

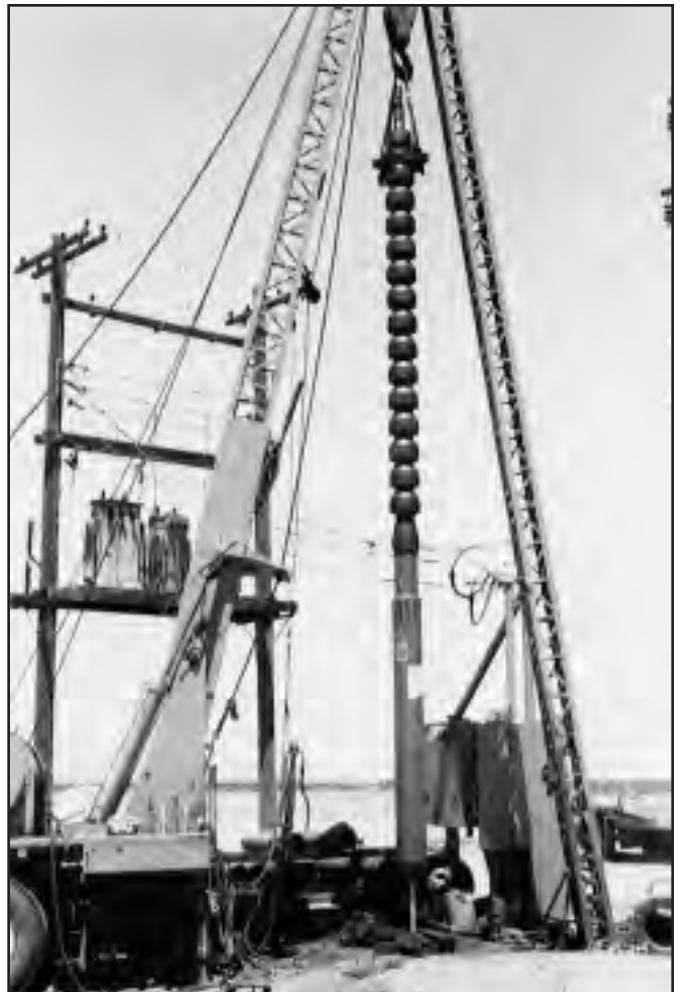
Application Bulletin

Turbine Pump Relies On LAKOS Separator For Extended Life

Correcting the problems of severe pump efficiency loss and excessive annual repair costs caused by abrasive sand, a LAKOS Turbine Pump Protection Separator was installed in a well at a cotton farm near Phoenix, Arizona and directly increased the effective operating life of the pump to more than four years before necessary servicing. According to Bob Moore, farm owner and operator, the savings are significant, eliminating a once annual charge of \$5,000 or more to pull, repair and replace their 1300 U.S. gpm (340 m³/hr) turbine pump. Says Moore, "The savings are even greater nowadays, since that same service probably now costs more than \$15,000."

continued on reverse

For the installation of this Turbine Pump Protection Separator, Moore relied on Hennesey Pump & Supply Company of Phoenix, Arizona. Shown at right, the separator is attached directly to the pump's suction casing. To protect the separator's tail pipe from damage during installation, Hennesey Pump devised an effective "spider" (see below) to keep the tail pipe centered.



Prior to this four-to-one increase in the pump's operating life, efficiency dropped from 75% to 45% in a single season, contributing also to a much greater energy bill simply to deliver the needed water to furrow irrigate the cotton in this arid region (see "Sample Energy Savings").

According to Moore, another of his turbine pumps is also equipped with a LAKOS Pump Protection Separator and has operated for over five years with no appreciable loss of performance.

A partial list of others using LAKOS Pump Protection Separators:

Gilbert Pump - Tucson, AZ
Anderson Pump - Chowchilla, CA
Humboldt Drilling - Winnemucca, NV
United Pump & Supply - Portland, OR
Layne Western - IA
CPS Distributing - CO
Alta Pump - CA
Weber Pump - Tempe, AZ
Clowe & Cowan - El Paso, TX
Sabol & Rice - Salt Lake City, UT
Caruthers Pump - Caruthers, CA
City of Mesa - AZ
Artesian Water Company - DE
City of Las Cruces - NM
Austin Pump & Supply - Austin, TX
B & E Pump - Simsbury, CT
Miller Pump Service - San Jacinto, CA
City of Chandler - AZ
Aetna Pump - MA
Westside Pump - San Joaquin, CA
Preferred Pump & Supply - Ft. Worth, TX
Tucson Medical Center - Tucson, AZ
Eastern Pump & Supply - Danbury, CT
City of Sweetwater - CA
Layne Western - KS
City of Ontario - CA
Layne Western - NE
Whitten Pump - Delano, CA

SAMPLE ENERGY SAVINGS

By eliminating excessive abrasive wear, a pump's efficiency lasts much longer . . . and that saves energy and money. For a pumping system like that described in this bulletin, the savings in energy can be very significant.

For example, given a flow rate of 1,000 U.S. gpm (227 m³/hr), a pumping lift of 600 feet (183m), an annual pumping volume of 757 acre-feet (247 million gallons or 933,000 m³) and an electricity cost of 7¢/KWH, the average annual pump-energy bill would be \$54,300 (if the pump dropped from 75% to 45% every year).

With a LAKOS Pump Protection Separator, the average (over four years), is easily reduced to only \$53,000 . . . A SAVINGS OF MORE THAN \$1,000 PER YEAR IN ENERGY ALONE. And remember, this doesn't even include the reduced pump service and repair costs!

LAKOS Pump Protection Separators. The smart alternative to excessive repair and energy bills. NOTE: Ask your LAKOS representative for further information on the effects of sand on pumping systems.

Driller's Service - Hickory, SC
Rainmaker - Fresno, CA
Virginia Supply & Well - Atlanta, GA
Delta Pump & Supply - Stockton, CA
Laibe Supply - Indianapolis, IN
Bartley Pump - Santa Rosa, CA

CLAUDE LAVAL CORPORATION

Not connected with The DeLaval Separator Company

1365 N. Clovis Avenue • Fresno, California 93727 USA
Telephone: (559) 255-1601 • Fax: (559) 255-8093
Toll-Free: (800) 344-7205 (USA, Canada & Mexico)
www.lakos.com • E-Mail: info@lakos.com