

## Instructions for: **Extractable Petroleum Hydrocarbons (EPH) in Water** (cat # PT-EPH-USTW)

### **SCOPE AND APPLICATION**

Wibby Environmental's UST Extractable Petroleum Hydrocarbons (EPH) in Water Proficiency Testing Standard is designed to be used with USEPA and state specific hydrocarbon 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 303-940-0033.

### **SAMPLE PREPARATION AND ANALYSIS**

1. For best results, the PT standard should be stored and used at ambient temperature (near 20°C). *If the standard is accidentally refrigerated, it must be warmed to room temperature to ensure that all analytes are in solution prior to dilution.*
2. Add approximately 990 mL of organic free deionized water to a 1000 mL class A volumetric flask.
3. Carefully open the ampule by snapping off the top at the narrow part of the neck.
4. Transfer exactly 1.0 mL of the PT standard concentrate to the flask using a gas tight syringe and delivering the aliquot below the surface of the water.
5. Bring the volumetric flask to volume with organic free deionized water. Mix the solution by inverting the volumetric flask a minimum of three times.
6. The standard is now ready for preparation and analysis per the selected method(s). We recommend the standard be analyzed as soon as possible after dilution. If this is not possible, store the diluted standard at 4° C until analysis.

### **REPORTING RESULTS**

1. Report results to three significant figures.
2. There are two sections for reporting EPH data per the requirements of Massachusetts and North Carolina (first section) and Washington (second section). If you have any questions regarding reporting results per the requirements of these states, please contact Wibby Environmental at 1-866-WibbyPT (866-942-2978)
3. Report your results on line at [www.wibby.com](http://www.wibby.com). Click on the "Online Data Entry" link or the "PT Manage" link.
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.
5. Wibby Environmental must receive all results prior to the study closing date shown on the Data Reporting Sheets.

### **SAFETY**

These standards are designed for use by laboratory professionals who are familiar with handling environmental reference materials as well as hazardous materials. If you have any questions about the safe handling of these standards or require a Material Safety Data Sheet (MSDS,) please contact Wibby Environmental at 1-866-WibbyPT (866-942-2978).

### **QUESTIONS?**

If you have any questions regarding these standards or reporting requirements, please call Wibby Environmental at 1-866-WibbyPT (866-942-2978).

## 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.

### EPH in Water (PT-EPH-USTW)

NELAC Code	Analyte	Units	Concentration Range	PTRL
<b>Additional State Specific Analytes</b>				
-	C9 - C18 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	C19 - C36 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	C11-C22 Aromatic Hydrocarbons	µg/L	300 - 3000	NA
5500	Acenaphthene	µg/L	50.0 - 1000	NA
5505	Acenaphthylene	µg/L	50.0 - 1000	NA
5555	Anthracene	µg/L	50.0 - 1000	NA
5575	Benzo(a)anthracene	µg/L	50.0 - 1000	NA
5585	Benzo(b)fluoranthene	µg/L	50.0 - 1000	NA
5600	Benzo(k)fluoranthene	µg/L	50.0 - 1000	NA
5590	Benzo(g,h,i)perylene	µg/L	50.0 - 1000	NA
5580	Benzo(a)pyrene	µg/L	50.0 - 1000	NA
5855	Chrysene	µg/L	50.0 - 1000	NA
5895	Dibenz(a,h)anthracene	µg/L	50.0 - 1000	NA
6265	Fluoranthene	µg/L	50.0 - 1000	NA
6270	Fluorene	µg/L	50.0 - 1000	NA
6315	Indeno(1,2,3-cd)pyrene	µg/L	50.0 - 1000	NA
5005	Naphthalene	µg/L	50.0 - 1000	NA
6615	Phenanthrene	µg/L	50.0 - 1000	NA
6665	Pyrene	µg/L	50.0 - 1000	NA

### EPH in Water (Washington) (PT-EPH-USTW(WA))

NELAC Code	Analyte	Units	Concentration Range	PTRL
<b>Additional State Specific Analytes</b>				
-	C8 - C10 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C10 - C12 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C12 - C16 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C16 - C21 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C21 - C34 Alliphatic Hydrocarbons	µg/L	300 - 3000	NA
-	C8 - C10 Aromatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C10 - C12 Aromatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C12 - C16 Aromatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C16 - C21 Aromatic Hydrocarbons	µg/L	300 - 3000	NA
-	>C21 - C34 Aromatic Hydrocarbons	µg/L	300 - 3000	NA