

SEEPEX BN RANGE FOR PRODUCED WATER TRANSPORT - INCREASES PRODUCTIVITY & SAVES MONEY

THE CHALLENGE

The customer engages in the exploration and production of oil, natural gas, and sulphur and transports and wholesales petroleum and petroleum products. Part of the customer's process involves extracting heavy crude oil and produced water from the ground. The produced water, which comprises water, sand, and chlorides, is then transported to multiple remote sites that are, on average, eight to twelve kilometres (four to eight miles) away from the production wells for treatment before it is put back in the ground. Trucking the produced water is extremely time-consuming and expensive and can cost the customer \$500,000.00 to \$1,000,000.00 per year in transportation costs.

THE SOLUTION

Our application expert - Steve Jesudian - offered SEEPEX BN Range Pumps with equal wall stator technology and hydraulic motor to pump the produced water to the remote sites for treatment, replacing the need for trucking. Very small buildings that do not have electricity are located on these remote sites. One hydraulic motor powered equal wall SEEPEX progressive cavity pump is installed inside each of the buildings. These pumps convey the produced water through piping to a disposal well so the water can be put back into the ground. The equal wall stator offers low shear and does not create emulsions. It dissipates heat efficiently and runs cooler, resulting in longer service life, and the footprint is reduced to almost half, reducing capital costs.

The pumps successfully replaced the truck transport system. The customer saved between \$500,000.00 and \$1,000,000.00 per year for all the sites remote trucking costs.

THE RESULTS

- ▶ Reduced Operating Costs
- ▶ Increased Efficiency
- ▶ Increased Productivity

For more information on this solution or if you have a fluid handling challenge of your own - Contact a John Brooks Company Application Expert today!



OIL & GAS | PRODUCED WATER TRANSPORT SEEPEX BN RANGE PUMPING SYSTEM SAVES UP TO \$1,000,000.00 A YEAR IN TRANSPORTATION COSTS

TECHNOLOGY UTILIZED

SEEPEX BN Range Progressive Cavity Pump - for use in a variety of industrial sectors and pumps low-viscous to viscous media, with and without solids. Equal-Wall Stators offer a less expensive parts replacement and less weight, saving about 25% on energy consumption.

- ▶ Conveying Capacity : 0.132 – 2,200 gpm (0.05 – 500 m3/h)
- ▶ Pressure: Up to 700 psi (48 bar)
- ▶ Low Shear Rates
- ▶ Self-Priming and No Gas Locking
- ▶ Minimal Pulsation—No Need for Pulsation Dampeners
- ▶ High-Pressure Applications
- ▶ Stable and Variable Flow
- ▶ Heavy-Duty Design
- ▶ Handling Multiphase Liquids
- ▶ Standardized Pump Components

HOW BN RANGE PUMPS WORK

- ① SEEPEX BN Range Pumps lift oil from the slop oil tank to the separator and transfer the fluid from the knockout drum to the separator tanks.
- ② The pumps with Equal-Walled Stator technology transport produced water to hydro-cyclones to separate oil and water.
- ③ Finally, the pumps transport rejected oil back to the upstream separators and water to induced gas flotation (IGF) units.