

Instructions for: **UST Gasoline in Soil (Cat # PT-GAS-USTS)**

SCOPE AND APPLICATION

Wibby Environmental's UST Gasoline in Soil Proficiency Testing Standard is designed to be used for all USEPA Methods. You should be familiar with the method(s) before analyzing the standard. If you have any questions about the use of these standards, please contact Wibby Environmental Customer Service at 1-866-WibbyPT (866-942-2978).

SAMPLE PREPARATION AND ANALYSIS

1. Store the PT standards under refrigeration (~4°C) and then equilibrate to room temperature (near 20°C) when used.
2. The UST Gas in Soil standard includes two separate containers; a VOA vial containing approximately 12 g of Blank Solid Matrix and a 2 ml flame sealed ampule containing the analytes of interest. The solvent for the UST Gas in Soil concentrate is methanol. The standard can be used with either the *Direct Purge Method* or after *Methanol Extraction*.
3. **Direct Purge Method:**
 - a. Open the Blank Soil Matrix vial and transfer 5 g of the matrix into your sparger cell.
 - b. Carefully open the ampule containing the Gasoline concentrate by snapping off the top at the narrow part of the neck.
 - c. Transfer exactly 50 µL (micro liters) of the concentrate onto the Blank Soil Matrix in the sparger cell using a gas tight syringe. Add the spike below the surface of the matrix.
 - d. Add 5 ml of organic free deionized water to the sparger cell containing the Blank Solid Matrix and

concentrate. The standard is now ready for analysis.

4. **Methanol Extraction Method:**
 - a. Open the Blank Soil Matrix vial and transfer 5 g of the matrix into your extraction vessel.
 - b. Carefully open the ampule containing the Gasoline concentrate by snapping off the top at the narrow part of the neck.
 - c. Transfer exactly 50 µL (micro liters) of the concentrate onto the Blank Soil Matrix in the extraction vessel using a gas tight syringe. Add the spike below the surface of the matrix.
 - d. Immediately add 5 ml of purge and trap grade methanol to the extraction vessel cell containing the Blank Solid Matrix and concentrate. The standard is now ready for extraction and analysis

REPORTING RESULTS

1. Report all results using the Data Reporting Sheets enclosed with your standards or online at www.wibby.com.
2. For the purposes of reporting results, the percent moisture of the PT standard is 0% and the sample weight is 5.00 g. Report all results in mg/kg on a dry weight basis.
3. Report results to **three** significant figures.
4. You may also report your results using the Data Reporting Sheets enclosed with your standards. FAX your results to Wibby Environmental at 866-283-0269 or mail the results to Wibby Environmental, 6390 Joyce Drive, #100, Golden, CO, 80403. All results must be received by Wibby Environmental prior to the study closing date shown on the Data Reporting Sheets.

6390 Joyce Drive
100
Golden, CO 80403

Phone 303-940-0033
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www.wibby.com

Underground Storage Tank PT Concentration Ranges and PTRLs

Definitions:

PTRL

NELAC Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing NELAC PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: NELAC PT FOT Tables)

NA

Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Gasoline in Soil (PT-GAS-USTS)

NELAC Code	Analyte	Units	Concentration Range	PTRL
9408	Gasoline Range Organics (GRO)	mg/kg	100 - 2000	10.0
Additional State Specific Analytes				
4375	Benzene	mg/kg	1.00 - 250	NA
4765	Ethylbenzene	mg/kg	1.00 - 250	NA
5140	Toluene	mg/kg	1.00 - 250	NA
5260	Xylenes, total	mg/kg	1.00 - 250	NA
-	F1: C6 - C10	mg/kg	100 - 2500	NA