## Oil fields may water farms

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BAKERSFIELD -- Oil companies might have yet another revenue stream – water – if field testing by a Los Angeles company of its equipment yields the right proof of concept.

OriginOil Inc. says it is putting its "Electro Water Separation" equipment into use cleaning up water from oil drilling operations so it can be used for steam injection and as irrigation water.

The site is hosted by privately-held Vaquero Energy, an exploration and production company based in Bakersfield.

Wyatt Shipley, Vaquero Energy's operations manager, says OriginOil's units are treating the water that is produced as part of oil extraction. He says the process also recovers "significant amounts of oil, which otherwise would have been lost to disposal."

"It is critical from a technical perspective to have a test site in the heavy oil fields of Central California," says Lee Portillo, OriginOil vice president of engineering for oil and gas. The company says it has done field tests in the natural gas fields of Colorado and the light oil reservoirs of West Texas.

The Vaquero field test is also being used by TriSep Corporation of Goleta for its "Clean-Frac" ultrafiltration in conjunction with the OriginOil test.

"We're pleased to be part of this proof-of-concept for the treatment of produced water for agricultural reuse, which is a major need for drought-affected areas like California's Central Valley," says Dave McGovern, director of new business development at TriSep. "The two systems work together to produce an effluent free of oil, suspended solids, and bacteria, which is well on the way to being irrigation-quality water."

OriginOil has placed two units at Vaquero. The first can treat 250 barrels per day. The second is a commercial-scale model, designed to treat 3000 bpd. Commercial scale can be achieved with this design by combining up to four units in a single 40-foot container to treat as much as 500,000 gallons per day, the company says.

Interest by producers, water districts and farmers in the Bakersfield test has been high since Chevron built an eight-mile pipeline to supply treated produced water to a local water district for farming use, says OriginOil. Recently, when water prices on the open market skyrocketed to \$1,300 an acre-foot, the price of the Chevron-treated water remained under \$60, it says.

Immediate state funding for producers for water treatment and recycling may be available from Proposition 1, which provides more than \$7 billion for new water projects, including \$725 million for water recycling projects, such as reusing oil formation water for agriculture, it adds.