

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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www.hgiworld.com



Leak Detection

For more information [hgileakdetection.com]

hydro **GEOPHYSICS**

“ WHERE THE WATER GOES —————> THE ELECTRICITY FLOWS ”

Subsurface Imaging

Innovative Solutions

Leaks Happen

Leaks can happen at any time in the life of a lined containment system. Poor installation procedures, improper usage, environmental factors, age, and repeated stress from regular use can cause tears, rips, or punctures in liners. Left undetected, these failures can risk shutdowns, regulatory fines, and staggering remediation costs.

Regardless of the industry or application, knowing when and where your system is leaking is the main objective in protecting the environment and your investment. Our leak detection methods involve electrically-based geophysics with innovative cabling systems, GPS, and a unique data analysis that can pinpoint the smallest leak. Ingenuity and technical flexibility give HGI a significantly higher leak detection success rate than our competitors.

Detecting Leaks

Each lined system is a structure unique in design, construction technique, and material. These variations present challenges with typical integrity testing and non-electrical leak detection. In particular, ASTM standards for leak detection are often not successful after the liner has been in use, because they fail to account for the unique qualities of each system, leak condition, and site.

HGI starts with ASTM standards as a guideline and then we modify the survey based on our extensive experience and technological innovations to create a leak detection survey tailored to fit your site. Our methods allow the entire pond to be filled to maximum capacity prior to surveying. Filling the pond once speeds up the assessment and allows complete survey coverage along the slope and bottom of the pond in one setup. This approach also increases survey accuracy by reducing human error, while improving safety because personnel never enter the pond. Collectively, our innovations make leak detection cheaper, safer, and more accurate, thus putting your pond back in service more quickly.

Performance & Reliability

HGI has been advancing the field of leak detection in lined ponds, landfills, and heap leaches using electrical methods for over 18 years. Our technologies have been through rigorous testing and validation on several federal projects and are proven to provide better accuracy, earlier detection, and fewer false alarms than competing methods.



Integrity

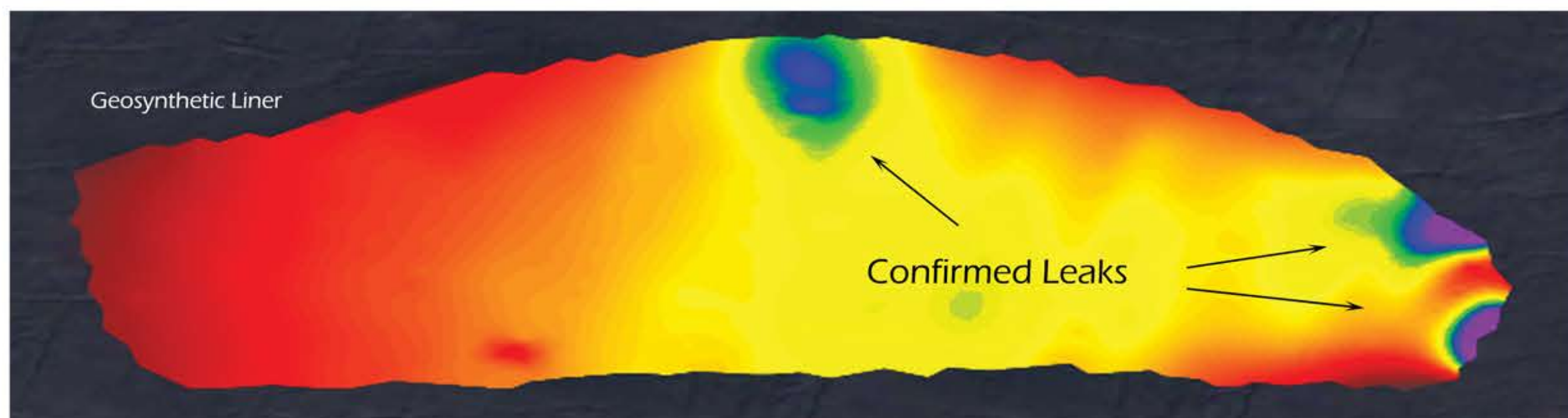


Experience



Innovation

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



HGI's deliverable, (right) shows the electrical response in a plan map so that clients can easily visualize the magnitude of the leak response.

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