

Market Segment: Rental Power

POWER PROFILE

North Church Gravel

POWER NEED

North Church Gravel is an extensive sand and gravel supplier based in Franklin, New Jersey, USA, which serves a variety of major finished concrete block product manufacturers as well as numerous large land development contractors.

Company officials have begun to execute a five-year plan to expand output at the company's 365-acre site through a complete layout change of the buildings and processing equipment. In the first phase of the plan, company officials sought to quickly increase annual output from 750,000 tons in 2010 to 1.2 million tons by the end of 2011.

In order to stay in operation until new utility service was installed, North Church Gravel required a temporary generator set to provide needed electrical power for office buildings and processing equipment, including crushers and conveyors. Executives sought an immediate solution that would get their equipment up and running at the new site while complying with stringent state and federal emissions standards for industrial operations.

SOLUTION

Working with Cat® Dealer Foley Power Systems, the operators of North Church Gravel selected the Cat XQ800 mobile diesel generator set powered by the fuel-efficient, Tier 4 Interim certified Cat C27 diesel engine with ACERT™ Technology.

Rated for prime operation at 725 kW, the Cat XQ800 rental unit features a user-friendly interface and automatic generator set

paralleling. A principle advantage of the control system is the auto configuration of key performance parameters when frequency or voltage changes are required. The standard EMCP 4.4 control panel, ADEM™ A4 equipment monitor and Cat Digital Voltage Regulator (CDVR) sense changes and adjust the parameters for optimum performance.

Designed for greater efficiency and reduced fuel consumption, the Cat XQ800 generator set features a solar-powered battery maintainer that keeps batteries fully charged when not in use. The open crankcase ventilation system mitigates environmental impact by reducing the oil contained in engine ventilation by 75 percent. This unit also provides 110 percent spill containment of onboard engine fluids.

The support staff at Foley collaborated with Caterpillar engineers to install and operate the generator set used by North Church Gravel as a Tier 4 field follow test unit. Numerous permits were required to use the generator set at the site, and Foley worked very closely with the customer's consultant to ensure they were able to obtain the necessary approval from the New Jersey Department of Environmental Protection. Frequent monitoring of the emissions data and generator operation helped confirm that the generator set was working in compliance with state and federal laws.

RESULTS

The Cat XQ800 was up and running within three hours after arriving on site, and North



North Church Gravel turned to Caterpillar for temporary power to launch the expansion of the company's 365-acre site in northern New Jersey.

CUSTOMER

[North Church Gravel](#)

LOCATION

Franklin, New Jersey, USA

CUSTOMER BUSINESS ISSUE

Reliable, portable power for the quarry production machinery

SOLUTION

[One Cat® XQ800 rental diesel generator set](#)

CAT DEALER

[Foley Power Systems](#)



Church Gravel began full production at the quarry immediately. The rental unit operated 55 to 60 hours a week for five months, and Foley Power Systems performed full maintenance checkups every 250 hours as part of the field follow testing process.

As part of the long range plans at the site, North Church Gravel purchased a used Cat 500 kW diesel generator set from Foley to provide standby power for the site.

“The Cat XQ800 generator set was reliable, sturdy, user-friendly and very maneuverable,” said Frank Gelewski, facility manager for North Church Gravel. “We have used Cat products for years, and we are very impressed with the quality of their generator sets as well as the exceptional customer service provided by Foley.”

With the Tier 4 field test completed at North Church Gravel, Foley Power Systems purchased a Cat XQ800 to offer as a rental unit for other customers with substantial temporary power needs.

“The Cat XQ800 is a solid product that exceeds the highest environmental standards and differentiates us from the competition,” said Eric Lavin, rental manager for Foley Power Systems.

For more information, please visit www.catelectricpowerinfo.com/pp.

POWER PROFILE

North Church Gravel



North Church Gravel requires electrical power for office buildings and processing equipment, including crushers and conveyors, that complies with stringent state and federal emissions standards for industrial operations.