

# Viking Pump Minimizes Glycol Dehydration Downtime in the Marcellus-Utica Shale

CASE STUDY | UNITED STATES

## OVERVIEW

Viking Pump recently collaborated with a Houston-based dehydration fabricator to offer a more reliable, fit-for-purpose pump to one of their customers in the Marcellus-Utica shale. A joint site visit was made to a natural gas glycol dehydration facility, located in Clarington, OH along the Ohio River. This provided an ideal opportunity to see first-hand what type of pump was needed to accommodate the flow rate and pressures they were trying to attain.

Viking Pump application engineers delivered a customized, easy-to-install, trouble-free pump that performed better than its predecessor. The first one has been in operation 24/7 for over 12 months, with no failure or maintenance issues. The positive outcome resulted in this field-proven Viking pump being added to the fabricator's dehydration skid going forward.

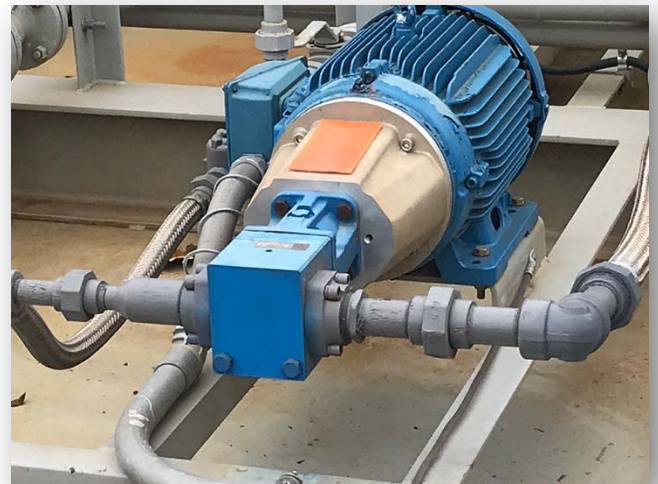


GL-41009 Pump & Motor Unit

## CHALLENGE

The operator was running an intensive natural gas glycol dehydration process around the clock at a gathering site servicing multiple wells in the Marcellus-Utica area. However, the process was not up to par, with maintenance issues and premature failure of existing electric-driven pumps causing a lot of downtime.

These problems were primarily due to high temperature and cavitation damage, limiting the pumps' lifespan to just 2 or 3 months each. An alternative pump solution was needed to withstand the high temperature and pressure conditions (1200 psi), and to minimize the frequency of pump replacement.



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## SOLUTION

After assessing the situation, Viking Pump recommended a specially designed, electric-driven pump to meet the challenging requirements, and the operator was willing to give it a try.

The Viking 41013 Model, GLV Series™ was installed in conjunction with the fabricator, while a relationship was being established between Viking Pump and the end user.

The new pump has a durable construction that can handle this type of application, with ratings of 1500 psi and 350° F. The M-Drive motor mounting unit comes standard, with a bracket and close-coupled arrangement between the pump and motor for easy installation—in both new applications and retrofits, where the existing motor can be used. In this case, the operator welcomed the cost savings of not having to purchase new motors.

## RESULTS

The operator was convinced of Viking Pump's quality, long-lasting performance, and reliability as shown by the initial pump trial. There have now been three dehydration skids provided by the fabricator at the same customer site, all with the new Viking pumps included.

According to the onsite Sr. Facilities Technician, "The Viking pumps are super simple to install, it couldn't get any easier. They are subjected to the same conditions and run like the day they were put in."

This successful field trial demonstrated that the Viking glycol series pumps are capable of four times longer operation (and still running) under demanding, harsh conditions with no service needed. It has secured Viking Pump a place in the natural gas glycol dehydration market, where time is money and downtime must be minimized.

PUMP  
RATINGS  
OF  
**1500**  
PSI  
AND  
**350° F**

Viking Pump's external gear GL-407 Series™ and GL-410 Series™ products offer a reliable pumping solution for circulation of triethylene glycol (TEG) in natural gas dehydration systems. For more information, contact your Viking Pump distributor and request a flyer with full details and specifications.