

## An Environmental Conservation Agency

**Focus:**

An environmental conservation agency that deploys mobile laboratories to be used for a variety of applications including water and air quality testing.

**Problem:**

The agency was in need of a safe, portable gas solution for its mobile labs used in the field.

**Solution:**

The customer purchased several Parker laboratory gas generator products that included hydrogen generators, zero air generators, and TOC gas generators specifically for their TOC instruments.

**Impact:**

Each mobile lab is equipped with a lightweight gas generator for their GC and TOC applications.



**Project Name:** An Environmental Conservation Agency

**Location:** New York State

### Summary

With nine locations serving the needs of all New Yorkers, the mission of the agency is simple, to conserve, improve and protect New York State's natural resources. It is committed to preventing and abating, water, land and air pollution, in order to enhance the health, safety and the overall economic, physical and social well-being of the state's people.

### Challenge

The agency incorporates the use of several mobile laboratories, which allows them to bring the science to the application for a variety of applications including water and air quality testing. By isolating single instruments to a mobile station versus the traditional in-house laboratory design where multiple instruments are served by the same gas supply, the agency needed to provide a safe, mobile gas source for each mobile lab that could support their gas chromatograph (GC) and total organic carbon analyzer (TOC).

### Solution

Parker partnered with the agency in the early design stages of the project and specified equipment that was compact, lightweight and easy to operate. The customer ultimately purchased several Parker hydrogen generators, zero air generators, and TOC gas generators that not only streamlined their mobile operations but also to eliminated the risk of potential safety incidents as a result of transporting high-pressure gas cylinders on-board their mobile lab, as they had done in the past.

Each mobile lab is equipped with gas generators, specific to their instrument needs, and they now enjoy increased lab space, a less heavy mobile lab and have eradicated the risk of running out of gas while traveling on a testing route.

Parker's hydrogen generation systems are the gold standard of the industry, and as a result, possess and excellent reputation for performance and reliability in the GC market.

### TOC Gas Generators

**Parker TOC Gas Generators** produce carrier and combustion gas from an existing compressed air supply for TOC instruments, eliminating the need to purchase expensive, inconvenient, high pressure cylinders of air, nitrogen, or oxygen.

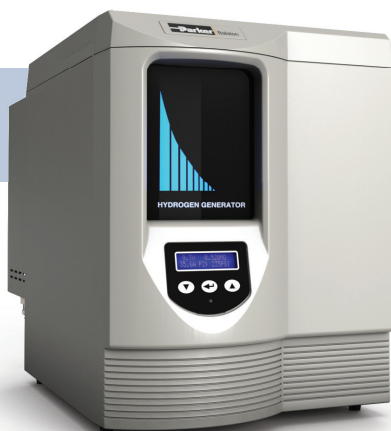


### Zero Air Generators

**Parker Zero Air Generators** are manufactured with state-of-the-art, reliable components and are engineered for easy installation, operation, and long term performance. Their compact design requires a small footprint while eliminating the safety concerns and uncertainty related to costs and availability of cylinder gas delivery. Generate a continuous supply of zero grade air on-demand with a Parker zero air generator.

### Fuel Gas Hydrogen Generators

**Parker Fuel Gas Hydrogen Generators** utilize a proton exchange membrane, which eliminates the use of liquid electrolytes with hydrogen generators. Deionized water is all that is required to generate hydrogen for weeks of continuous operation. Automatic water filling is available as an option for all fuel gas hydrogen generators. Simply connect your in-house supply of deionized water to the nitrogen generator for virtually hands-free operation.



### Hydrogen Generators

**Parker Hydrogen Generators** are an excellent source of ultra-pure, dry hydrogen for a wide range of laboratory uses. These generators are used extensively with gas chromatographs to provide a fuel gas for Flame Ionization Detectors (FID), a reaction gas for hall detectors, and a carrier gas to ensure absolute repeatability of retention times. High sensitivity trace hydrocarbon analyzers and air pollution monitors also use hydrogen to ensure the lowest possible background noise.