

Summary of Test Results for the UltraWater Filtration System in the *elita* Series of non-electric ionizers

performed by:



All test results are certified and performed in NELAP accredited labs to proper EPA Standards.

Abstract: All tests performed were done in manner to replicate the flow rates and contact times of the *elita* series with a flow rate of 1 gallon per minute.

All control water samples, influent samples, were created using DI water then spiked with contaminant samples from ERA Labs (<http://www.eraqc.com>) and scanned separately for accurate starting values without passing through UltraWater filters.

All filters were flushed prior to testing using 10 gallons of DI water, then cleared of excess water by air. Prior to collection approximately 2 liters of control water sample was passed through and the effluent samples were collected at this time.

Testing for a sample group of heavy metals, disinfectants, anions group were performed by Silver State Labs on October 24, 2014. VOC testing was managed by Silver State Labs and performed under contract by Anatek Labs on October 1, 2014. PPCP (Pharmaceuticals and Personal Care Products) testing was managed by Silver State Labs and performed under contract by Eurofins Labs September 19, 2014. Glyphosate testing was performed by eurofins / Eaton Analytical on 4/14/16 using the UltraWater Filtration System only. Original lab reports available upon request.

Test Result Definitions:

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 equipment's capabilities and the type of tests performed.



Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percentage Reduction	Reporting Limits
<u>Disinfectants and other Anions</u>					
Total Residual Chlorine	0.79	mg/L	Not Detected	99.99%	0.1
Free Chlorine	0.68	mg/L	Not Detected	99.99%	0.1
Fluoride	0.79	mg/L	0.11	86.08%	0.1
Nitrate as N	0.69	mg/L	0.15	78.26%	0.1
Nitrite as N	0.54	mg/L	0.13	75.93%	0.1
<u>Heavy Metals</u>					
Aluminum	0.67	mg/L	0.05	92.54%	0.05
Antimony	0.036	mg/L	0.009	75.00%	1
Arsenic	0.035	mg/L	0.007	80.00%	1
Barium	2.49	mg/L	0.02	99.20%	0.01
Beryllium	0.014	mg/L	Not Detected	99.99%	1
Boron	0.9	mg/L	Not Detected	99.99%	0.5
Cadmium	0.005	mg/L	Not Detected	99.99%	1
Chromium	0.05	mg/L	0.001	98.00%	1
Chromium VI	752	mg/L	466	38.03%	20
Copper	0.2	mg/L	Not Detected	99.99%	1
Iron	0.54	mg/L	Not Detected	99.99%	0.01
Lead	0.064	mg/L	Not Detected	99.99%	1
Manganese	0.44	mg/L	0.002	99.55%	1

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User Friendly Summary of UltraWater Test Results

Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percent Removed	Reporting Limits
Molybdenum	0.026	mg/L	0.005	80.77%	1
Mercury	0.012	mg/L	Not Detected	99.99%	1
Nickel	0.44	mg/L	0.001	99.77%	1
Selenium	0.05	mg/L	0.008	84.00%	1
Silver	0.031	mg/L	Not Detected	99.99%	1
Thallium	0.006	mg/L	Not Detected	99.99%	1
Vanadium	0.76	mg/L	0.08	89.47%	1
Zinc	1.12	mg/L	0.001	99.91%	1
<u>Volatile Organics</u>					
1,1,1,2-Tetrachloethane	274	ug/L	2.68	99.02%	0.5
1,1,1-Trichlorethane	189	ug/L	1.9	98.99%	0.5
1,1,2,2-Tetrachloroethane	387	ug/L	3.37	99.13%	0.5
1,1,2-Trichloroethane	405	ug/L	3.71	99.08%	0.5
1,1-Dichlorethane	274	ug/L	2.53	99.08%	0.5
1,1-dichloropropene	200	ug/L	1.79	99.11%	0.5
1,2,3-Trichloropropane	434	ug/L	3.56	99.18%	0.5
1,2,4-Trichlorobenzene	224	ug/L	1.07	99.52%	0.5
1,2,4-Trimethylbenzene	197	ug/L	0.88	99.55%	0.5
1,2-Dichloroethane	450	ug/L	3.89	99.14%	0.5
1,3,5-Trimethylbenzene	181	ug/L	0.88	99.51%	0.5

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Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percent Removed	Reporting Limits
2,2-Dichloropropane	127	ug/L	1.37	98.92%	0.5
Benzene	264	ug/L	2.23	99.16%	0.5
Bromobenzene	272	ug/L	1.63	99.40%	0.5
Carbon Tetrachloride	142	ug/L	1.42	99.00%	0.5
cis-1,2-dichloroethene	332	ug/L	2.78	99.16%	0.5
Dibromomethane	444	ug/L	3.63	99.18%	0.5
Dichlorodifluoromethane	81.9	ug/L	0.88	98.93%	0.5
Ethylbenzene	184	ug/L	1.23	99.33%	0.5
Glyphosate	860	ug/L	1.2	97.00%	6
Hexachlorobutadiene	163	ug/L	0.98	99.40%	0.5
Isopropylbenzene	161	ug/L	0.93	99.42%	0.5
Napthalene	296	ug/L	1.81	99.39%	0.5
n-Propylbenzene	160	ug/L	0.85	99.47%	0.5
o-Xylene	587	ug/L	3.55	99.40%	0.5
p-isopropyltoluene	164	ug/L	0.77	99.53%	0.5
Styrene	261	ug/L	1.37	99.48%	0.5
tert-Butylbenzene	163	ug/L	0.93	99.43%	0.5
Toluene	232	ug/L	1.83	99.21%	0.5
trans-1,3-Dichloropropane	395	ug/L	3.49	99.12%	0.5
Vinyl Chloride	119	ug/L	1.24	98.96%	0.5

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Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percent Removed	Reporting Limit (ng/L)
<u>Hormones</u>					5
Contraceptive Hormone	EE2 (17 Alpha-ethynylestradiol)	340	Not Detected	99.99%	5
Estrogenic Hormone	E2 (17 Beta-Estradiol)	390	Not Detected	99.99%	5
Estrogenic Hormone	Estrone	300	Not Detected	99.99%	5
Steroid Hormone	Androstenedione	150	Not Detected	99.99%	5
Steroid Hormone	Norethisterone	290	Not Detected	99.99%	5
Steroid Hormone	Progesterone	120	Not Detected	99.99%	5
Steroid Hormone	Testosterone	140	Not Detected	99.99%	10
<u>Over the Counter</u>					5
Analgesic	Acetaminophen	140	Not Detected	99.99%	5
Analgesic	Phenazone	130	Not Detected	99.99%	10
Analgesic-NSAID	Ibuprofen	430	Not Detected	99.99%	5
<u>Prescription Drugs</u>					5
Analgesic	Lidocaine	98	Not Detected	99.99%	5
Analgesic-NSAID	Butalbital	160	Not Detected	99.99%	5
Anti anxiety	Meprobamate	200	Not Detected	99.99%	5
Anti Asthmatic	Albuterol	150	Not Detected	99.99%	10
Anti Asthmatic	Theophylline	100	Not Detected	99.99%	5
Anti Convulsant	Primidone	140	Not Detected	99.99%	5
Anti Inflammatory	Diclofenac	350	Not Detected	99.99%	5

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Compounds Action	Compound Name	Compound Level (ng/L)	AlkaViva UltraWater Results	Percent Removed	Reporting Limit (ng/L)
Anti Inflammatory	Ketoprofen	96	Not Detected	99.99%	
Anti Inflammatory	Ketorolac	85	Not Detected	99.99%	5
Anti Inflammatory	Meclofenamic Acid	150	Not Detected	99.99%	5
Anti seizure	Carbamazepine	140	Not Detected	99.99%	5
Antibiotic	Amoxicillin	2600	160	93.8%	20
Antibiotic	Azrothromycin	78	Not Detected	99.99%	5
Antibiotic	Chloramphenicol	200	Not Detected	99.99%	10
Antibiotic	Erythromycin	210	Not Detected	99.99%	10
Antibiotic	Flumeqine	310	Not Detected	99.99%	10
Antibiotic	Lincomycin	220	Not Detected	99.99%	10
Antibiotic	Oxolinic acid	150	Not Detected	99.99%	5
Antibiotic	Trimethoprim	100	Not Detected	99.99%	5
Anti-cholesterol	Clofibric acid	180	Not Detected	99.99%	5
Anticoagulant	Warfarin	300	Not Detected	99.99%	5
Antidepressant	Fluoxetine (Prozac)	84	Not Detected	99.99%	10
Anti-Seizure	Dilantin	610	Not Detected	99.99%	20
Beta Blocker	Atenolol	110	Not Detected	99.99%	5
Beta Blocker	Lopressor	600	Not Detected	99.99%	20
Blood thinner	Pentoxifylline	140	Not Detected	99.99%	5
Calcium Blocker	Nifedipine	690	Not Detected	99.99%	20

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Enzyme	Chloridazon	68	Not Detected	99.99%	5
H2 Blocker	Cimetidine	28	Not Detected	99.99%	5
Heart Medication	Dehydronifedipine	140	Not Detected	99.99%	5
Lipid Regulator	Bezafibrate	120	Not Detected	99.99%	5
Lipid Regulator	Gemfibrozil	310	Not Detected	99.99%	5
Muscle Relaxant	Carisoprodol	96	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfachloropyridazine	130	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfadimethoxine	160	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfamerazine	100	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfadiazine	83	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfamethazine	120	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfamethizole	150	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfathiazole	84	Not Detected	99.99%	5
Sulfa Antibiotic	Sulfamethoxazole	110	Not Detected	99.99%	5
Triazide	Bendroflumethiazide	250	Not Detected	99.99%	5
Valium- Antianxiety	Diazepam	140	Not Detected	99.99%	5
<u>Stimulants</u>					
Caffeine Degradate	1,7-dimethylxanthine	31	Not Detected	99.99%	5
Caffeine Degradate	Theobromine	120	Not Detected	99.99%	5
Nicotine Degradate	Cotinine	260	Not Detected	99.99%	10

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Stimulant	Caffeine	130	Not Detected	99.99%	5
Analgesic-NSAID	Naproxen	700	Not Detected	99.99%	10
<u>Personal Care Products</u>					
Antibacterial	Triclosan	470	Not Detected	99.99%	10
Mosquito Repellant	DEET	61	Not Detected	99.99%	2
<u>Preservatives</u>					
Preservative	Butylparaben	260	Not Detected	99.99%	5
Preservative	Ethylparaben	920	Not Detected	99.99%	20
Preservative	Isobutylparaben	260	Not Detected	99.99%	5
Preservative	Methylparaben	1000	Not Detected	99.99%	20
Preservative	Propylparaben	270	Not Detected	99.99%	5
<u>Pesticides/Herbicides</u>					
Herbicide	2,4-D	210	Not Detected	99.99%	5
Herbicide	Bromacil	140	Not Detected	99.99%	5
Herbicide	Chlorotoluron	120	Not Detected	99.99%	5
Herbicide	Diuron	140	Not Detected	99.99%	5
Herbicide	Glyphosate	860	23	97.33%	6
Herbicide	Isoproturon	490	Not Detected	99.99%	100
Herbicide	Linuron	120	Not Detected	99.99%	5
Herbicide	Metazachlor	110	Not Detected	99.99%	5
Pesticide	Quinoline	170	Not Detected	99.99%	5

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Triazine Herbicide	Atrazine	150	Not Detected	99.99%	5
Triazine Herbicide	Cyanazine	200	7.9	96.05%	5
Triazine Degradate	DACT (Diaminochlorotriazine)	130	Not Detected	99.99%	5
Triazine Degradate	DEA (Deethylatrazine)	140	Not Detected	99.99%	5
Triazine Degradate	DIA (Deisopropylatrazine)	130	Not Detected	99.99%	5
Triazine Herbicide	Propazine	120	Not Detected	99.99%	5
Triazine Herbicide	Simazine	190	Not Detected	99.99%	5
<u>Wastewater Indicators</u>					
Flame Retardant	TCEP	110	Not Detected	99.99%	5
Flame Retardant	TCPP	140	Not Detected	99.99%	5
Flame Retardant	TDCPP	580	Not Detected	99.99%	5
Plasticizer	BPA (Bis Phenol A)	310	Not Detected	99.99%	10
Sugar Substitute	Acesulfame-K	2100	Not Detected	99.99%	20
Sugar Substitute	Sucralose	6700	Not Detected	99.99%	100
Surfactant	4-nonylphenol	870	Not Detected	99.99%	100
Surfactant	4-tert-octylphenol	320	Not Detected	99.99%	50
X-ray Contrast agent	Iohexol (Iohexal)	200	Not Detected	99.99%	10
X-ray Contrast agent	Iopromide	440	Not Detected	99.99%	5

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