

APPLICATIONS

PUMPS



WASTE WATER RE-INJECTION

File No. 115

Section 3

PROBLEM:

To dispose of salt water separated from crude oil without dumping salt water on the ground.

SOLUTION:

Include a high pressure CAT PUMP in the salt water removal system to reinject it into the ground.

SPECIFICATIONS:

CAT PUMPS Model	1016
Pressure	700 PSI
Flow	10 GPM
Temperature	Ambient
Fluid.....	Water
Duty Cycle	Continuous
Drive	7.5 H.P. TEFC

BENEFITS:

- Compact, lightweight unit enables portability and easy installation.
- Simplicity of service allows a quick on-sight periodic maintenance.
- Dependability and longevity of service means minimal downtime.
- Worldwide availability of pumps and parts.

OPERATION:

In the process of bringing crude oil out of the ground, a large quantity of salt water or brackish water is also brought up. In the past, this water was dumped on the surface of the ground. Today, due to EPA controls, another means of disposal has been developed. In a typical oil field situation, the crude oil is pumped to a holding tank. After approximately a half day, the crude oil separates from the salt/brackish water, the oil rises to the top of the tank and the waste water and sediment remain at the bottom of the tank. To avoid transfer of sediment with the salt water, the salt water outlet is tapped into the tank about one foot above its bottom. At this level, the hose connects the tank to the inlet of the model 1016 CAT PUMP, which then pumps the salt water back into the ground under high pressure. A regulator with a by-pass routed back to the holding tank maintains constant pressure on the system.

Flow and pressure required for injection may differ significantly from one injection site to another due to variables such as the volume of the salt water, depth of wells and ground density. To improve oil well production, some injection sites are strategically placed, using the injected water to flood the oil well and increase the flow of crude oil.

“Customer confidence is our greatest asset”

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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