

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 : 2510041A
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 4
11. Report Issued on : 28.09.2025
12. Protocols : NSF /ANSI

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.

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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

Heavy Metals µg/L

Heavy Metals	Input Concentration	Output Concentration	% Reduction
Chromium	200	< 1	99.5 +
Cobalt	200	< 1	99.5 +
Molybdenum	200	< 1	99.5 +
Vanadium	200	< 1	99.5 +
Uranium	200	< 1	99.5 +

VOC's µg/L

VOC's	Input Concentration	Output Concentration	% Reduction
1,1-dichloro-2-propane	1000	< 1	99.9 +
1,1,1-trichloro-2-propane	1000	< 1	99.9 +
1,2,4-trichlorobenzene	1000	< 1	99.9 +
Chloroform	1000	< 1	99.9 +

Disinfectant and Inorganic Non-Metallic Contaminants mg/L

Disinfectant and Inorganic Non-Metallic Contaminants	Input Concentration	Output Concentration	% Reduction
Chlorine Residual	2	< 0.01	99.5 +

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 +

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Individual Organic Compound mg/L

Organic Compound	Input Concentration	Output Concentration	% Reduction
Methylcyclohexane-methane	2	< 0.01	99.5 +

Per - and Polyfluoroalkyl Substances (PFAS) µg/L

PFAS	Input Concentration	Output Concentration	% Reduction
PFNA -perfluorononanoic acid	10	< 0.02	99.8 +
PFHxS -perfluorohexane sulfonic acid	10	< 0.02	99.8 +
PFHpA -perfluoroheptanoic acid	10	< 0.02	99.8 +
PFBS -perfluorobutanesulfonic acid	10	< 0.02	99.8 +
PFDA -perfluorodecanoic acid	10	< 0.02	99.8 +

Radiologicals µg/L

Radiologicals	Input Concentration	Output Concentration	% Reduction
Cesium	1000	< 1	99.9 +
Iodine	1000	< 1	99.9 +
Lead	1000	< 1	99.9 +
Nickel	1000	< 1	99.9 +
Strontium	1000	< 1	99.9 +
Thorium	1000	< 1	99.9 +

Petroleum Contaminants mg/L

Oil and Grease	10	< 0.1	99.0 +
Mineral Spirits	10	< 0.1	99.0 +
Gasoline	10	< 0.1	99.0 +
Diesel	10	< 0.1	99.0 +
Kerosene	10	< 0.1	99.0 +
Crude Oil	10	< 0.1	99.0 +

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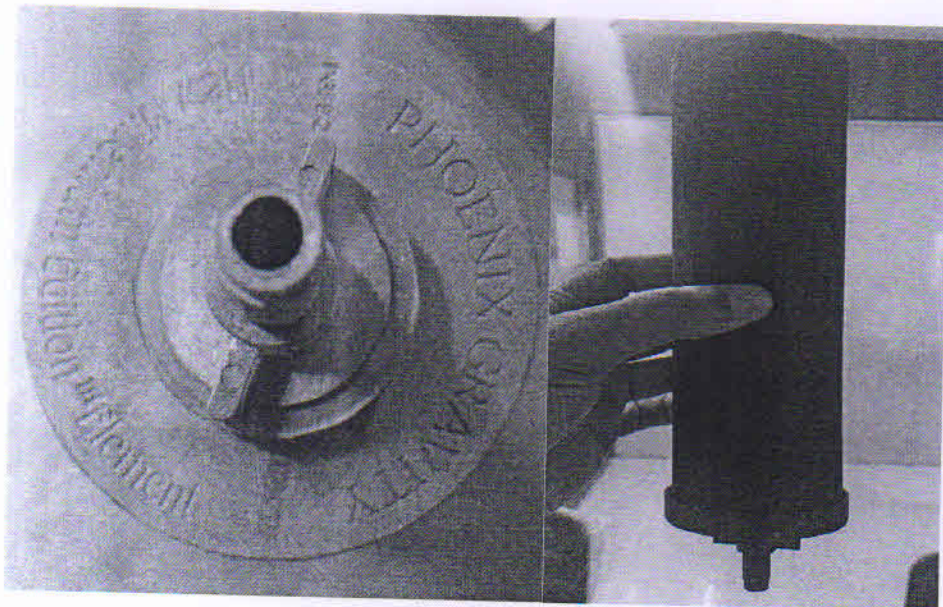


Fig 1: - Candle



Fig 2: - Filtering Unit

Conclusion: The Submitted Filter Candle meets the requirements for the above stated standard NSF 42 and NSF 53 norms at the initial stage of the testing.

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Ivekar and Bhat
General Manager - Quality
Authorised Signatory