Seawater Technologies LLC, Our "1 Page Summary" Feb.26, 2025

https://www.seawatertechnologies.com/index.html please visit the website for additional information

Oilfield waters are a multi-billion-dollar business today. Fresh and brackish water sourcing, hauling, pipeline transportation, storage, produced water treatment (for re-use, disposal, EOR – enhanced oil recovery, and fracturing) are just a few of the various oilfield uses. ARAMCO, in Saudi Arabia, and ONGC in India, use seawater for EOR (Enhanced Oil Recovery) in the Ghawar and Mumbai High oilfields (respectively), as **seawater is free and available without any limits**. Seawater is what was actually present in the reservoir rock pore spaces when the great marine environment reservoirs of the world were formed. **We should be fracturing with it!**

The bottom line is this; our oil and gas industry does not re-use much produced water for hydraulic fracturing (~35%) and there is still a huge volume of clean frac "source water" needed, even in the mature oil and gas basins in the world (not to mention areas of the world which have no fresh water and no brackish groundwater, in the volumes required for *industrialized fracturing*, like much of the Middle East, Africa, Australia, Turkey, Mexico, etc.).

Our proposition is so simple; **use Seawater onshore !** , where economically and logistically feasible, as a base fluid for fracturing, and try to stop using fresh water for fracturing in water stressed areas of the world! The industry likes green and sustainable solutions, when they are cheaper, easier, or have immediate uptake with *management.* What the O & G industry is doing with fresh water usage in fracturing is not sustainable, nor is it with due diligence to the longevity of our fresh water systems. Our grandchildren will pay the price for our wasteful uses of fresh water. **Consider this,** if the industry would have worked together, and built a 48" pipeline for 400 miles from the Gulf of Mexico to the Permian basin, we would have saved over 18 Billion bbls. of fresh water over the past 10 years; and paid off the pipeline!

Starting in 2013, Seawater Technologies LLC patented the whole process in the U.S.A.; and 19 water stressed countries where shale / unconventional fracturing may be evolving.

23 *Granted* patents in 20 countries including: The Kingdom of Saudi Arabia, the U.S.A. (4), South Africa, Mexico, Australia, the Ukraine, Poland, China, Latvia, Romania, Sweden, The U.A.E., Turkey, Germany, Denmark, Spain, France, United Kingdom, India, and Lithuania. Many of the European countries have banned fracturing. In 2025, we continue with patents in the following 12 countries for the next 9+ years: The Kingdom of Saudi Arabia, the U.S.A. (4), South Africa, Mexico, Australia, Poland, China, Romania, The U.A.E., Turkey, The Ukraine, and India. We are very interested in talking to end-users, operators, investors, and buyers; offering operators a global, or country-by-country license, where applicable. Moreover, we would entertain selling the whole patent portfolio. My 43 years of oilfield experience and travels have let us see and work in many oilfields, in many countries, and meet some great people along the way. We want to see their countries prosper just the same way the U.S.A. has prospered by fracturing unconventionals. Thank You, Brent Smith +1-307-359-8627. Most patents are valid through May – 2034. brent.smith@seawatertechnologies.com or brentsmith48@yahoo.com

Also, the 5th U.S.A. patent – dealing with R.O. Water (R.O./Desalination) # US 9,862,871 B2. January 9, 2018. This granted patent claims the discharge waste of R.O. and Desalination plants (in USA), as a base fluid for fracturing.