

WE GET THE BIG PICTURE



HGI is an innovative, solution-oriented geophysical consulting company and service provider to the environmental, engineering, ground water, mining, oil & gas, and natural resource exploration industries. We specialize in the application of 3D geophysical methods for time lapse subsurface characterization and monitoring of fluid flow through geologic materials.

Innovation, quality of work, detailed focus, and flexibility are hallmarks of HGI's service. Our ability to create custom-fit solutions based on individual client needs makes us an industry leader in the field of geophysics and geosciences.

For more information on HGI's products and services, please visit us at HGIworld.com or call us at: 1-866-647-3315



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Injection Monitoring

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hydroGEOPHYSICS

A BILLION GALLONS OF EXPERIENCE!

Subsurface Imaging

Innovative Solutions

Reducing Risks

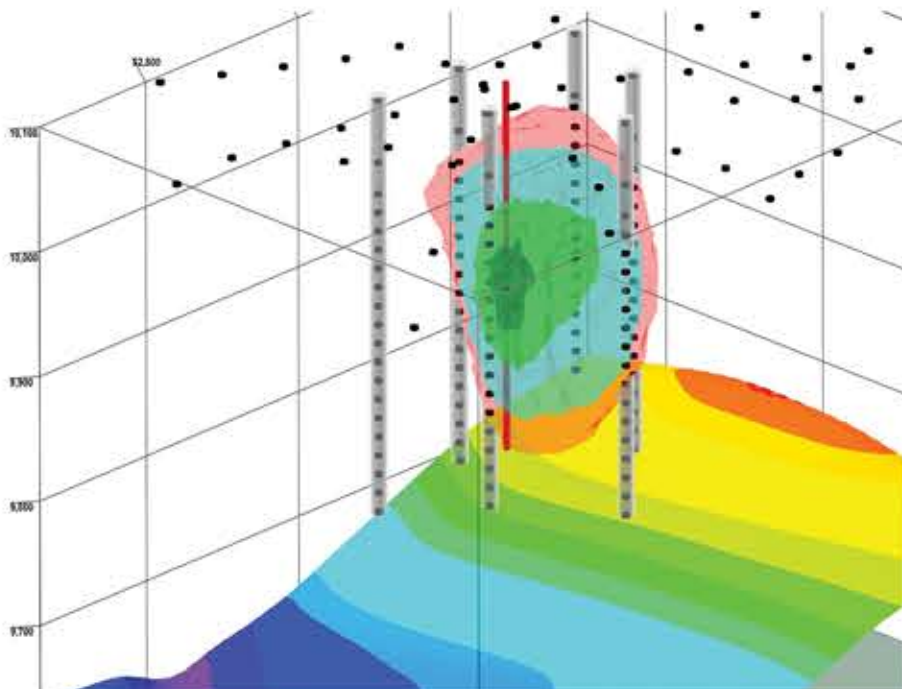
Directly delivering reagents through an injection well is a common means to amend soil and groundwater chemistry for environmental applications. More recently, it is being used to increase the efficiency of resource extraction in the mining industry. Understanding the fate of the reagent and its intended target is a critical factor of any subsurface injection program, as the reagents may not reach the anticipated targets. Without this understanding, it is easy to see that there is a great potential for costs to increase or for safety to be compromised.

hydroGEOPHYSICS Inc. has developed advanced geological monitoring technologies to help ensure the safe and effective delivery of reagents to subsurface targets. By mapping the variability in hydrological, geochemical, and thermographical responses, we can volumetrically capture the full spatial perspective of changes in near real time, thus providing assurance that reagents are hitting their intended targets.



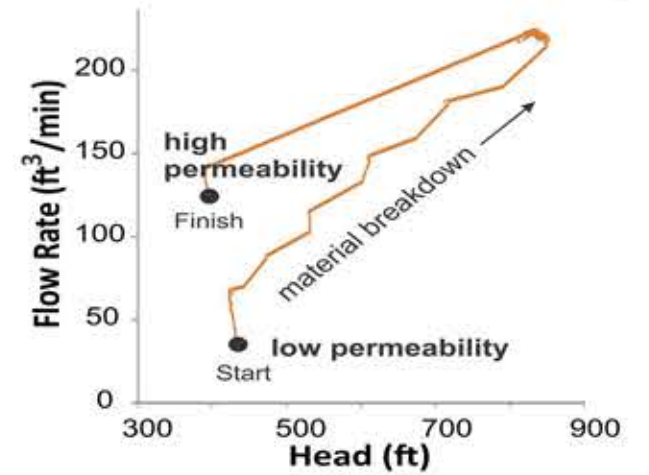
Geophysical Monitoring

To monitor injections, HGI built a state-of-the-art, 180 channel geophysical monitoring system that can capture a complete snapshot of subsurface conditions (on average) every 20 minutes. We even gave it a clever name... Geotection, as it has multiple uses relative to imaging subsurface geology. Geotection, along with the latest advances in modeling algorithms, will provide you with the highest resolution image of any method available today. And the results speak for themselves. Reaction fronts are more defined, preferential channeling is better understood, and wasted opportunities are vanquished.

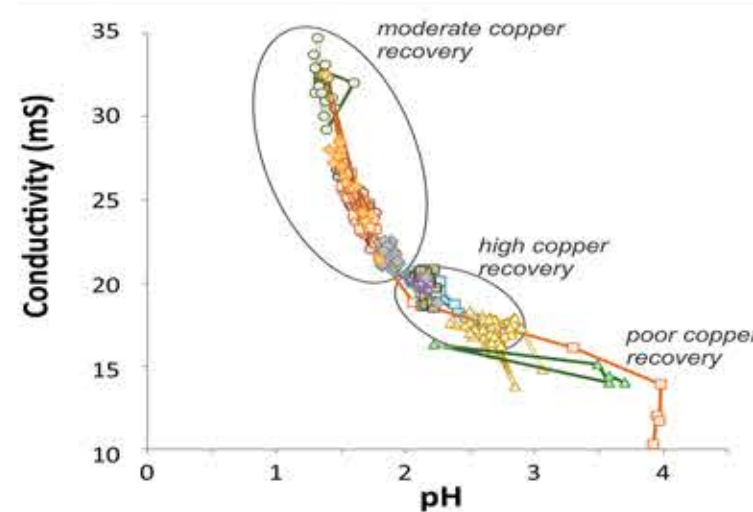


Well Hydraulics

The ability to deliver a reagent deeply within the subsurface is dependent on the substrate's ability to accept a given rate of flow. These flows create mixing and displacement, causing an increase in localized hydrostatic pressure that changes rapidly in response to material breakdown and conveyance. The well hydraulic data provides clues to enhancements needed for augmenting the permeability, whether greater back pressure is needed, or if there is a potential for your formation to be sealed. We will use our knowledge in well hydraulics to help ensure the integrity of your project remains intact.



Real-Time Geochemical Analysis



You need information fast and sending samples away daily to a brick-and-mortar analytical lab is the opposite of fast. Our mobile solutions lab saves you from this time lag and from the unknown, allowing you to make decisions that keep you nimble in the field. We have designed a laboratory trailer that can get you the basic information from bench top meters to titrations, spectroscopy, and other rugged methods you learned in chemistry lab. Samples should still be sent to the lab, but our analysis allows you to continue moving forward in the meantime.



HGI professionals have the skills and experience to support every aspect of your project from concept and design to acquisition and interpretation.

Our Clients

- Apollo Gold / Jipangu
- ASARCO
- Freeport McMoRan
- Cotter Corporation
- Inland Explorations
- Kennecott Mining
- Rio Tinto
- Alamos Gold
- Anglo Gold
- Barrick
- Coeur Mining
- Kinross Gold
- KGHM
- Newmont Mining
- Sago Mine
- Pacific Copper