibacterial	Triclosan	320	Not Detected	99.99%	10
Mosquito Repellant	DEET	74	33	55.41%	2

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Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percentage Reduction	Reporting Limit (ng/L)
<u>Preservatives</u>					
Preservative	Butylparaben	290	11	96.21%	5
Preservative	Ethylparaben	720	30	95.83%	20
Preservative	Isobutylparaben	160	5.6	96.50%	5
Preservative	Methylparaben	1600	33	97.94%	20
Preservative	Propylparaben	220	7.5	96.59%	5
Pesticides/Herbicides					
Herbicide	2,4-D	220	64	70.91%	5
Herbicide	Chlorotoluron	150	29	80.67%	5
Herbicide	Diuron	220	17	92.27%	5
Herbicide	Isoproturon	280	150	46.43%	100
Herbicide	Linuron	140	7.7	94.50%	5
Herbicide	Metazachlor	51	42	17.65%	5
Pesticide	Quinoline	210	11	94.76%	5
Triazine Herbicide	Atrazine	210	54	74.29%	5
Triazine Degradate	DACT (Diaminochlorotriazine)	240	33	86.25%	5
Triazine Degradate	DEA (Deethylatrazine)	260	45	82.69%	5
Triazine Degradate	DIA (Deisopropylatrazine)	280	53	81.07%	5
Triazine Herbicide	Propazine	210	43	79.52%	5
Triazine Herbicide	Simazine	230	54	76.52%	5

Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percentage Reduction	Reporting Limit (ng/L)
Wastewater Indicators					
Flame Retardant	TCEP	140	45	67.86%	5
Flame Retardant	TCPP	270	120	55.56%	5
Flame Retardant	TDCPP	1200	110	90.83%	5
Plasticizer	BPA (Bis Phenol A)	190	18	90.53%	10
Sugar Substitute	Acesulfame-K	930	340	63.44%	20
Sugar Substitute	Sucralose	4600	1600	65.22%	100
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Surfactant	4-nonylphenol	530	Not Detected	99.99%	100
Surfactant	4-tert-octylphenol	250	Not Detected	99.99%	50
X-ray Contrast agent	lohexol (lohexal)	390	140	64.10%	10
X-ray Contrast agent	lopromide	200	66	67.00%	5