

## MIP Project Summary: Columbia Technologies

The discovery of dry cleaning solvents in soil and groundwater beneath the laundry room of the Peabody Orlando Hotel in Orlando, FL, led the Florida Department of Environmental Protection to request a site assessment to identify the extent of soil and groundwater impacts from perchloroethylene (PCE) and any of its degradation products. The hotel owners contacted environmental consultant, Ensafe from Memphis, TN, to help them respond.

Ensafe turned to Columbia Technologies in Baltimore, MD, to develop, process, and present the bulk of the site assessment data using the MIP System. Columbia's task was to delineate the presence or absence

of VOCs in soils and groundwater at the site, and collect representative samples of the subsurface ... all in a single field visit.

"The MIP system provided excellent high-resolution data. Combined with SmartData Solutions®, the client was able to quickly and accurately select both groundwater and vapor sampling locations while the Project Team was on site."

John Sohl, Owner  
Columbia Technologies • Baltimore, MD

The exact scope of the

project was dynamic based on interpretation of real-time data.

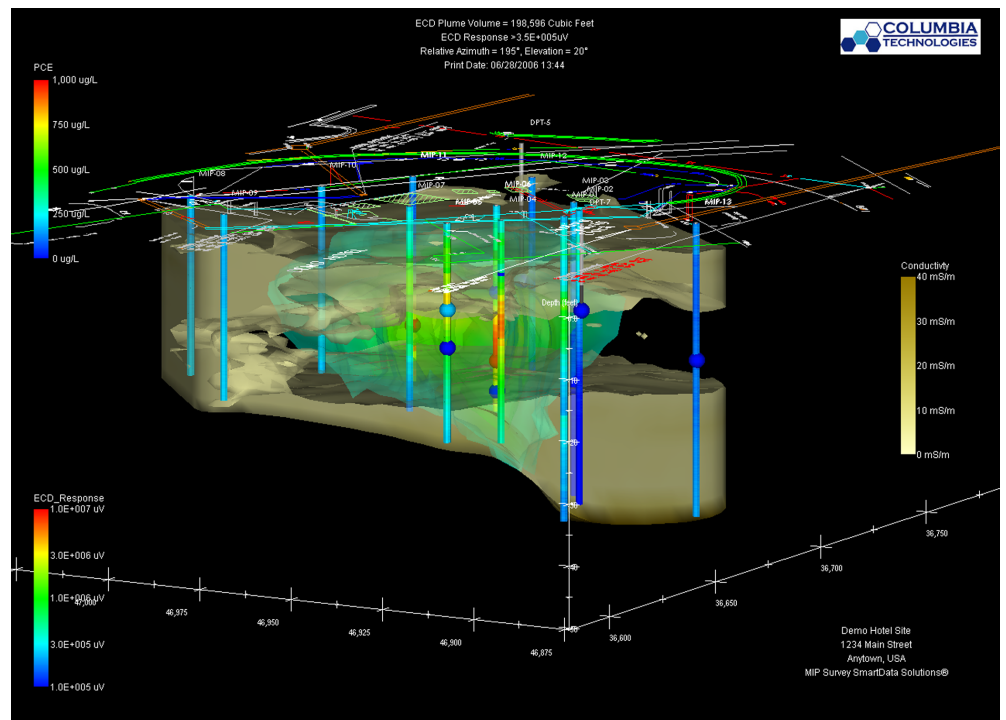
The field team, working both inside and outside the hotel, included Doug McInnes, Columbia's MIP Manager, and Robert Stewart, Columbia's Geoprobe® Operator, who teamed with Ben Brantley, Ensafe's Project Manager. They customized a site-specific work plan for the project using Geoprobe® direct push technology and the MIP system. By using the MIP and SmartData



On a jobsite with the Columbia Technologies 6620DT and MIP support vehicle equipped with mobile laboratory equipment.

Solutions®, a rapid 3-D visualization and information delivery system, the field team was able to optimize specific results from the site in real time. The results were posted on a secure website daily, incorporating all relevant data into high definition 3-D images of the subsurface. This enabled the Project Manager, who was onsite, and other members of the Ensafe team, located elsewhere, to decide with confidence where to next obtain MIP logs and where to install monitoring wells.

Columbia Technologies is recognized as an MIP Service Specialist, and has completed MIP training at the Geoprobe® corporate facilities and adheres to MIP Standard Operating Procedures.



ECD response was noted 3- to 6-feet bgs which is believed to have been evidence of soil gas. Groundwater was encountered at 7 feet and is shown by a drop in temperature. At 12 to 13 feet, the maximum concentration of PCE/TCE dry cleaner solvents was detected. The probe was pushed past this level until reaching a clay level which was acting as an aquatard.

Doug McInnes, Columbia Technologies, reviews real-time MIP data with a client on the Geoprobe® Field Instrument inside the company's support vehicle. Both the Field Instrument and MIP Controller are mounted in a ruggedized and padded container which can be removed and used in other carrier vehicles.

