



## Application Case Reference



### Cardno ATC

Client: Confidential

Date: 10 July, 2014

Location: St. Pauls, North Carolina

Site History: Environmental Waste Storage Facility

Environmental Conditions: The contaminated site was a ditch at the north end of the facility. Adjacent to the contamination was about 3 acres of dense foliage. The geology of the area was very flat and the soil was typical of the piedmont area.

Project Objectives: The objective of this project was to delineate the contaminated area. The delineation was done vertically and horizontally. Once the delineation was finished we went back out onsite to analyze the soil with the QED/UVF method during hand excavation.

### Project Description:

This project site is an environmental storage facility. During a transfer of petroleum by-products one of the lines detached and over 50 gallons of product spilled. This spill took place right next to the facility outfall; therefore, the contamination flowed into the ditch.

The visible product was pumped out of the ditch immediately and 6-8" of soil was removed from the bottom of the ditch. There was residual product on the cut bank and the surrounding debris. A distinct odor was found at the discharge point and 30' from the discharge point where ponding had occurred.

### How was the QED incorporated into the scope of work?

The QED was incorporated into the scope of work to test the soil for derivatives of crude oil products. At each point a sample was taken and analyzed to see if it exceeded the action limit of 10 mg/kg. The data was used to create a vertical and horizontal delineation.

The QED was also used during the excavation phase of this project. Real-time data was used to see that all of the contaminated soil had been removed from the site.

It is estimated that \$10,000 was saved on this project using the QED/UVF technology in analytical and remobilization fees and three months' worth of time savings.

*"The job was done under extreme heat and their rep. was good to go. She went above and beyond. She was nice person, very knowledgeable about what she was doing and knew the process she was performing. They were very helpful. They represented the quality we ask from our subs., they stepped up."* – ATC Representative

