

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



Richland, Washington Office
509-946-7111

Woodinville, Washington Office
206-669-3730

Newport Beach, California
949-274-7426

Tucson, Arizona Office
520-647-3315

www.hgiworld.com



Heap Solutions

For more information [Heapsolutions.com]

hydroGEOPHYSICS

It's your greatest Asset

Heaps are the greatest asset to a mine and contain untapped precious metal inventories due to complex flow regimes, inefficient leaching, and heterogeneity. Appreciating heap hydraulics during the mining process is critical to unlocking precious metal reserves in mining stockpiles.

Recent innovations from HGI have allowed for broader assessment of large-scale hydraulic processes. For example, HGI has shown that internal structure will have a significant influence on solution behavior within heaps and that structure is unique to each operating facility. A heap leach pile is a highly complex system that can only be assessed with a holistic approach, providing actionable information you can use to optimize output.

A Geophysical Foundation

Seeing an opportunity to apply a more holistic approach to the challenges faced by the mining industry, scientists and engineers at HGI adapted geophysical characterization methods to visualize the dynamic and interrelated systems at work inside heaps, tailings, and waste rock.

HGI's primary methods include electrical resistivity, induced polarization, temperature monitoring, and geochemistry. Used together, a more complete picture can be obtained on the nature of metal extraction. After years of applying geophysical methods on metal mines and gaining a wealth of experience, HGI has created Heap Solutions, a service solely dedicated to improving precious metal recovery in heap leach mining operations.

"We now have a greater opportunity to understand the increasingly detailed picture by using geophysical methodologies to characterize, track, and target saturation and solution movement."

Dr. Dale Rucker, Chief Technical Officer - hydroGEOPHYSICS

Subsurface Imaging

Innovative Solutions

A New Era of Understanding

Structural heterogeneity is a major control on metal production. Following years of testing, engineering, and experience in heap characterization, hydroGEOPHYSICS, Inc. (HGI) offers mine operators the "BIG PICTURE" in understanding dynamic and interrelated processes in action.



Integrity

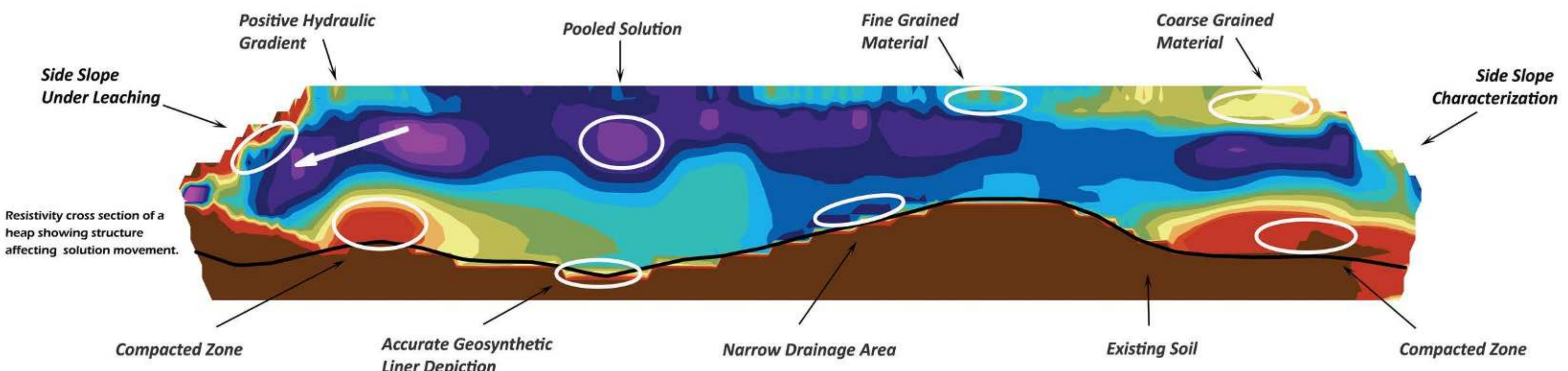


Experience



Innovation

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



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