

A Breakthrough in Economic Brine Desalination

May 2025

A Breakthrough in Brine Desalination: A Growing \$50B Global Opportunity



Oil and gas

- 28B m³/yr produced water
 - \$7.5B
- Annual growth of 6.2%



Mining

- 10B m³/yr of wastewater
- \$7.8B
- Annual growth of 7.4%



Manufacturing

- 36B m³/yr
- \$16.5B
- Annual growth of 4.5%
- Only 20% is treated before disposal due to cost

Compounding water scarcity



Escalating regulations





Huge demand for a reliable, low-energy solution



Confidential & Proprietary to Aquafortus, Inc



The Desalination Problem



Thermal

- High energy demand
- Extensive maintenance
- Post-treatment required



Membranes

- Prone to fouling
- Regular CIP required
- Upper limit of TDS



All

- Significant pretreatment required
- Struggle with changes in water chemistry

Decades-old Technology with limited innovation potential

aquafortus™

The AQUAFORTUS Solution

Economical

>40% lower energy than any thermal technology

aquafortus™

Versatile

Treats wastewater all the way to ZLD with a single process

No Chemical Consumption

No water softening or antiscalant required

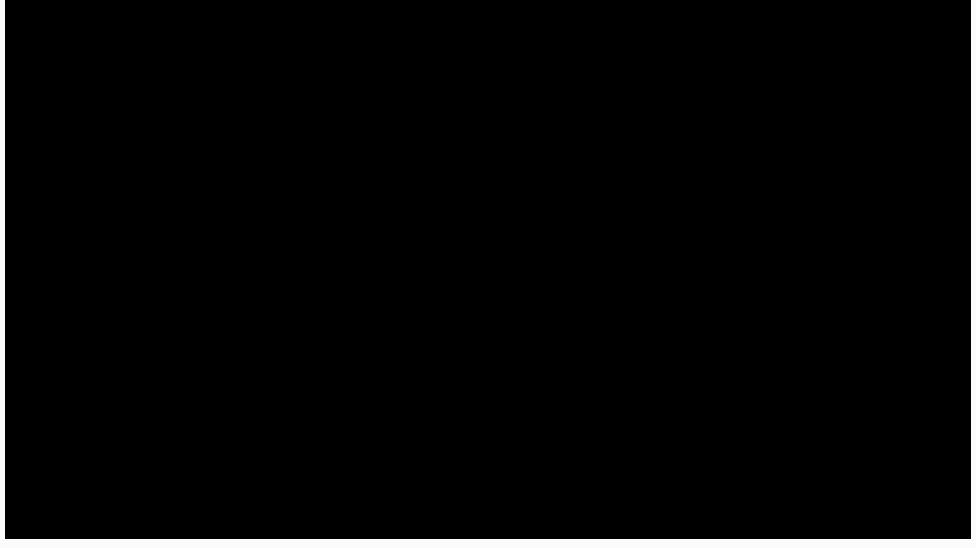
<u>Robust</u>

Can easily adjust to varying water chemistry in realtime

<u>Cleaner</u>

Delivers potable quality water - TDS <100 ppm with no post-treatment

ABX: How It Works





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Proven Performance and Scalability



Lab Scale (Auckland)

- R&D of new Absorbents and Regenerants
- Rapid analysis of customer brines
- Failure testing under harsh conditions



Pilot Plant (Texas, USA)

- 300 m³/day
- Processing produced water brine
- Capable of ZLD
- Commissioned in Q4 2024
- Very low SEC of 20.4 kWh/m³, with clear pathway to improvements
- No pretreatment and no posttreatment

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Generating RO quality water

Semi-Pilot (Auckland)

- Full system mass balance and life cycle testing
 - Feasibility testing of customer
 brines
 - Validation of new R&D advancements



Pilot Desalination Results

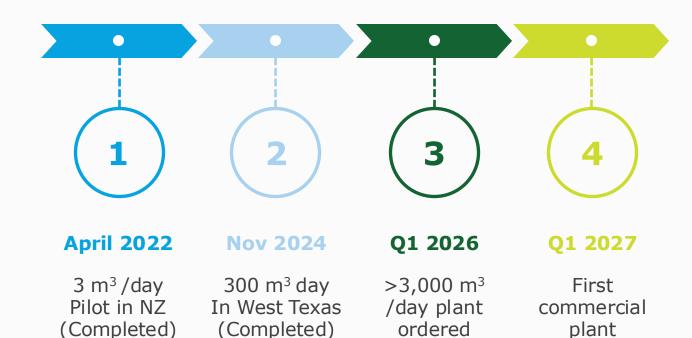
Test Sample	Cl	Sulfate	В	Са	К	Mg	Na	Sr
Raw PW brine Inlet	73465	435	41	5441	559	594	43800	604
40% Concentrate	11523 0	696	63	5873	1167	1017	70367	1067
Final RO permeate	34	3	<0.25	1	22	<2.5	9	<0.25



Clear Momentum

Strong Existing Traction Across Target Markets

Commercial demand is accelerating with successful pilot plant



Momentum With Market Leaders



Investment from leading producer LOI in place with leading Mid-

stream operator



Mining

- Feasibility studies with two of three largest global mining companies
- Minimize environmental footprint
- Winner of a global challenge for innovative treatment technology



BHP

Industrial

operational

- Pending commercial agreements with lithium extraction technologies
- Strong leads for FDG and complimentary hydrogen generation technology
- Working site specifications for US pilot in global semiconductor manufacturer



Capital Light Business Model Design and Support

Upstream customer provides brine + treatment fee in return for lower disposal costs and beneficial water reuse



Aquafortus licenses the ABX technology for the application.

E&P signs minimum 5-yr offtake agreement for their wastewater with Plant Owner Funds / builds the desalination plant and receives profits

Plant operator receives service fees Aquafortus receives royalty & provides tech support over life of plant Aquafortus provides plant designs & technology

For a 3,000 m³/day plant, Aquafortus charges:

- An initial design fee of \$3MM;
- A per m³ royalty of \$1.25; and
- An annual fee of \$250k for technical support.

Pricing fees provide a 5-year equity payback period for the plant owners.

The plant owner will engage an EPC for plant construction and a midstream provider for day-to-day operations.



Thank You

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