



Frac/Produced Water Reuse System

Ultramax High Recovery Process-80%+
Treat up to 200,000 ppm TDS for Surface Discharge
pretreatment included

The Problem

High minerals content in the Frac/Produced water (step1) are the major components of TDS (total dissolved solids). These minerals need to be removed so the water can be reused.

Recent advance in our laboratory make the EWP patented technology available to generate a lower TDS water for reuse.

How it Works

Electrodes used are made from activated carbon and other materials. These electrodes are layered into a cell casing. A DC power supply is applied across the electrodes. The individual electrodes are charged with different polarities. The minerals in the water have polarity charges, (step 2) which are attracted to the opposite polarity of the electrode, thus removing the minerals from the water. These minerals are electrochemically absorbed on the surface of the electrode creating the pure water.

When sufficient minerals are deposited on the electrodes and conductivity increases beyond the set point desired, the electrodes go through regeneration steps. (Step 3) The contaminants fall off the electrode after a flush valve opens discharging the contaminants removed. Upon completion of this cycle,

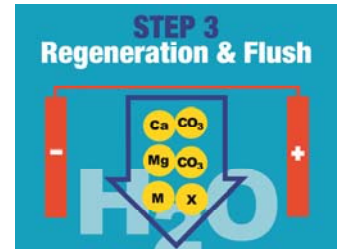
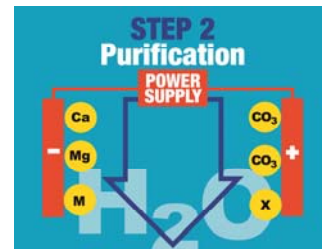
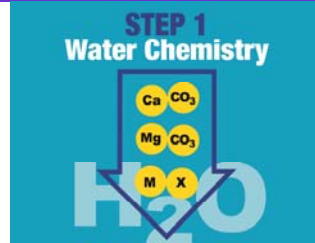
Benefits

- Millions bbl water saved per Frac or produced water hauled
- Simple Operation & Low Operating Costs
- No chemicals
- limited pretreatment needed for solids and oil
- 80%+ recovery
- Small foot print
- World Class CDI Technology Plus Smart Controls
- 8 Log Disinfection of microbes

Contaminants Removed

- Arsenic
- Lead
- Nitrates
- Metals
- Perchlorate
- Sodium Chloride
- Sulfates
- Sodium Chloride
- Hardness

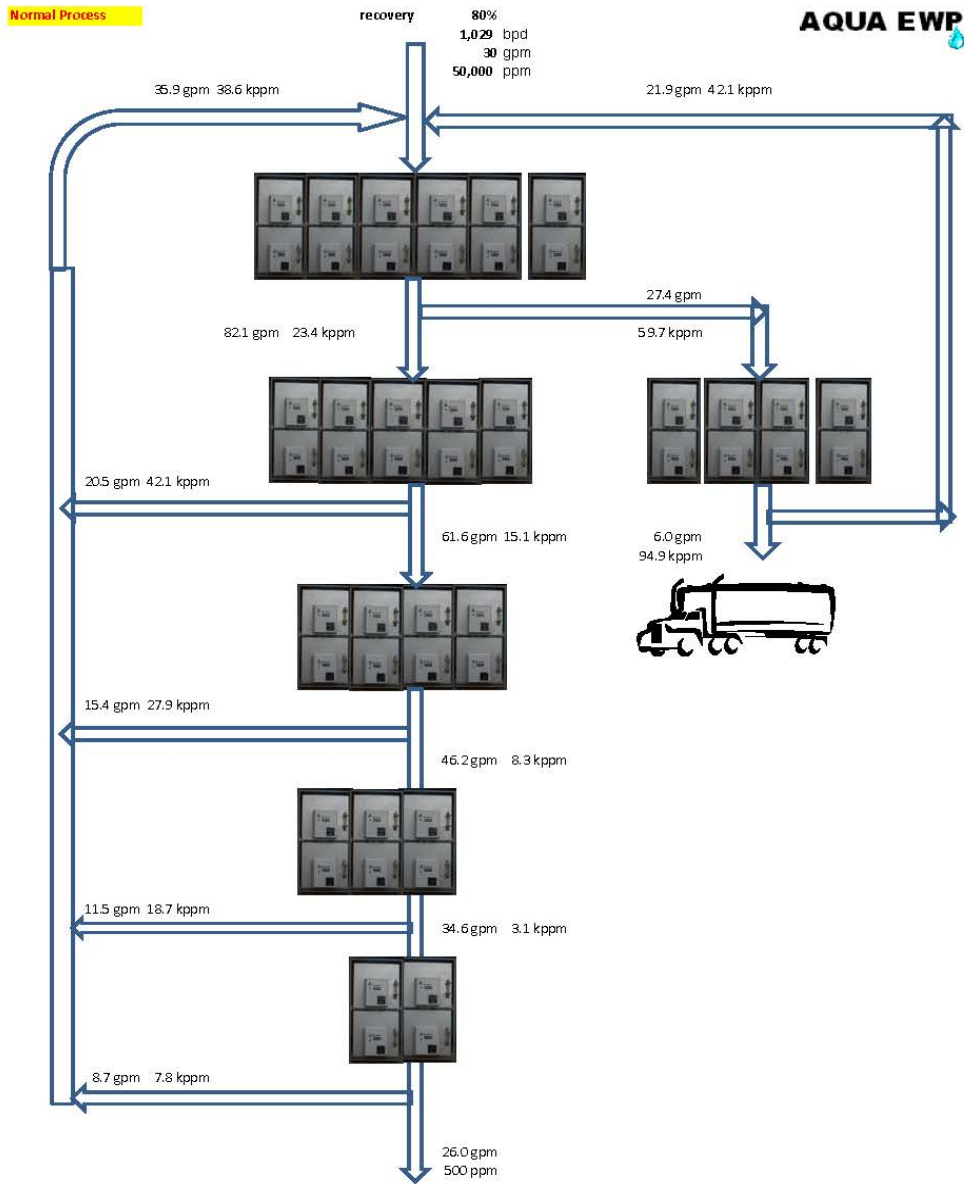
Rentals Now



AQUA EWP

1326 North Trinity. • San Antonio, TX 78207
fax 210-737-6791 Tel 210-737-8000
www.AquaEWP.com
Email: Aquaewp@swbell.net

Ultramax High Recovery Process (80%)



Able to meet surface discharge requirements
Max TDS 100,000 ppm



Displays

- Conductivity out
- Flow is manual
- Operational Model

Features

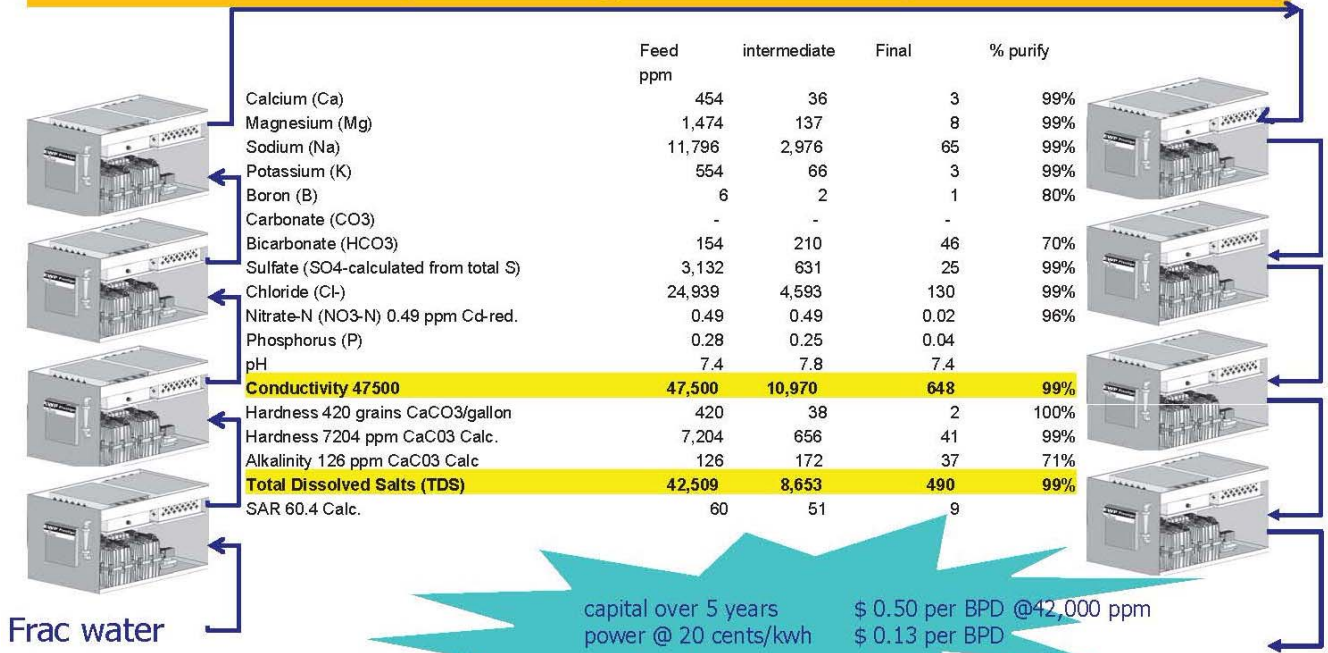
- Automatic cleaning
- Continuous operation

Modules of 16 cells (500 bpd)
that you can insert into a container



EWP is now capable of Frac Flowback Water Desalination

In 8 stages in series



**With 5 more stages for Waste Water Recycle—
85% recovery**

