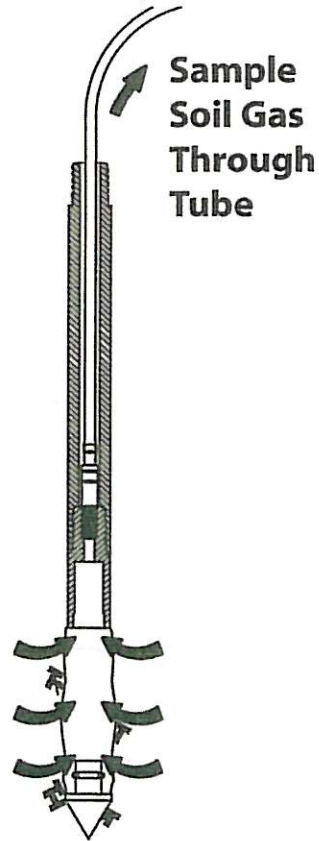


The sampling of soil gases is used to investigate possible contaminants in soil and ground water. Many known contaminants in both soil and water emit vapors.

The monitoring of these vapors not only detects pollutants, but also establishes possible pathways in which these vapor may escape. These pathways, or lateral extensions, could lead to adjacent properties or even into buildings.

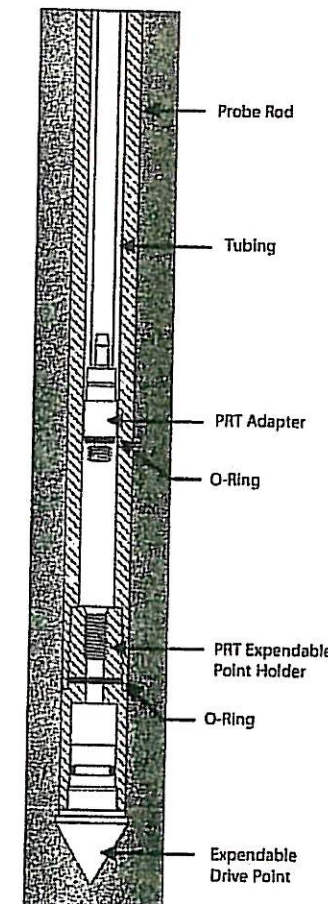
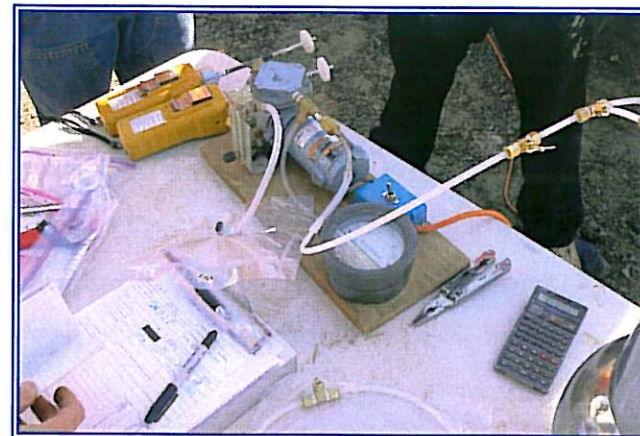


Until recently, soil gas sampling was considered unreliable for risk evaluation purposes. Even though the process was inexpensive and quick, the fluctuations in readings made it an unreliable resource for quantitative data. In its simplest form, technicians would hammer a length of galvanized water pipe into the ground and connect a hand held reader to gain measurements, leaving a large amount of room for error.

However, in recent years, soil gas sampling has gained in popularity as collection and measurement techniques have become more refined. The measurement of contaminants is now considered on par with many of the more elaborate and historically accepted practices.

The process involves driving with a low diameter, hollow drill rod and an expendable drive point. The drilling rig is far and away the largest piece of equipment used in the procedure and smaller rigs can be used to minimize space requirements.

Once the desired depth is reached, the expendable point is disengaged by raising the drill rod. A collection tube is fed into the drill rod pipe until it reaches the expendable point. After the collection hose is in place, the other end of the hose is connected to a vacuum canister and other equipment used to monitor and regulate the quantity and rate in which the sample is taken.



Great care is taken to isolate the system from ambient or "atmospheric" air as the sample is collected in a summa canister. The entire system fits easily on a table top.

In a matter of minutes the canister is filled. The sample is collected allowing the environmental team to move to the next location or send the samples to the laboratory for testing.

Soil Gas Sampling is quick and leaves only a 1 1/2-inch hole compared to the traditional 7-inch or more hole left using traditional investigation methods.

With such small holes, no larger than a golf ball, there is little clean up after the procedure is finished, and damage to parking lots, streets and sidewalks are kept to a minimum.

Soil Gas Sampling is typically used for the detection of hydrocarbons including common solvents, chlorofluorocarbons (CFCs), Aromatic hydrocarbons such as common fuel components, fuel additives, ketones and methane and other gases.

Soil gas sampling is a valuable tool for those in need of additional environmental information. The procedure is quick and less-disruptive to the site. Further, the findings are accepted by most scientists and government agencies as scientific and reliable, providing the necessary data to understand the characteristics of an environmental condition.





Soil Gas Sampling

Cost Effective & Less Invasive

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With the high price of land, a growing number of companies are turning towards the purchase of property with existing homes or businesses for their future development needs. For many the prospect of having an established revenue stream in the form of a tenant during the sales or permitting process is an inviting one. But performing the required environmental due diligence can be intrusive and time consuming; until the introduction of soil gas sampling. The use of soil gas sampling techniques can limit the disruption to an existing business or work site and leaves dramatically less physical evidence after the assessment is completed.

Phase II environmental site assessments are often performed where the potential for contaminants has been identified. Once the potential pollutant has been recognized, additional testing may be required and, depending upon the suspected cause, the investigation can become obtrusive, especially to existing businesses from gas stations to retail and office complexes. The challenge then turns to limiting the disruption while performing a proper investigation.

