

Intelligent drillhole tools key to success

A maiden Canadian company benefited from Maptek™ Vulcan™ drillhole tools during its 3-year exploration program.



Key to the success of any drilling program is the accurate placement and orientation of drillholes to intersect specified geological targets. Maintaining a record of this information helps ensure that objectives are achieved.

Constantia Resources Ltd, a private company affiliated with Hunter Dickinson Inc. is part way through exploring the Maggie Project in southwest British Columbia. Historical data from the 1970s indicates the presence of copper and molybdenum mineralisation.

Terrain characteristics and proximity to historical or cultural artefacts in the area often require changes to proposed drill coordinates.

Field personnel have been relying on Maptek™ Vulcan™ to update field data and have those changes reflected automatically in the drillhole database. An additional benefit is the ability to display selected drill metadata using Intelligent Objects.

Central to this system is an SQL database containing proposed drillhole coordinates, orientation, length and rationale for drilling. An ODBC connection enables sharing between Vulcan and the SQL view of the data.

The proposed drillhole database is populated at head office during technical discussions with project geologists. The focus is an interactive session in which existing project data is displayed and interpreted.

Access to the database is user friendly and particular care is taken to record reasons for drilling and expectations for each hole.

Once field personnel have inspected the proposed site, adjustments may be required due to proximity to sensitive areas. Field personnel have privileges to access the head office network via VPN and insert modified proposed coordinates in the database and update any other fields pertaining to the hole status.

Functionality is embedded in the SQL view to select modified coordinates if they are present. This ensures the most recent coordinate set is used. If required, drillhole azimuth, dip and length can also be modified accordingly.

To aid planning and assess the success of a drillhole a link is established via Intelligent Objects back to the underlying SQL database. Hovering over drillholes allows for dynamic display of selected data such as purpose, priority, status of environmental clearance, comments and change history.

The Maptek solution ensures that field and head office personnel are using a single set of data at all times. Moreover, any changes made to the drilling program based on field criteria are reflected immediately and can be assessed against the agreed goals.

The current phase of the Maggie exploration program is expected to be completed in 2016.

*Thanks to David Gaunt
VP Resource & Database, Hunter Dickinson Inc.*