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○ Drift Exploration

○ 2008

Glacial *Exploration*

ADDRESSING THE NEEDS OF TODAY'S
EXPLORATION LEADERS



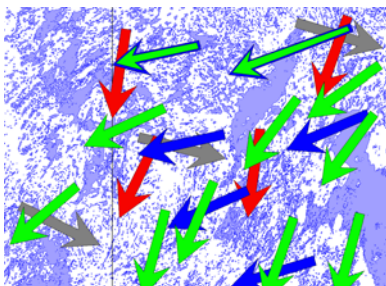
Our team of glacial deposits experts can provide the one thing that may help save time and money in the lengthy endeavor to a discovery.

Tools to help you find the path to the source

As we all know, mineral exploration through glacial sediment prospecting can be a long and expensive process. Glacio-fluvial and till sampling yield extensive results that ought to be interpreted in the most knowledgeable way. The sampled media may have undergone various erosional and depositional processes. Deciphering past glacial ice-flows is, at times, quite straight forward. However, in most cases, a thorough study of the glacial

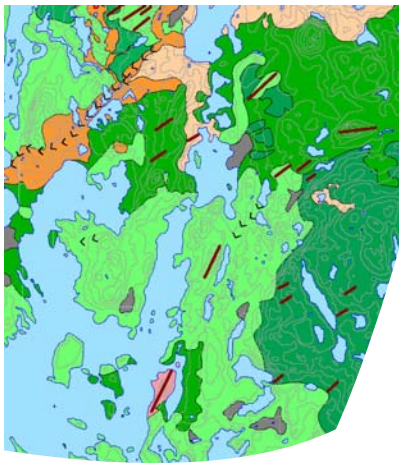
ice-flow indicators will not only yield a better understanding of the transport vectors, but also will redirect the forthcoming high resolution sampling in the most optimized way.

High grain counts or anomalous concentrations always represent a great news. Identifying such data associated with post-depositional processes will bring the exploration geologists' focus back to where it should be.



Ice-flow history maps

Extensive areas of the Canadian territory have undergone multiple glacial cycles as well as various ice-flowing directions. Early ice-flow, glacial maximum ice-flow and, late to deglaciation ice-flow directions will tend to vary at many scales. The end result of these changes is the present-day outline of the dispersal trains. Often, these trains are composite trains that can be deciphered through a deeper understanding of the local ice-flow history. Ice-flow history maps are essential tools to address the location of the targets.



Surficial deposits map: supporting the interpretation

Identification of primary and post-depositional processes of the sampled media

Support to interpretation

Drift exploration attempts to trace back the source of numerous tracers, mineral or chemical. The previous glaciations have laid out a wide spectrum of sediment types, often difficult to depict. The depositional processes vary from one type of sediment to another. These processes will have a profound impact on the net concentration of the tracer. Post-depositional processes are common in formerly glaciated terrains. They can be associated to short lived glacial lakes, to the action of brief but intense meltwater

action or to fluvial networks that no longer exist. All these processes may alter the original indicator minerals yield of the sampled sediments. The identification and understanding of these processes will have a direct effect on the interpretation of large sample sets. Detailed surficial deposits mapping will help the exploration geologists to prepare a better planning of their sampling season as well as it will be of primary help to interpret the forthcoming results.

Surficial deposits maps are powerful tools for interpretation of exploration results as well as planning, both geological and logistical.

Geological and logistical planning

The production of surficial deposits maps before the field season can allow the exploration geologist to pick up the future sampling areas and prepare the crew for its forthcoming work. Surficial deposits mapping will also allow the exploration geologists to know ahead of time the best location for the exploration camps. Such mapping may be used for future planning of potentially growing base camps. Identification of best locations for future infrastructures (utilities, transport, buildings, airstrip ...), identification of borrow-pits for future construction are facilitated with these maps.

Our Services:

- ▶ SURFICIAL DEPOSITS MAPPING FOR DRIFT EXPLORATION PURPOSES AT MULTIPLE SCALES
- ▶ SURFICIAL DEPOSITS MAPPING FOR LOGISTICS AND INFRASTRUCTURE PLANNING AT MULTIPLE SCALES
- ▶ ICE-FLOW HISTORY MAPS
- ▶ GEOCHEMICAL SURVEYS OF GLACIAL DEPOSITS WITH THOROUGH STATISTICAL ANALYSIS
- ▶ SUPPORT FOR INTERPRETATION AND SEDIMENTOLOGICAL INTEGRATION OF YOUR RESULTS WITH OUR MAPPING DATA



FINE TUNING: Narrowing down the source



Kimberlite indicator minerals are quite dependable proxies to identify areas of interest. Geophysical follow-up has more than often demonstrated its powerful strength to locate potential drilling targets.

Often, however, the number of targets may quickly exceed the drilling budget. Geochemical investigations of the till may help to elucidate the likely source and isolate it from the background. Identification of the geochemical composition of the geophysical targets will provide an additional tool to prioritize them .

Additionally, known kimberlitic occurrences can serve as models in order to extract the local geochemical signature of the kimberlites and its contrast to the regional background. Thorough statistical methods are used to achieve this goal.

Such surveys can be conducted in other exploration setups (uranium, base or precious metals, rare earth elements,...).