Neustadt Refinery is a division of Bayern Oil that started refining oil back in 1964. Neustadt refines local oil into propane, butane, all gasoline grades, diesel, light oil, and heavy oil. To help with the refining process, Neustadt has four sets of front-fired boilers. Each boiler has four burners capable of firing natural gas, waste gas, and oil. Detection and discrimination has proven to be difficult over the years due to the staggered gas cane arrangement.

When the inner canes are shut off, detection of the outer canes is a must. However, the amount of signal coming back has proven problematic for our competition. The Phoenix scanner on the other hand, has a UV sensor that detects the available radiation and compares that with the background radiation. The special algorithms in the Phoenix are able to provide reliable detection and discrimination.