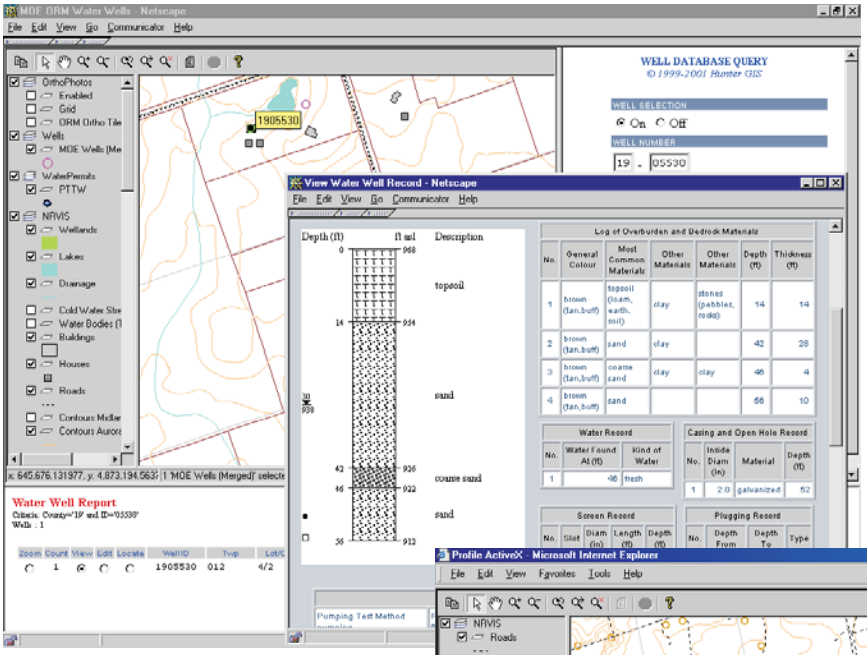
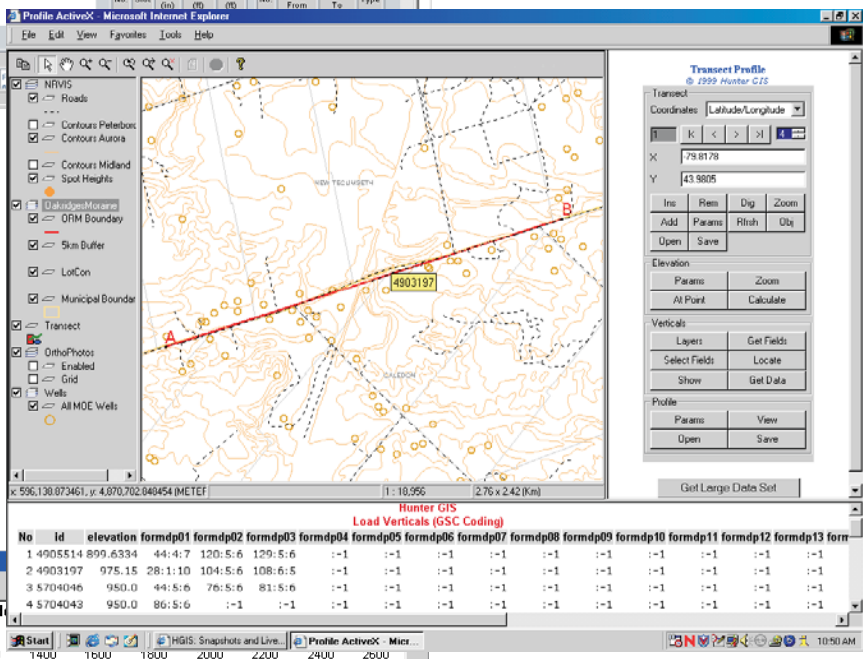
Water Well Record Management



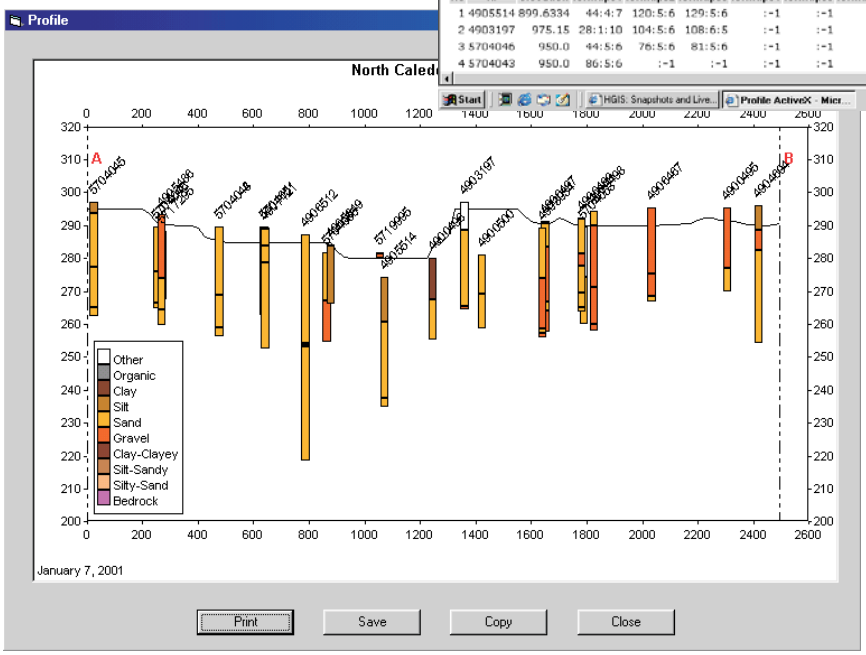
View and Edit

- Examine well logs
- Graphical view of formations
- Update with validity checks
- Adjust well location
- Add new log records
- Interactively select wells
- Perform queries



Transect Profilng

- Digitize or import transect
- Compute elevation based on contour and spot height layers
- Select wells within a specified buffer
- Classify formations
- Customizable plot output
- Save parameters for subsequent viewing



Featuring

- Ministry of the Environment database formats (single and multi-table)
- Geological Survey of Canada sediment protocols
- Ontario Basic Mapping (OBM)
- Tax Assessment parcels reference layers
- Customizable templates
- Browser-based (MS IE)
- Built on Autodesk MapGuide

Autodesk Authorized Developer

Hunter GIS Solutions for Autodesk MapGuide

Tel: (905) 607-4120 Web: www.hunter-gis.com

HUNTER GIS

Water Well Record Management Solutions

The Hunter GIS Web-based Ontario Water Well Record Management Solution has been developed on the Autodesk MapGuide platform. This platform permits web enabling of a wide variety of base map layers including orthophoto, elevation mass points, topographic contours, parcel mapping and many other resource and land use planning layers with linked databases.

There are three levels of functionality for the Hunter GIS MapGuide Water Well Solutions. Functional levels include:

1) Querying and Viewing

- Navigate (goto) to parcel address where database support is available.
- Navigate to geographic township, lot and concession where database support is available.
- Navigate to specific well record number in water well database.
- Perform a buffer query around a point, line or polygon and display a database extract for each well selection.
- Select an individual well and display the digital record with on the fly graphic display of the well (vertical stratigraphy and hydraulics incorporate sediment classification protocols.
- Perform ad hoc queries from the water well database.

2) Online Live Update (Trusted User or Redline)

- Digitize new well locations on the mapping layers and add attributes to the database.
- Relocate existing wells to a new location and look up new elevations and update the digital database.
- Update existing digital database to correspond to drillers records or to hydrogeological reports.
- Write back to original map layers and linked databases or alternatively store on redline layers and a temporary database for future integration by administrators.

3) Analysis (optional)

3.1 Transect Profiling

- Digitize a straight or irregular transect line and compute a vertical profile from elevation mapping.
- Select wells within a buffer distance or individually.
- Project wells onto vertical profile and compute vertical data - formations, hydraulics, water found, etc.
- Output graphic plots and tabular data.

3.2 Contouring

- Prepare TINS (Triangulated Irregular Networks) and Contours of formations, hydraulics and well characteristics.

3.3 Distribution

- Download graphic (SDF, shp format) and attributes based on “clipped” window extents to user hard drives for distribution to customers (online or offline).

4) Other Related Queries

- Permit to Take Water Queries (Ministry of the Environment)
- Stream Flow Station Query (Geological Survey of Canada)
- Climate Station Query (Atmospheric Environment Service)
- Stream Water Quality Station Query (Ministry of the Environment)

The Hunter GIS Water Well Record Management System provides for provincial scale water well record management with update from Regional Offices, by Drillers and other ‘trusted users’. Data may be centralized or distributed at Regional Centres. Reports may be customized.