FILTRA-SYSTEMS PROJECT CASE STUDY

Irrigation Water From Steam Flood

INDUSTRIAL FILTRATION | IRRIGATION WATER FILTERS | IRRIGATION WATER TREATMENT

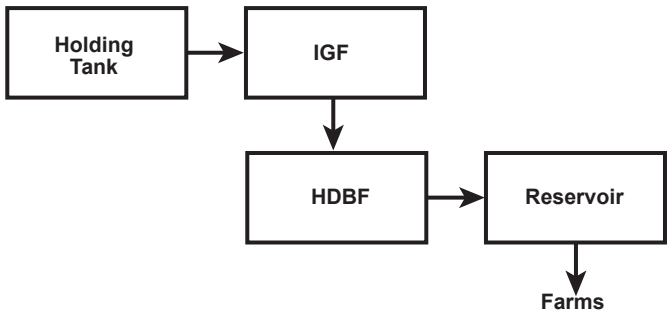
Chevron Texaco - Kern River

PRODUCT USED:

Walnut Shell Media Filters

END USER:	Chevron Texaco Exploration & Production
LOCATION:	Bakersfield, California
UNITS:	(6) Model FDB-340P
RATE:	30,000 gpm
PROCESS:	Fresh water for agricultural use

IRRIGATION WATER TREATMENT-PROCESS FLOW DIAGRAM



MORE INFO

Chevron Texaco's Kern River facility uses the DBF for oil and suspended solids removal from fresh water, which is leaking into the oil formation and lowering the temperature of the field.

Chevron Texaco is injecting steam to keep the oil in their field at least 1550 F. At this temperature they are able to pump it from the formation. The oil concentration in the fresh water, at the inlet of the filters, is quite low (Ave. 3-5 mg/l). The outlet of the irrigation water filter system is always less than 1 mg/l, (Ave. 0.2-0.3 mg/l).

The irrigation water filters are operated at 15 gpm/ft2 normally. During the 25 minute backwash periods, the two filters on-line, operate at about 22 gpm/ft2. The irrigation water treatment filter outlet water quality during the backwash cycle is still less than 1.0 mg/l during these high flux rate periods.

The fresh water is stored in a large reservoir and pump to local farms for watering fruits, vegetables, and nuts. If the water in the reservoir ever has a visible oil sheen, Chevron Texaco must drain the water and clean the reservoir. This can cost upwards of $150,000-$200,000.

After installing the HDBF, instead of paying to dispose of this water, as they were previously, Chevron Texaco is able to sell this water and provide for the local farms.

This installation was originally quoted with vertical vessel deep bed filters. Using the vertical vessel configuration, our competition quoted 9 filtration units.

The horizontal filter vessel orientation allowed Filtra-Systems Company to provide (3) model FDB-340P filters for the entire flow rate. Three more filters were later added for a 30,000 gpm flow rate

So if you looking for the tested and proven way to remove oil and suspended solids from fresh water, call now 248-427-9090.