



AlkaViva, LLC
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Test Results

for
AlkaViva LLC
8745 Technology Way, St. C
Reno NV, 89521

Project: AlkaViva UltraWater

Sample group: Heavy Metals, Disinfectants, VOCs, Anions

Completed date: December 10, 2012

Legend:

ND = non-detectable levels of the contaminate were found.

ug/L = ultragrams per liter.

Effluent = the sample collected post filter.

Influent = the sample of incoming water.

*All tests at Silver State Analytical were performed with the Fluoride Arsenic Shield and UltraWater Filters running together. The Fluoride and Arsenic removal is dependent on the added filtration.

Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percent Removed	Reporting Limits
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Disinfectants and other Anions

Total Residual Chlorine	1	mg/L	ND	99.99%	0.25
Free Chlorine	0.33	mg/L	ND	99.99%	0.25
Fluoride	2.27	mg/L	ND	99.99%	0.5
Nitrate as N	0.73	mg/L	ND	99.99%	0.1
Nitrite as N	0	mg/L	ND	0	0.1
TDS	105	mg/L	100	1%	10

Heavy Metals

Aluminum	0.695	mg/L	0.216	68.92%	0.01
Antimony	0.0313	mg/L	ND	99.99%	0.001
Arsenic	0.466	mg/L	ND	99.99%	0.001
Barium	0.932	mg/L	0.00103	99.89%	0.001
Beryllium	0.00482	mg/L	ND	99.99%	0.001
Boron	1.69	mg/L	0.722	57.28%	0.01
Cadmium	0.0471	mg/L	ND	99.99%	0.001
Chromium	0.179	mg/L	ND	99.99%	0.001
Chromium VI	0.958	mg/L	ND	99.99%	0.0005
Copper	0.41	mg/L	ND	99.99%	0.001
Iron	1.36	mg/L	0.0103	99.24%	0.01
Lead	0.0988	mg/L	ND	99.99%	0.001

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*ug/L=Ultragrams Per Liter, or Parts Per Billion

Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percent Removed	Reporting Limits
Manganese	0.0912	mg/L	ND	99.99%	0.01
Molybdenum	0.0675	mg/L	ND	99.99%	0.001
Mercury	0.008	mg/L	ND	99.99%	0.002
Nickle	0.0693	mg/L	ND	99.99%	0.001
Selenium	0.0909	mg/L	ND	99.99%	0.001
Silver	0.117	mg/L	ND	99.99%	0.001
Thalium	0.0071	mg/L	ND	99.99%	0.001
Vanadium	0.977	mg/L	ND	99.99%	0.001
Zinc	0.585	mg/L	ND	99.99%	0.001
<u>Volitile Organics</u>					
1,1,1,2-Tetrachloethane	201	ug/L	ND	99.99%	5
1,1,1-Trichlorethane	156	ug/L	ND	99.99%	5
1,1,2,2-Tetrachloroethane	616	ug/L	ND	99.99%	5
1,1,2-Trichloroethane	60.2	ug/L	ND	99.99%	5
1,1-Dichlorethane	397	ug/L	5.43	98.63%	5
1,1-Dichloroethene	98.5	ug/L	ND	99.99%	5
1,1-dichloropropene	246	ug/L	ND	99.99%	5
1,2,3-Trichloropropane	528	ug/L	ND	99.99%	5
1,2,4-Trichlorobenzene	101	ug/L	ND	99.99%	5

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Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percent Removed	Reporting Limits
1,2,4-Trimethylbenzene	192	ug/L	ND	99.99%	5
1,2-Dichlorobenzene	228	ug/L	ND	99.99%	5
1,2-Dichloroethane	108	ug/L	ND	99.99%	5
1,2-Dichloropropane	186	ug/L	ND	99.99%	5
1,3,5-Trimethylbenzene	387	ug/L	ND	99.99%	5
1,3-Dichloropropane	275	ug/L	ND	99.99%	5
1,4-Dichlorobenzene	203	ug/L	ND	99.99%	5
2,2-Dichloropropane	179	ug/L	ND	99.99%	5
2-Chlorotoluene	429	ug/L	ND	99.99%	5
4-Chlorotoluene	94.5	ug/L	ND	99.99%	5
Benzene	172	ug/L	ND	99.99%	5
Bromobenzene	59.6	ug/L	ND	99.99%	5
Carbon Tetrachloride	153	ug/L	ND	99.99%	5
Chlorobenzene	231	ug/L	ND	99.99%	5
cis-1,2-dichloroethane	366	ug/L	ND	99.99%	5
cis-1,3-Dichloropropene	145	ug/L	ND	99.99%	5
Dibromomethane	156	ug/L	ND	99.99%	5
Dichlorodifluoromethane	160	ug/L	ND	99.99%	5
Ethylbenzene	262	ug/L	ND	99.99%	5
Hexachlorobutadine	80.3	ug/L	ND	99.99%	5

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UltraWater Test Results



Drinking Water Contaminant	Influent Contaminant Level	Unit of Measure	UltraWater Results (Effluent)	Percent Removed	Reporting Limits
Isopropylbenzene	328	ug/L	ND	99.99%	5
m+p-Xylene	72.5	ug/L	ND	99.99%	5
Methylene chloride	266	ug/L	ND	99.99%	5
methyl-t-butyl ether (MTBE)	372	ug/L	5.36	98.56%	5
Napthalene	124	ug/L	ND	99.99%	5
n-Propylbenzene	247	ug/L	ND	99.99%	5
o-Xylene	59.8	ug/L	ND	99.99%	5
p-isopropyltoluene	124	ug/L	ND	99.99%	5
Styrene	85.4	ug/L	ND	99.99%	5
tert-Butylbenzene	318	ug/L	ND	99.99%	5
Tetrachloroethane	168	ug/L	ND	99.99%	5
Toluene	265	ug/L	ND	99.99%	5
trans-1,2-Dichloroethane	186	ug/L	ND	99.99%	5
trans-1,3-Dichloropropene	205	ug/L	ND	99.99%	5
Trichloroethane	259	ug/L	ND	99.99%	5
Vinyl Chloride	136	ug/L	ND	99.99%	5

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Test Results

for
AlkaViva LLC
8745 Technology Way, St. C
Reno NV, 89521

Project: AlkaViva UltraWater

Sample group: PPCP Testing

Completed date: August 3, 2012

Legend:

ND = non-detectable levels of the contaminate were found.

ng/L = nanograms per liter.

Effluent = the sample collected post filter.

Influent = the sample of incoming water.

Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percent Removed	Reporting Limit (ng/L)
<u>Hormones</u>					
Contraceptive Hormone	EE2 (17 Alpha-ethynylestradiol)	500	ND	99.99%	5
Estrogenic Hormone	E2 (17 Beta-Estradiol)	380	ND	99.99%	5
Estrogenic Hormone	Estrone	400	ND	99.99%	5
Steroid Hormone	Androstenedione	370	ND	99.99%	5
Steroid Hormone	Norethisterone	600	ND	99.99%	5
Steroid Hormone	Progesterone	550	ND	99.99%	5
Steroid Hormone	Testosterone	410	ND	99.99%	10
<u>Over the Counter</u>					
Analgesic	Acetaminophen	640	ND	99.99%	5
Analgesic	Phenazone	530	ND	99.99%	5
Analgesic-NSAID	Ibuprofen	1800	ND	99.99%	10
<u>Prescription Drugs</u>					
Analgesic	Lidocaine	280	ND	99.99%	5
Analgesic-NSAID	Butalbital	310	ND	99.99%	5
Anti anxiety	Meprobamate	520	ND	99.99%	5
Anti Asthmatic	Albuterol	1800	ND	99.99%	5
Anti Asthmatic	Theophylline	310	ND	99.99%	10
Anti Convulsant	Primidone	230	ND	99.99%	5
Anti Inflammatory	Diclofenac	390	ND	99.99%	5
Anti Inflammatory	Ketoprofen	280	ND	99.99%	5
Anti Inflammatory	Ketorolac	230	ND	99.99%	5
Anti Inflammatory	Meclofenamic Acid	380	ND	99.99%	5
Anti seizure	Carbamazepine	480	ND	99.99%	5
Antibiotic	Amoxicillin	480	ND	99.99%	20
Antibiotic	Azrothromycin	31000	810	97.38%	5
Antibiotic	Carbadox	360	ND	99.99%	5

*ND = Nondetectable levels found

Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percent Removed	Reporting Limit (ng/L)
Antibiotic	Chloramphenicol	700	ND	99.99%	10
Antibiotic	Erythromycin	110	ND	99.99%	10
Antibiotic	Flumequine	270	ND	99.99%	10
Antibiotic	Lincomycin	1200	ND	99.99%	10
Antibiotic	Oxolinic acid	84	ND	99.99%	5
Antibiotic	Trimethoprim	200	ND	99.99%	5
Anti-cholesterol	Clofibric acid	470	ND	99.99%	5
Anticoagulant	Warfarin	860	ND	99.99%	5
Antidepressant	Fluoxetine (Prozac)	470	ND	99.99%	10
Anti-Seizure	Dilantin	2400	ND	99.99%	20
Beta Blocker	Atenolol	1000	ND	99.99%	5
Beta Blocker	Lopressor	3400	ND	99.99%	20
Blood thinner	Pentoxifylline	490	ND	99.99%	5
Calcium Blocker	Nifedipine	1600	87	94.56%	20
Enzyme	Chloridazon	120	ND	99.99%	5
H2 Blocker	Cimetidine	4400	ND	99.99%	5
Heart Medication	Dehydronifedipine	230	ND	99.99%	5
Lipid Regulator	Bezafibrate	1200	ND	99.99%	5
Lipid Regulator	Gemfibrozil	450	ND	99.99%	5
Muscle Relaxant	Carisoprodol	540	ND	99.99%	5
Sulfa Antibiotic	Sulfachloropyridazine	3400	ND	99.99%	5
Sulfa Antibiotic	Sulfadimethoxine	550	ND	99.99%	5
Sulfa Antibiotic	Sulfamerazine	170	ND	99.99%	5
Sulfa Antibiotic	Sulfadiazine	630	ND	99.99%	5
Sulfa Antibiotic	Sulfamethazine	200	ND	99.99%	5

*ND = Nondetectable levels found

Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percent Removed	Reporting Limit (ng/L)
Sulfa Antibiotic	Sulfamethizole	270	ND		5
Sulfa Antibiotic	Sulfathiazole	200	ND	99.99%	5
Sulfa Antibiotic	Sulfamethoxazole	290	ND	99.99%	5
Triazide	Bendroflumethiazide	880	ND	99.99%	5
Valium- Antianxiety	Diazepam	620	ND	99.99%	5
<u>Stimulants</u>					
Caffeine Degradate	1,7-dimethylxanthine	700	ND	99.99%	5
Caffeine Degradate	Theobromine	560	ND	99.99%	5
Nicotine Degradate	Cotinine	1900	ND	99.99%	10
Stimulant	Caffeine	780	ND	99.99%	5
Analgesic-NSAID	Naproxen	240	ND	99.99%	10
<u>Personal Care Products</u>					
Antibacterial	Triclosan	1000	ND	99.99%	10
Mosquito Repellant	DEET	340	ND	99.99%	2
<u>Preservatives</u>					
Preservative	Butylparaben	730	ND	99.99%	5
Preservative	Ethylparaben	2100	ND	99.99%	20
Preservative	Isobutylparaben	780	ND	99.99%	5
Preservative	Methylparaben	1400	ND	99.99%	20
Preservative	Propylparaben	270	ND	99.99%	5
<u>Pesticides/Herbicides</u>					
Herbicide	2,4-D	250	ND	99.99%	5
Herbicide	Bromacil	480	ND	99.99%	5
Herbicide	Chlorotoluron	440	ND	99.99%	5
Herbicide	Diuron	940	ND	99.99%	5
Herbicide	Isoproturon	2000	ND	99.99%	100
Herbicide	Linuron	420	ND	99.99%	5

*ND = Nondetectable levels found

Compounds Action	Compound Name	Influent Compound Level (ng/L)	AlkaViva UltraWater Results	Percent Removed	Reporting Limit (ng/L)
Herbicide	Metazachlor	520	ND		5
Pesticide	Quinoline	250	ND	99.99%	5
Triazine Herbicide	Atrazine	390	ND	99.99%	5
Triazine Herbicide	Cyanazine	16	ND	99.99%	5
Triazine Degradate	DACT (Diaminochlorotriazine)	260	ND	99.99%	5
Triazine Degradate	DEA (Deethylatrazine)	120	ND	99.99%	5
Triazine Degradate	DIA (Deisopropylatrazine)	250	ND	99.99%	5
Triazine Herbicide	Propazine	340	ND	99.99%	5
Triazine Herbicide	Simazine	120	ND	99.99%	5
<u>Wastewater Indicators</u>					
Flame Retardant	TCEP	29	ND	99.99%	5
Flame Retardant	TCPP	440	ND	99.99%	5
Flame Retardant	TDCPP	1000	ND	99.99%	5
Plasticizer	BPA (Bis Phenol A)	270	ND	99.99%	10
Sugar Substitute	Acesulfame-K	1300	ND	99.99%	20
Sugar Substitute	Sucralose	15000	ND	99.99%	100
Surfactant	4-nonylphenol	710	ND	99.99%	100
Surfactant	4-tert-octylphenol	400	ND	99.99%	50
X-ray Contrast agent	Iohexol (Iohexal)	240	ND	99.99%	10
X-ray Contrast agent	Iopromide	290	ND	99.99%	5

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