

**BESURE Passive Soil-Gas Technology™**  
***The Best Method for the Best Results***



Beacon Environmental provides the highest level of accuracy and quality assurance and quality control (QA/QC) procedures for the analysis of soil gas samples in the industry. In addition, the design of Beacon Environmental’s BESURE Passive Soil Gas Sampler™ and BESURE Sample Collection Kit™ enable the rapid and efficient collection of field samples.

The table below provides a comparison of the BESURE Passive Soil Gas Technology™ from Beacon to the PSG technology of other companies.

Description	Beacon Environmental	Other PSG Company
Analysis by thermal desorption-gas chromatography/ mass spectrometry (TD-GC/MS)	✓	✓
Analyses completed in-house	✓	✓
Prep blanks, trip blanks, method blanks, & duplicate samples	✓	✓
Color isopleth maps provided	✓	✓
Hydrophobic adsorbents selection described	✓	
Samplers need to be encased in a membrane, which is a material that can act as competing adsorbent		✓
Samplers provided in easy-to-use and rugged plastic tool kit with tug-tight custody seal	✓	
Demonstrated accuracy at various depths, including as shallow as 10 centimeters	✓	
Analysis following EPA Method 8260	✓	
Analytical results based on internal 5-point initial calibration	✓	
Internal standards and surrogates included with each run	✓	
BFB tunes (5 to 50 nanograms through GC, per method)	✓	
Continuing calibration checks (50 nanograms per compound)	✓	
Standard data turn around time (in business days)	5	>10

Beacon Environmental’s five-point internal calibration method is based on quantities of the target compounds that range from 10 to 250 nanograms. The reporting limit for each of these is 25 nanograms to assure that the low measurements reported are accurate and defensible, as dictated by EPA Method 8260. When high measurements of contaminants are identified, the sample can be split or diluted to maintain an accurate quantification.

Other passive soil gas methods are known to base their results on an external calibration method and calibrate at quantities that are greater than an order of magnitude above their reporting limits, but refer to the method as being Method 8260 (*i.e.*, claim a reporting limit of 25 ng but have 250 ng or higher as the low point of the calibration). These deficiencies are not in agreement with EPA Method 8260 nor are they acceptable for soil or groundwater analysis and should not be accepted as valid for passive soil gas analyses.

**FOR MORE INFORMATION, VISIT [BEACON-USA.COM](http://BEACON-USA.COM) OR CALL 800.878.5510**