



REDEEMER RESOURCES

Treating Produced Water with Targeted UltraTech Solutions

Produced water ponds used to store waste water from hydraulic fracking sites have reported troubles with maintaining clear water. Commonly, a cycle of soured produced water (or black water) appears before returning to clear water after a significant time. This can cause delays in recycling or disposal of the produced water.

The Solution

The unique combination of UltraTech's targeted solutions, Ultra-S3 and Ultra-Archaea, this problem can be treated quickly, and cost effectively. In pilot trials, both solutions were used together on wastewater from a site in West Texas. The results are as follows.

Key Performance Indicators (KPIs):

- + Oxidation-Reduction Potential (ORP) - positive and close to 100 mV
- + Iron level - less than 2 mg/L
- + pH level - 6 to 8

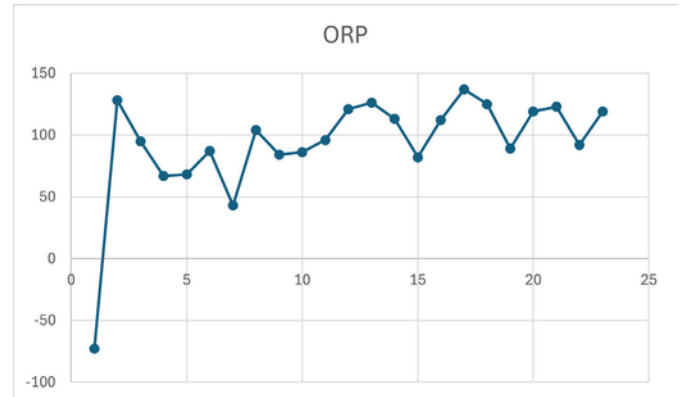
Over the course of two weeks these metrics were monitored.

Aeration was added to help the Ultra-Archaea thrive and continuously reduce the amount of organic material present in the water.

Within 12 hours of treating the pilot with Ultra-S3 and Ultra-Archaea, the ORP increased from -73 mV to 128 mV. No odor was observed in the treated water, while the control water consistently worsened over time.

Over the 10-day trial period, the results were obvious:

- + ORP averaged 100.7 mV
- + The pH averaged 7.7
- + Iron levels averaged 0.5 mg/L
- + Hydrogen sulfide levels under 1 mg/L and eventually fell to 0 mg/L



UltraTech International is the leading provider of premium environmental compliance products. Our mission is to create products for a cleaner, safer, and more sustainable world. The Advanced Technology Group (ATG) was started within UltraTech to attain one main goal: To construct a virtual bridge between the developers of disruptive and cutting-edge technologies and the global markets that need those technologies.

Ultra-Archaea are a collection of over 100 different species of archaea that are cultivated to have an affinity for all kinds of organic waste. The result is 100% natural, hardy and fast-acting microbes that will digest organic material and break them down into harmless byproducts.

Ultra-S3 is an effective oxidizing system that has been used successfully in the United States and abroad for more than a decade. It has been used in landfills, waste water treatment facilities, air scrubbers, waste water retention ponds, food processing plants, chemical plants, paper mills, and sewage lines. It is cost-effective and will treat many recalcitrant chemicals such as hydrogen sulfide (H₂S), benzene, methyl tert-butyl ether (MTBE), toluene, trichloroethylene, and many others.



info@
RedeemerResources.com
(432)-701-2657