

ANALYTICAL REPORT

ANALYSIS REPORT OF CARBON FILTER WATER QUALITY

1. Name of the Customer : NEW MILLENNIUM CONCEPTS, LTD.
dba, Berkey Water Systems
PO Box 201411, Arlington, Texas 76006
2909 E Arkansas Ln Ste C-627, Arlington, Tx 76010
2. Sample Collected by : Submitted by Customer
3. Date of Collection : 28.08.2025
4. Date of Sample Receipt : 28.08.2025
5. Sample Number : 2510041B
6. Sample Name : PHOENIX GRAVITY NEW MILLENNIUM
EDITION FILTER ELEMENT
7. Product code : PGF9-2
8. Analysis started on : 02.09.2025
9. Analysis Completed on : 27.09.2025
10. Page No. : 1 of 6
11. Report Issued on : 28.09.2025
12. Protocol : NSF /ANSI-401

Test Data Summary

Sample Name : PHOENIX GRAVITY NEW MILLENNIUM EDITION FILTER
ELEMENT
Product Code : PGF9-2
Batch Number : H02042520
Sample Details : 210mm L X 70mm OD
Flow Rate : 3-5 LPH

Flushing time:

The system/unit is flushed in accordance with the manufactures instructions using test water.
The system is challenged using appropriate influent challenge water.

Test Run: Initial

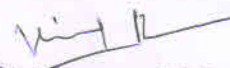
Instruments used for the testing

- GCMSMS: Gas Chromatography with Mass Spectroscopy for the evaluation of Pesticides Polyromantic hydrocarbons, Polychlorinated biphenyls and Volatile Organic Compounds.
- LCMSMS: Liquid Chromatography Mass Spectroscopy for the evaluation of Pesticides, PFAS AND Liquid chromatography for Pharmaceutical Drugs
- ICPMS: Inductive Coupled Plasma Mass Spectrometry for Metal and other radioactive elements.

Methods

- As per the Standard guidelines of NSF 42 AND NSF 53
- Test methods followed as per APHA 22ND EDITION
- Test methods followed as per AOAC 20TH EDITION
- Test methods followed as per EPA guidelines.

Page 1 of 6


Vivekanand Bhat
General Manager - Quality
Authorised Signatory

ANALYTICAL REPORT

Results

Table 1: - Challenge Water Properties

Parameters	Influent Challenge Water	Target
pH	8.04	7.5 to 9.5
Temperature	24.8 ⁰ C	25°C ± 2°C

Table 2: - Input Water Properties

TDS	423 mg/L	200-500 mg/L
Turbidity	4 NTU	3 to 5 Nephelometric Turbidity Units
TOC	12 mg/L	10 to 15 mg/L

Pesticide Contaminants µg/L

Pesticide	Input Concentration	Output Concentration	% Reduction
2,4-D	1000.0	< 1	99.9 +
2,4,5-TP	1000.0	< 1	99.9 +
4,4-DDD	1000.0	< 1	99.9 +
4,4-DDE	1000.0	< 1	99.9 +
4,4-DDT	1000.0	< 1	99.9 +
Aldrin	1000.0	< 1	99.9 +
Alchlor	1000.0	< 1	99.9 +
Aldrin	1000.0	< 1	99.9 +
Alpha-BHC	1000.0	< 1	99.9 +
Bromacil	1000.0	< 1	99.9 +
Carbofuran	1000.0	< 1	99.9 +
Chlordane	1000.0	< 1	99.9 +
Chlorneb	1000.0	< 1	99.9 +
Chlorobenzilate	1000.0	< 1	99.9 +
Chlorprophane	1000.0	< 1	99.9 +
Cyanizene	1000.0	< 1	99.9 +
Dacthal (DCPA)	1000.0	< 1	99.9 +
DEET, (N,N-diethyl-meta-toluamide)	1000.0	< 1	99.9 +
Delta-BHC	1000.0	< 1	99.9 +
Dichlorvos	1000.0	< 1	99.9 +
Dieldrin	1000.0	< 1	99.9 +
Diphenamid	1000.0	< 1	99.9 +
Disulfoton	1000.0	< 1	99.9 +
Endosulfan Sulfate	1000.0	< 1	99.9 +
Endrin	1000.0	< 1	99.9 +
Endrin Aldehyde	1000.0	< 1	99.9 +

ANALYTICAL REPORT

Endrin Ketone	1000.0	<1	99.9 +
Endosulfan I	1000.0	<1	99.9 +
Endosulfan II	1000.0	<1	99.9 +
Ethoprop	1000.0	<1	99.9 +
Fenamiphos	1000.0	<1	99.9 +
Fluoridone	1000.0	<1	99.9 +
Gamma-BHC (Lindane)	1000.0	<1	99.9 +
Glyphosate	1000.0	<1	99.9 +
Heptachlor	1000.0	<1	99.9 +
Heptachlor epoxide	1000.0	<1	99.9 +
Methoxychlor	1000.0	<1	99.9 +
Methyl Paraoxon	1000.0	<1	99.9 +
Metolachlor	1000.0	<1	99.9 +
Molinate	1000.0	<1	99.9 +
Norflurazon	1000.0	<1	99.9 +
Pebulate	1000.0	<1	99.9 +
Prometon	1000.0	<1	99.9 +
Prometryn	1000.0	<1	99.9 +
Pronamide	1000.0	<1	99.9 +
Propachlor	1000.0	<1	99.9 +
Propazine	1000.0	<1	99.9 +
Simazine	1000.0	<1	99.9 +
Triademefon	1000.0	<1	99.9 +
Tricyclazole	1000.0	<1	99.9 +
Trifluralin	1000.0	<1	99.9 +
Bisphenol A	1000.0	<1	99.9 +

Semi Volatiles and Poly Aromatic Hydrocarbons (PAH'S) µg/L

Semi volatiles	Input Concentration	Output Concentration	% Reduction
Acenaphthylene	1000	<1	99.9 +
Anthracene	1000	<1	99.9 +
Benz[a]anthracene	1000	<1	99.9 +
Benzo[b]fluoranthene	1000	<1	99.9 +
Benzo[k]fluoranthene	1000	<1	99.9 +
Benzo[a]pyrene	1000	<1	99.9 +
Benzo[g,h,i]perylene	1000	<1	99.9 +
Butylbenzylphthalate	1000	<1	99.9 +
Carboxin	1000	<1	99.9 +
2-Chlorobiphenyl	1000	<1	99.9 +
Chrysene	1000	<1	99.9 +
Dibenz[a,h]anthracene	1000	<1	99.9 +
Di-n-Butylphthalate	1000	<1	99.9 +
Diethylphthalate	1000	<1	99.9 +

ANALYTICAL REPORT

Di(2-ethylhexyl)adipate	1000	<1	99.9 +
Di(2-ethylhexyl)phthalate	1000	<1	99.9 +
Dimethylphthalate	1000	<1	99.9 +
Fluorene	1000	<1	99.9 +
Hexachlorobenzene	1000	<1	99.9 +
Hexachlorocyclohexane (alpha)	1000	<1	99.9 +
Hexachlorocyclohexane (beta)	1000	<1	99.9 +
Hexachlorocyclohexane (delta)	1000	<1	99.9 +
Hexachlorocyclopentadiene	1000	<1	99.9 +
Indeno[1,2,3-c,d]pyrene	1000	<1	99.9 +
Isophorone	1000	<1	99.9 +
Poly Chlorinated Biphenyls (PCB'S) µg/L			
2,2',3,3',4,4',6-Heptachlorobiphenyl	1000	<1	99.9 +
2,2',4,4',5,6'-Hexachlorobiphenyl	1000	<1	99.9 +
2,4,5-Trichlorobiphenyl	1000	<1	99.9 +
Pentachlorophenol	1000	<1	99.9 +
Phenanthrene	1000	<1	99.9 +
cis-Permethrin	1000	<1	99.9 +
trans-Permethrin	1000	<1	99.9 +
TCEP (Tris(2-chloroethyl)phosphate)	1000	<1	99.9 +
TCPP (Tris(1-chloro-2-propyl)phosphate)	1000	<1	99.9 +

Disinfection Byproducts mg/L

Disinfection Byproducts	Input Concentration	Output Concentration	% Reduction
Bromochloroacetonitrile	10	<0.1	99.0 +
Chloropricin	10	<0.1	99.0 +
Dibromoacetonitrile	10	<0.1	99.0 +
Dichloroacetonitrile	10	<0.1	99.0 +
Haloacetonitrile	10	<0.1	99.0 +
Haloketones	10	<0.1	99.0 +
Tribromoacetic acid	10	<0.1	99.0 +
Trichloroacetonitrile	10	<0.1	99.0 +
Trihalomethanes	10	<0.1	99.0 +

Pharmaceutical Drugs µg/L

Pharmaceutical Drugs	Input Concentration	Output Concentration	% Reduction
Acetaminophen	1000	<1	99.9 +
Atenolol	1000	<1	99.9 +
Carbamazepine	1000	<1	99.9 +
Ciprofloxacin HCl	1000	<1	99.9 +

ANALYTICAL REPORT

Erythromycin USP	1000	<1	99.9 +
Sulfamethoxazole	1000	<1	99.9 +
Trimethoprim	1000	<1	99.9 +
Diclofenac Sodium	1000	<1	99.9 +
Phenytoin	1000	<1	99.9 +
Progesterone	1000	<1	99.9 +
Ibuprofen	1000	<1	99.9 +
Triclosan	1000	<1	99.9 +
Estrone	1000	<1	99.9 +

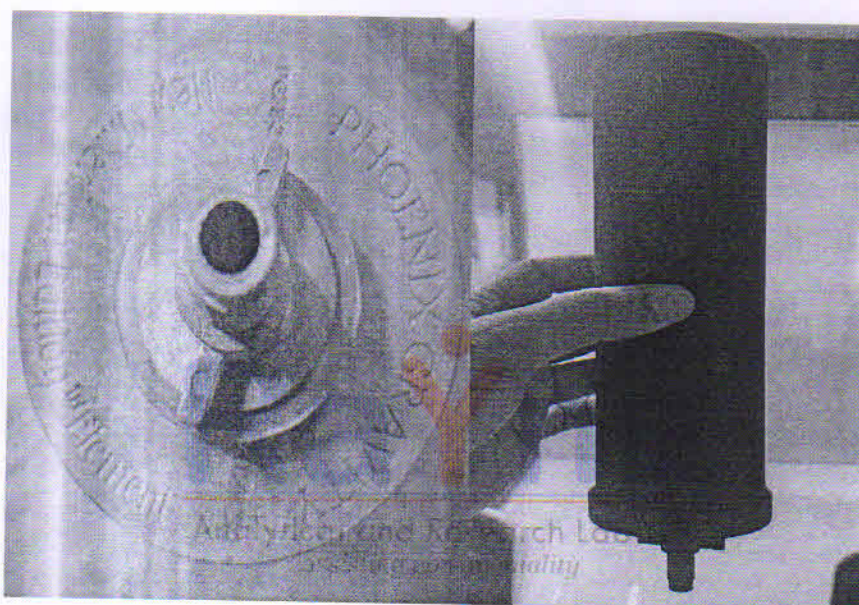


Fig 1: - Candle

ANALYTICAL REPORT



Fig 2: - Filtering Unit

Conclusion: The Submitted Filter Candle meets the requirements for the above stated standard NSF 401 norms at the initial stage of the testing.

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