

Compliance Monitoring

Under the *Water Act* of Alberta, authorization is required by the provincial government for all forms of water use except household, traditional agriculture, fire-fighting and hand pump water wells. Approvals come with stringent conditions, and failure to meet them can lead not only to financial consequences, but also to negative publicity. To help water users meet their obligations and avoid penalties and public relations fallout, HCL has created a comprehensive compliance monitoring program.

The HCL Program

- Simple and cost-effective
- Checks as frequently as once a day
- Proactive, to avoid fines and negative publicity

Groundwater Licensed for Oilfield Activities

As major water users, oilfield operators have much to gain from the HCL program. HCL's compliance monitoring services cover the following areas:

- Groundwater diversion amounts and rates
- Maximum water-level decline
- Changes in the chemical quality of groundwater
- Drawdown limits for waterflood operations under the *Water Conservation and Allocation Guideline for Oilfield Injection (2006)*

HCL has completed compliance monitoring at more than 100 oilfield sites around Alberta.

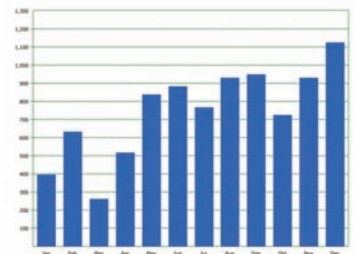
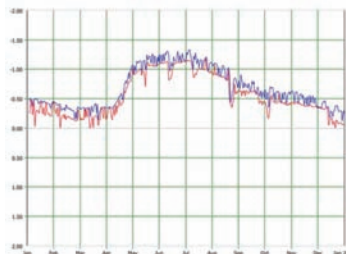
Municipal Groundwater Use

HCL also serves municipalities to help ensure they meet the requirements of the *Water Act* and — in the case of cities and towns with water distribution systems — the *Code of Practice for Waterworks Systems Using High Quality Groundwater*.

In addition to waterworks, groundwater diversions of as little as 1 cubic metre per day are also subject to compliance monitoring. HCL monitoring can also cover:

- Tank loading facilities
- Recreational facilities
- Anywhere else groundwater is diverted for non-household use

HCL currently provides compliance monitoring for more than 20 municipal sites in Alberta.



Agricultural Groundwater Use

Agricultural groundwater users, including confined feedlots, can use HCL monitoring services to ensure compliance with the conditions of their *Water Act* approvals and to make certain their groundwater supply is reliable for their present and future needs.

Flexible data collection, notification and reporting options

Data can be collected and input by the client or by HCL. Automatic emails advising of a compliant or non-compliant situation can be sent to one person or ten people or more, and compliance reports can be prepared for any timeframe.

Presently, HCL provides compliance monitoring for over 150 authorizations at more than 100 agricultural sites in Alberta.



Groundwater and Surface Water Solutions for a Changing Environment