

SEPARATION THAT MAKES SENSE™

Recover more oil, in half the time.

SEPARATION  
ENHANCER



**Conclusion**

The Separation Enhancer improved the oil quality and volume recovered, while reducing oil carry over in the waste stream. Less processing time, energy and chemicals were necessary to meet quality standards.

**Overview**

This produced water site in Loco Hills Sand, New Mexico. Receives 3,000 barrels of produced water per day. This facility utilizes a series of separators and skim tanks to recover any crude oil remaining in the water.

The process flow of this site consists of, skimming oil from the input tank and sending the recovered oil to a 500 bbl. tank battery. There, the oil is heated to 150 degrees and treated with chemicals, to reduce BS&W content before recovery and disposal.

This refinement process requires heat, chemicals, gravity and settling time. The process takes approximately 4 weeks to achieve acceptable 2.5% BS&W levels; before disposal or sale. A 60 day test was recorded while utilizing the Eco1st Separation Enhancer. The intent of this test, is to measure the Separation Enhancers performance compared to traditional methods of oil refinement and disposal.

**Challenge**

**Solution 3" Separation Enhancer**

**Reduce operational costs and retention time**

The operational costs associated with the average four week processing and refining of the oil. Including equipment, chemicals, heat, energy, time and labor.

The Eco1st Separation Enhancer reduced settling time by 50%. Production increased on average between 80%-100%. The Separation Enhancer significantly reduced the monthly variable energy and production costs.

**Reduce the oil BS&W content below 2.5%**

Typically, after refining oil through traditional heat treatment, chemical applications, and separators; the BS&W content averaged between 2.5% or higher after 4 weeks of treatment.

The Eco1st Separation Enhancer reduced the oil BS&W content to an average of .04%. Thus, increasing the value of the oil by 2.1%. Additionally, less oil carry over was consistently recorded in the waste stream.

**Reduce chemical and heat usage**

Heating and chemicals expenses averaged \$3,000 a month.

Once installed, the Separation Enhancer enabled the customer to eliminate the application of both chemicals and heat treatment.



## **Ionization = Separation**

With over 130 U.S. and International patents, The Eco1st Separation Enhancer, is a one of a kind, eco-friendly, inline, industrial fluid ionizer. The Separation Enhancer accelerates the separation process of both basic and complex emulsions in a multitude of oil and water applications. Our systems effectively increase site efficiencies, consistency and recovery unlike any other system on the market today.

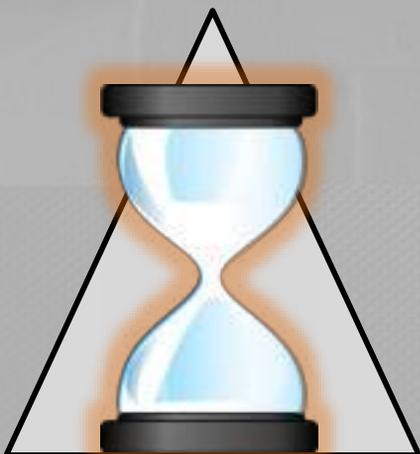
**MAKE YOUR PRODUCTION CONSISTANT**



## **Lower Operating Costs**

Separation Enhancers are sized and built application and flow rate specific. End users can easily install the system, with little down time. Separation Enhancers are also built with high grade materials with no moving parts. Once installed, the Separation Enhancer will deliver consistent results without the need of outside power, routine maintenance or operator adjustment.

*In course of one year, this customer saved roughly \$36,000 on just heating and chemical usage alone.*



## **2 WEEKS**

### **A 50% reduction in retention time**

This facility observed the standard oil refinement process go from an average 4 weeks, down to 2 weeks after the implementation of the Separation Enhancer. The Separation Enhancer not only reduced operating costs by 50%, but also increased the facilities ability to increase production and profitability.

**80% - 100% PRODUCTION INCREASE**

