



Assessment & Monitoring

AGI Surveys FOCUSING YOUR REMEDIATION EFFORTS



Survey With Confidence - With proven technology that works in virtually all soil conditions Strengthen Your Conceptual Site Model - With a more accurate site assessment tool Reduce Risk - With better data from the start

Increase Accuracy & Decrease Costs

Accurate site assessment plays a key role in determining whether subsequent efforts will be focused and costeffective. Using an AGI Survey during the early stages of assessment can bring accuracy to the conceptual site model, streamlining the entire remediation and monitoring process.

The AGI Survey uses a proven, patented, sorbent-based collection tool that can be deployed in all soil and groundwater conditions. AGI's robust analytical capability can identify a broader range of organic compounds at lower concentrations than any other soil gas method.

Time and again, AGI Surveys have been called in after remediation has started, to help find sources not identified by traditional means. You can avoid such costly mistakes by using AGI Surveys early on. We will help you strengthen your conceptual site model from the start.

Up to 99% Accurate

Correlations comparing AGI Survey to:

- soil data, 96% (USACE CRREL, 1996)
- active soil gas data, up to 99% (US EPA ETV, 1998)
- groundwater data, 99% (US EPA ETV, 2000)

The AGI Passive Sampler Makes the Difference



With over 80% open pore space, the AGI passive sampler keeps water out while allowing vapors to pass through to the sorbents, unimpeded. (See 50,000X view of membrane porosity, to right.)



Comparing Active Gas Sampling to the AGI Survey

Active gas sampling provides a snapshot of site conditions at the moment of collection. Soil permeability, saturation, depth to source, ambient conditions and compound volatility can adversely impact the data quality. SVOCs, for example, leave sparse signature in soil gas, and are difficult to capture within a limited sampling interval. In saturated soils, active gas sampling is nearly impossible. The AGI Survey overcomes these limitations by using a timeintegrated, sorbent-based approach to sampling. The AGI passive sampler, with its waterproof, vapor-permeable membrane, can collect soil gas under any conditions, including saturated soils. The module protects the sorbent, while exposure time (from one to 14 days) maximizes sensitivity to a broad range of compounds at low concentrations.

Simplified Field Operations

The AGI passive smapler makes sample collection quick and easy, indoors and out, with minimal site disruption. You supply the hand tools; we supply everything else, including step-by-step instructions to ensure sample integrity from field to lab. Simply prepare a 1/2- to 3/4-in. diameter hole, just three foot in depth. No casing is required. Next, use the insertion rod to push the module in place, cork the hole to prevent surface contamination and leave for a minimum one-day exposure period. That's it.



Proven Analysis & Interpretation

Back at the lab is where AGI's more than 20 years of experience kicks in. State of the art TD/GC/MS analysis, using modified EPA method 8260, provides a rich mass data set (60+ compounds) and optional concentration data. Compound-specific data are reported for vinyl chloride through pyrene, including VOCs, SVOCs and PAHs. Strict QA/QC methods are followed throughout the process.

Your final report includes project information, data tables and color contour maps of compound distribution. Integration with additional site information is available, as is consultation with our project managers every step of the way.





Our Experience

More than 20 years providing environmental services:

- Thousands of surveys worldwide
- US EPA Environmental Technology Verification
- ISO 17025 DoD ELAP accreditation by A2LA*

Our Expertise

The AGI Survey team is comprised of professionally accredited:

- Geologists - Geoscientists



- Chemists - Engineers - Statisticians

*The AGI laboratory has successfully completed the evaluation based on ISO/IEC 17025:2005, the 2003 NELAC Chapter 5 Standard, and the requirements of the Department of Defense Environmental Laboratory Accreditation Program (DoD ELAP), version 4.1. It is accredited to perform its modified 8620 method for the analysis of the AGI passive sampler following the sampling of soil gas, sediment, water or air.



When to Use an AGI Survey

After Phase I – but before you start drilling costly monitoring wells, taking expensive soil samples or developing dynamic work plans for Triad – call on AGI Surveys to bring a 'high resolution' focus to your conceptual site model. The AGI Survey is a cost-effective way to develop a comprehensive picture of a site. With these data, subsequent sampling activities and remediation efforts can proceed with significant cost savings, realized throughout the project.

Applications

Site Assessment – Remedial Design – Long Term Monitoring

Whether it's a property transfer or regulatory response, an AGI Survey helps you quickly shift your assessment effort from exploration to confirmation. You'll find value, too, in using AGI for your remedial design, natural attenuation tracking and long-term monitoring programs.

Brownfields/Superfund

Realize millions of dollars in savings by using a AGI Survey to shape your conceptual site model correctly, from the start.

Industrial

Deploy one easy-to-use tool consistently, inside buildings as well as out, for a high-resolution data set that helps define source and delineate extent.

Military

Detect what other methods might miss with AGI's extensive experience in identifying fuels, chlorinated compounds, explosives and chemical warfare agent breakdown products.

Terminal/Refineries/Pipelines

Sample around tanks and along pipes to pinpoint leaks, so your remediation efforts are focused and cost-effective.

Landfills

Identify a host of unknowns that may be escaping from refuse.

Dry Cleaners

Conduct business as usual with AGI's unobtrusive sample collection methods.



Property Transfers

Assign liability at the time of sale, for long-term risk management. Ideal for gas stations, strip malls, etc.

Risk Assessment

Strengthen vapor intrusion and indoor air studies with concentration values in the ppt range.



AMPLIFIED GEOCHEMICAL IMAGING LLC

210 Executive Drive Suite 1, Newark, DE 19702 Phone: +1.302.266.2428 Fax: +1.302.266.2429 Email: info@agisurveys.net www.agisurveys.net

Houston, TX: +1.281.782.8914 Lakewood, CO: +1.303.988.1968 Germany: +49.8102.999.875.12