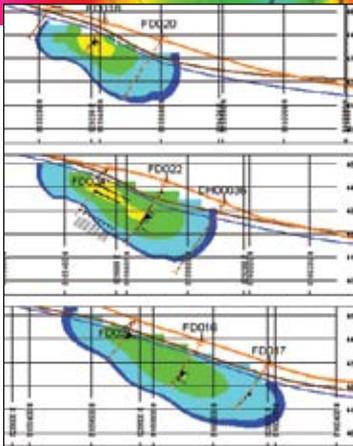
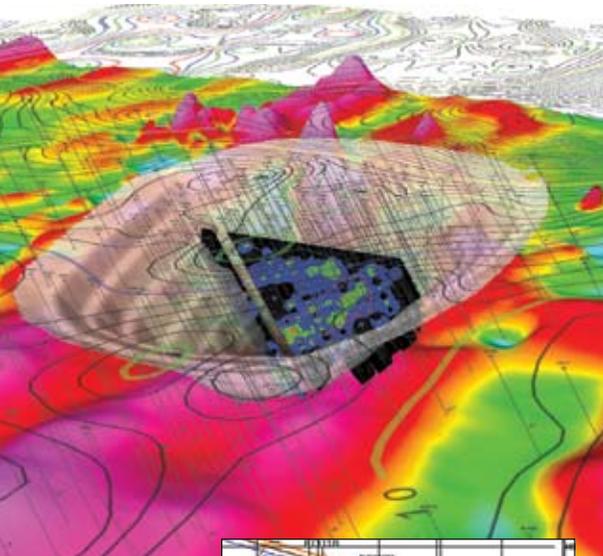


SIMPLE, MULTIDISCIPLINARY WORKFLOWS GET THE JOB DONE FASTER AND BETTER

Target speeds up exploration geology, from target selection to mine development



As a purpose-built application for exploration geology, Target has workflows to streamline and handle just about anything that involves drilling - from exploration to production control drilling.

For initial exploration, Target helps to quickly assemble robust geological and basic geotechnical data and present drilling results for subsequent detailed evaluation. Target is useful for every phase from exploration program management right through to feasibility studies, new operations in areas such as near mine exploration, and improving practices in operating mines.

The software provides a wide range of tools to import, analyze, validate and clean up data before exporting it for use with other applications, such as Access databases, specialist geoscientific data management systems such as acQuire, or modeling and mine planning systems such as Vulcan and Datamine. Target can identify and correct discrepancies between different types of data such as geological descriptions, assays, basic geotechnical data or geophysical logs. It can also trouble-shoot problems with data that could be due to data entry problems from the field, such as duplicate collar positions, overlaps between sample intervals, or assay values outside accepted limits and gaps.

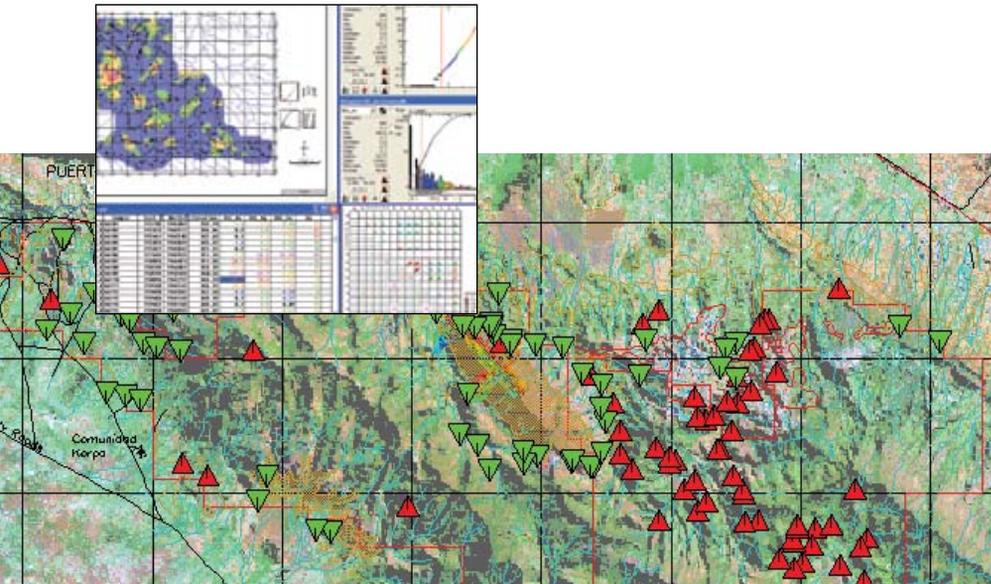
For coal, iron ore and base metal projects, exploration companies can save time and money by using Target to integrate assay and geological descriptions with downhole geophysical data. The quantitative use of geophysical data enables explorationists to reduce their reliance on other forms of data, including assays which can be expensive and time-consuming to collect. This helps to increase the value of their drilling investment.

Exploration and production control through statistical data analysis is another phase where the right software can make a difference. Target can identify different populations in data and help geologists understand their significance. Because of its dynamic linking feature, it puts a real spatial context into statistical analysis work. In addition to numbers in a histogram, you can see where the populations lie on a map, cross section or in 3D in relation to geology and structures.

Finally, Target makes it easy to quickly transform on-screen plots into professional-quality maps. Printed maps provide an audit trail that describe how your geological interpretations evolved over time - essential for training new staff, explaining geological concepts to management, and for satisfying independent auditors when seeking project finance for new developments. Clear maps are also helpful for sit-downs with your team to identify problems, try out ideas and develop alternative geological interpretations.

While Target is a simple, and easy-to-use, program, users report that 'everything it does, it does well'. It's proven technology explorationists can use to achieve rapid, productive results.

Simplifying advanced geochemical analysis



Today geochemical investigations, including surface and subsurface investigations, are an integral component of geoscience exploration projects.

Understanding the wealth of chemical information buried in the liquids, gases, and mineral deposits of rock enables scientists to put together broad-based theories about the way the earth is changing; helps environmental management companies decide how to dispose of a toxic or hazardous substance; and steers mining companies towards use of natural resources with minimum environmental impact. Geochemical data is also essential for creating single element anomaly maps, analyzing multi-element samples, recognizing geochemical associations and – most significantly – cost-effectively creating better-defined exploration targets.

Designed to meet the needs of rigorous geochemical analysis, Geosoft's Geochemistry software provides a completely integrated toolset for validating, analyzing and visualizing geochemical data, within one software environment.

This software helps geoscientists confirm the validity and quality of geochemical data by enabling them to view qualitative and quantitative assessment in context with other data sets. In addition to QA/QC tools, its variety of geochemical analysis functions includes summary statistics reports, histograms, scattergrams, ternary plots, probability analysis, correlation plots and principle component analysis.

For rapid assessments and experimentation with data in real time, its processing engine can run numerous filters and processes on data. You can combine a region's geochemistry, geology, geophysics and other data onto a single dynamically-linked map or set of maps, in 2D or 3D. Geosoft's robust mapping features and simple workflow enable users to quickly create multiple and varied types of maps, including gridded maps, surface maps, posted value and sub-location maps.

Bottom line: the software's ability to integrate all data sets, analyze for statistical variation and relationships, conduct interactive graphical analysis of the statistics and present this information on maps enables geoscientists to make decisions faster, more accurately, and with an easily traceable path for due diligence.

SEMPlot workflow a solution for diamond geochemistry

Geosoft recently provided diamond explorers with a unique new tool - SEMPlot (Scanning Electron Microscopy) geochemistry workflow, now included within Geosoft's geochemistry software.

Rio Tinto Exploration, a world leader in finding, mining and processing the earth's mineral resources, developed SEMPlot with Geosoft to analyze Kimberlite indicator minerals. This is standard practice in diamond exploration. With SEMPlot, geologists import the data, identify the mineral grains based on their chemistry, display selected grains on discriminating graphs, and interactively reclassify them. They can analyze large volumes of microprobe data, and quickly produce spatial maps, graphical maps and plots.

"SEMPlot allows the data to be displayed in a graphical format, so it can be effectively interpreted," says Andy Lloyd, Rio Tinto Exploration project geologist in South Africa. "Its ability to manage data in excess of a million data points, with ease and simplicity, makes it a very powerful tool."

Dynamic linking capabilities are another benefit. "You can click onto a point in a geological map where you have a sample and see how it plots in terms of its mineral chemistry, or look at various geochemical displays and see where they fall on the ground," says Dr. Chris Smith, diamond consultant to Rio Tinto. "I'm not aware of any other commercially-available package that can do that."

