With a rich historical culture and abundant natural resources, the Rappahannock River’s cool waters gently flow from the serenity of the Blue Ridge Mountains to the west, skirting rocky outcrops and descending hillsides, eventually working its way to Fredericksburg, VA.

As the Rappahannock reliably meanders hundreds of miles toward the Atlantic Ocean, it delivers its natural resources to the region surrounding Fredericksburg, where Quarles Petroleum Inc. works diligently to ensure that another type of resource is moving outward to a much larger geographical region.

Located 49 miles south of Washington, D.C., and 58 miles north of Richmond, VA, Fredericksburg is considered one of the fastest-growing regions in the state. Quarles Petroleum has seen the growth first hand as it has expanded from a one-truck, family-owned oil business in 1940 into what is today a corporation employing more than 250 people.

A prominent distributor throughout the mid-Atlantic region, Quarles Petroleum is an oil distributor, propane supplier, service-station supplier and fleet-fuel site provider. As a service-station and fleet-fuel provider, Quarles has the constant responsibility to ensure that an adequate fuel-supply level is always reliably on hand at any given location so customer demand is always satisfied, no matter what the weather conditions or independent demand may be for any single location.

Quarles Petroleum fueling sites operate within a six-state footprint throughout the mid-Atlantic, with more than 120 individual fueling locations across that region. With more than 70 years of experience providing fuel to the public and fleets, Quarles Petroleum manages the daily demands of delivering fuel across a geographically diverse landscape of sweeping valleys and steep hillsides where drivers
must navigate huge temperature extremes and changing climates that can deliver freezing rain and snow in the winter to triple-digit temperatures during the summer months. The challenge for Quarles Petroleum, however, begins long before a customer attempts a transaction on site.

The Unattended Fueling Challenge
When it comes to the unique business of fleet-fueling sites, Quarles Petroleum’s rich heritage and experience with more than 120 convenient, unattended cardlock fueling sites is unmatched. Located in Pennsylvania, Maryland, Delaware, West Virginia, Virginia and North Carolina, the sites provide automated access to refueling privileges with easy card operation and convenient period billing.

Operating a 24/7 fueling facility demands attention to customer accessibility, product affordability and operational dependability in order to sustain a successful, growing business. According to Dean Brooks, Facilities Manager for Quarles Petroleum, “Our growth in our marketplace is based on providing our customers with the right product at the right price with exceptional customer service.”

Operating so many fueling facilities across such a diverse regional footprint, it is not hard to imagine the varying card-based methods a given customer base might employ to pay for its fueling needs. Managing the sheer volume of data coming in for those fuel products, as well as the customer-card information at each site, can be a daunting task. However, providing a diverse array of card options for the widest array of customers was essential for Quarles Petroleum to grow its business and ensure accurate data capture and convenient operation for its customers.

In order to succeed moving into the future, Quarles Petroleum recognized that it had to expand its services. According to Brooks, it was his company’s

OPW’s ability to connect with a number of networks and accept a wide variety of cards was key to Quarles’ selection.
need to expand the network of cards accepted at Quarles Petroleum facilities that prompted a change in the front-end fuel control systems that customers interface with at each fueling site.

“Our previous vendor had stopped making the system we were using and they were going to a new system that would not have worked with the Quarles network,” Brooks said. “We needed to find a new solution for our sites.”

Identifying The Right Solution
Quarles Petroleum fueling sites provide 24/7 fueling to more than 2,500 businesses and fleets throughout the mid-Atlantic. These fleets put millions of miles on their trucks every year and cannot afford to lose time during routine refueling stops and transactions. Time lost on the road for any reason negatively affects these delivery fleets as time lost equals lost revenues and a corresponding adverse effect on the bottom line.

Realizing that the previous system was in need of an update, for a solution Quarles Petroleum relied on a long-standing relationship it had with Advanced Fueling Systems, located in Ashland, VA. “Quarles and Advanced Fueling Systems have had a business relationship for about 20 years,” said Brooks. The two partners worked together to determine the best option for Quarles’ particular needs.

According to Linnie Hiter, President of Advanced Fueling Systems, the solution presented to Quarles Petroleum’s problem was all about matching up the specific needs with the right equipment. Hiter said that while there are many systems available, these systems also tend to come and go overnight.

“Quarles was making an expensive upgrade to their system and they needed it to be reliable,” Hiter said. “There are a lot of systems out there, but in my opinion you have OPW, and they aren’t going away.”

Hiter said that when a company like Quarles Petroleum makes an investment in a system, they need to know that the company and the support for the system will be around years later. “Quarles was looking for a system for the long game,” said Hiter. “We always pick the best product for all of our customers. We have used OPW in the past and it was reliable. They have the resources to handle anything that may come up and they have worked really close with Quarles to get the new system how they need it.”

Based on the recommendations of Hiter and Advanced Fueling Systems — and based on the reputation of OPW, Quarles opted for new equipment from OPW Fuel Management Systems, Hodgkins, IL. “We needed to find a new vendor and we turned to OPW Fuel Management Systems,” said Brooks.

Specifically, Advanced Fueling Systems recommended the FSC3000™ Fuel Site Controller and C/OPT™ Fuel Island Terminal, along with the Phoenix™ Plus Fuel Management Software from OPW Fuel Management Systems.

Brooks said the new OPW-FMS system expanded the number of networks available for client billing and provided the diversity for cards accepted at the sites that the competition’s system simply could not provide. “The OPW-FMS system can handle seven networks, which covers just about every card,” said Brooks. “Some sites can even handle additional cards.”

The FSC3000 sets the standard in fuel-management systems, featuring the capability to conveniently track and report fueling transactions by driver and/or vehicle. The FSC3000 interfaces with many authorization and commercial fueling networks, as well as proprietary network cards. It allows the user to set fueling restrictions that limit specific vehicles to the type of fuel used and quantities purchased, thereby assuring complete fueling-system security, accountability and control.
The FSC3000 also provides various methods for controlling fuel dispensers, which may feature both mechanical and electronic pumps, along with Gilbarco CRIND and Wayne CAT in-dispenser card readers. In addition, the FSC3000 now offers several exciting new features for special pricing and dollar authorization. Fuel station owners can now set price discounts for loyal customers, as well as authorize transactions according to dollar limits instead of quantity, providing better support for network card processing and daily or monthly allocations.

Brooks said the daily volume of transactions throughout the Quarles Petroleum network of fueling sites continues to grow. "We have thousands of transactions occurring every day," he said. "Now, with the new system, everything goes to one place, the data is tracked and they let us know everything. We have had a good response from the new system. From helping us write the file data and separating the different cards, the folks at OPW-FMS have been great."

**Conclusion**

When your business relies on communication and coordination between more than 120 separate locations, thousands of daily transactions, the tracking of inventory and the management of fuel volumes, it is imperative you can rely on your front-end fuel control system to provide reliable service.

In such a competitive business where the public and fleet managers can choose between dozens of fueling options, the ability to keep your clients happy with convenient and efficient fuel-management and processing capabilities is essential to maintaining the client base. When clients can focus on their core business, and not have to worry about fueling issues, that can be the difference between them becoming a one-stop transaction or a repeat, loyal customer.

"We have been working with OPW-FMS for about two years and the system has been really reliable," said Brooks. "That’s the whole thing that we deal with — it has to be reliable."

Based on the success so far across its 120-plus regional sites, there’s every reason to believe Quarles Petroleum’s fuel-management program will be just as dependable as the flow of the Rappahannock River making its steady march to the ocean.


**About OPW**

OPW is the global leader in fully integrated fluid handling, management, monitoring and control solutions for the safe and efficient handling of critical petroleum-derived fluids from the refinery to the commercial and retail points of consumption, including loading systems, rail and transport tank truck equipment, tank gauging equipment and automated fuel management systems, valves and fittings, underground and above ground storage tank equipment, spill containers, overfill prevention devices, secondary containment sumps and flexible piping, fuel dispensing products, including swivels, breakaways, industrial and automatic dispensing nozzles for vapor recovery, gasoline, diesel, and alternative fuels, and clean energy fueling nozzles and accessories for LPG, Hydrogen and CNG. OPW has 1200 employees with manufacturing operations in North America, Europe, Brazil, China and India and sales offices around the world. OPW is an operating company within the Energy segment of Dover Corporation (NYSE: DOV).