Gas Vapor Probe (GVP) Kit

**DESCRIPTION:**
The Gas Vapor Probe System is the finest system available today for environmental assessment and monitoring. It is available as a series of kits from a Basic Kit without a drill to a Heavy Duty Kit that also includes AMS Flighted Augers. Used for collecting samples of soil gas at shallow depths. Tips are offered in a dedicated tip or a retract-a-tip, which is removable.

**BENEFITS AND FEATURES:**
The AMS Gas Vapor Probe has been designed specifically for placement of devices used to recover soil gas samples. The GVP kit may also be used for collection of soil and groundwater samples when used with accessory screens that are sold separately.

**USE:**
The site should be surveyed for the presence of underground utilities, pipelines, underground tanks and piping, as well as other structures or objects. The position of underground objects should be flagged and/or marked to local protocols. Use the electric drill with 1 1/2” Concrete Bit to cut a hole in the pavement if necessary, prior to using the tile probe. Once the pilot hole has been made, proceed sampling using the GVP points. Following the determination of sample collection depth, cut a length of Fluoropolymer tubing slightly longer than collection depth. This extra length is to aid in the ease of sampling with tip installed. Attach one end to the barbed nipple on the selected sampling tip. Assemble from the sampling tip up. Place the assembled sampler, comprising tip assembly, extension, and extension drive adapter tip downward into the hole prepared by the Tile Probe. Certain soil conditions may allow for the assembled piece to be driven directly into the soil itself. Driving may be accomplished via AMS Slide Hammer, or electric rotary hammer drill. Once the first extension has been lowered or driven into the ground, place at clamp (not supplied) at ground level to stabilize it. Lift the driving device off the probe assembly, loosen and remove extension drive adapter from the extension and Teflon tubing. Pass the tubing through another GVP extension with the coupling down. Remove ground clamp, and continue to drive and add extensions until sampling point(s) have been reached.

**PREPARING TO SAMPLE - GVP TIP**
Prior to sample collection, it is necessary to expose tip and possibly remove the drive tip end. GVP extensions & extension drive adapter. Taking care to keep the tubing clean will allow it to pass unobstructed into the Extension Drive Adapter during the assembly & removal process. After removal, fill in around tubing with sand or native soils, followed by bentonite chips or powder to provide a permanent seal to protocol. Attach Fluoropolymer Tubing to the sample collection system with a short piece of flexible tubing.

**PREPARING A SAMPLE - RETRACT-A-TIP**
When sampling depth is reached, pull back the sampler assembly 3” either manually or with the Removal Jack. Take the sample and then proceed to the next sampling depth. When sampling is completed, remove the sampler and pack the hole with native soils and/or bentonite chips, powder or grout.

Application of a gentle vacuum to the proximal end of the Fluoropolymer tube will draw soil gas through the selected Gas Vapor Tip, through the tubing, and eventually the pump.

**HELPFUL HINTS:**
Suggested use of the tile probe in preparation of hole allows for the location of unknown obstructions, thereby eliminating potential damage of GVP Probe & speeding up the sampling process. Threads should always be cleaned after each use. Vegetable oil, used sparingly, can be used for thread lubrication. It is important to never contaminate any part(s) of the system that may come in contact with the sample. Always check to make sure that the power supply and cord are in proper working condition. Please refer to operator’s manual and instructional video prior to use of this product.

**ANCILLARY ITEMS:**
Soil Probes, Tile Probes, Ground Clamps, Screens, Electric Vacuum pump or Vacuum Station

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The world's finest sampling equipment.

Sub-Slab Gas Vapor Probe Kit

DESCRIPTION:
The Sub-Slab Gas Vapor Probe (GVP) Kit allows the user to sample for volatile organic and inorganic compounds from beneath floor slabs. The kit provides a semi-permanent probe, designed to allow repeated sampling over time in order to assess the potential of contaminated vapor intrusion from beneath buildings.

BENEFITS AND FEATURES:
The AMS Sub-Slab Gas Vapor Probe has been designed to lay flush on the upper surface of the slab as to not interfere with daily use of the area. The probe is sealed with a threaded stainless steel cap which includes a tamper-resistant spanner fitting.

USE:
Prior to drilling holes in a foundation or slab, contact local utility companies to identify and mark utilities coming into the building from the outside (e.g., gas, water, sewer, refrigerant, and electrical lines). Consult with a local electrician and plumber to identify the location of the utilities inside the building.

Prior to fabrication of sub-slab vapor probes, drill a pilot hole to assess the thickness of a slab. Use a small portable vacuum cleaner or shop vac to remove cuttings from the hole.

Using a 2” diameter core bit, bore a hole approximately 3/16” deep. This will allow you to counter sink the top cap so that it is flush with the slab. (Refer to Figure 1).

Then use a 1” masonry bit to bore through the remainder of the slab until sub-slab is reached. A 3” deep hole in the sub-slab is required so that the entire length of the screen can be exposed to the sub-slab.

Set sub-slab unit in hole. Grout the unit in with a quick-drying Portland Cement – which expands upon drying (to ensure a tight seal). Allow cement to cure for at least 24 hours prior to sampling.

SUB-SLAB GAS VAPOR PROBE KIT
52954 Sub-Slab Gas Vapor Probe Kit

SUB-SLAB GVP KIT ACCESSORIES
56958 Tamper-Resistant Top Cap

SUB-SLAB GVP KIT REPLACEMENT PARTS
52952 Sub-Slab Vapor Shaft Tube
52953 Sub-Slab Rubber Plug
13460 Connector SS-400-7-4
13462 Plug HH-1/4 NPT
13463 Hose-B SS-4-AC-1-4
21008 3” Implant with 1/4in SS Compression
22011 Stainless Steel Ball Adapter
208.63 Spanner Screw Driver

Figure 1