

Production mapping streamlines environmental site assessments

Production mapping software is significantly improving efficiencies in the Survey Products Group of US-based W.L. Gore & Associates, Inc. Gore's customized application of robust mapping software has eliminated repetitive tasks in the production of maps and, at the same time, improved the visualization of data for more effective client presentations.

Within the Survey Products Group service portfolio, Gore conducts environmental site assessments with clients and regulators, to locate, identify and delineate sub-surface contaminants. Subsequent sampling, remediation and monitoring programs are focused in a cost-effective and timely manner. The company uses a high-performance storage database, as well as software tools for analyzing, visualizing and managing large volumes of multi-disciplinary data sets. The end result aids the environmental consultant in developing a robust conceptual site model, which leads to accurate selections of subsequent soil or groundwater sampling locations, and optimization of remediation programs.

"The cost of groundwater cleanup and long-term monitoring programs can be in the millions of dollars," says Jay Hodny, Ph.D., Product Specialist at Gore. "It's not uncommon for a groundwater monitoring program to require regular sampling for over 20 years. If we can accurately locate the contaminant plume early in the investigation, and ultimately drill fewer monitoring wells, we deliver real value. Greater accuracy is the difference between installing and sampling 5 monitoring wells, versus 50, for 20 or 30 years."

Gore's Survey Products Group uses a custom solution based on Geosoft's robust mapping software to eliminate repetitive map production tasks and improve the visualization of data, providing a more effective presentation for the client.

Hodny combines CAD-based sitemaps, illustrating the sample locations, along with the analytical data in an integrated software environment. He utilizes robust contouring algorithms and map editing and visualization tools to generate accurate assessment maps of volatile and semi-volatile organic compounds present in the subsurface soil gas. Data retrieved from the GORETM Module, Gore's patented, waterproof, vapour-permeable sampler, can create a volumous data matrix for larger projects, such as large military bases that utilize hundreds or thousands of the samplers. Having production mapping tools saves time and improves efficiencies by quickly producing contour maps of relevant compounds across the survey area.

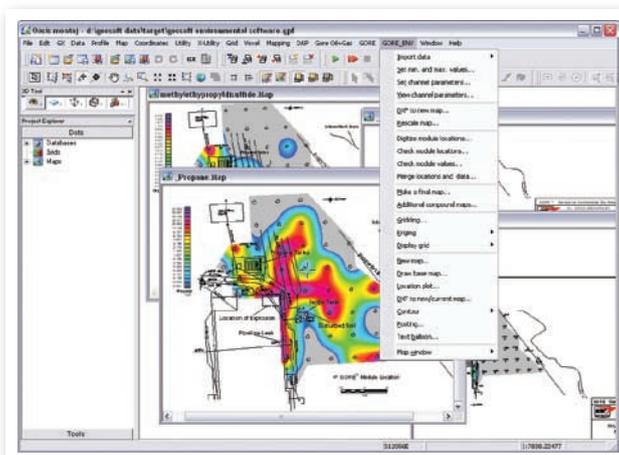
"I can take a full suite of 90 different compounds, and quickly produce informative maps for any of the compounds of interest," Hodny says. "If I had to do that one map at a time, you can imagine how long that would take me."

Gore's mapping solution automates several repetitive mapping tasks, such as creating title blocks, plotting north arrows, and using archived digital data. Geosoft Custom Solutions professionals learned Hodny's



mapmaking routine, and built in automated functions that minimized his tasks from 50 steps down to 10. The customized software saves Hodny a tremendous amount of time, which enables him to handle a greater number of survey projects, without sacrificing quality, while providing a standardized deliverable to the client.

"Geosoft automated 90 per cent of my map-making, but they made the program flexible so that I can stop at any time, do something unique to the maps, and then continue, while still having access to the full functionality of the Oasis montaj package," Hodny says. "I can create one map of one compound, and then tell Oasis montaj to make maps of all the other compounds requested by the client. Before the automation, I completed around one project per day. Now, I can generate three or four completed reports, with maps, in the same time period, delivered to the client electronically. The Geosoft montaj mapping environment also allows me to combine compound data from multiple surveys at a site, into one set of map compositions easily, for a more comprehensive understanding of the subsurface contamination."



Gore & Associates Inc
100 Chesapeake Blvd.
P.O. Box 10
Elkton, Maryland 21922-0010
United States

Phone: (410) 392-7600
Fax: (410) 506-4780

http://www.gore.com/en_xx