

## Instructions for: *Volatile Petroleum Hydrocarbons (VPH) in Water* (cat # PT-VPH-USTW)

### **SCOPE AND APPLICATION**

Wibby Environmental's Volatile Petroleum Hydrocarbons in Water Proficiency Testing Standard is designed to be analyzed using Massachusetts, North Carolina and/or Washington state methods for VPH. The standard can also be analyzed by other promulgated or in house VPH in water methods. You should be familiar with the method(s) before analyzing the standard. If you have any questions about the use of this standard, please contact Wibby Environmental Customer Service at 1-866-WibbyPT (866-942-2978).

### **STANDARD DESIGN AND CALCULATING RESULTS**

The VPH in Water standard contains Aliphatic Hydrocarbons, Aromatic Hydrocarbons and specific "Target Analytes" (Benzene, Ethylbenzene, MTBE, Toluene and Xylenes. Results can be reported per the specific requirements of the following state methods.

**Massachusetts** -These values are commonly referred to as CORRECTED. When calculating and reporting results for the aliphatic ranges include only the n-alkane hydrocarbons detected during your analysis that fall within the ranges shown on the Data Reporting Sheets. The aliphatic hydrocarbons results you report should not include contributions from any of the target analytes or aromatic analytes present in the standard. You should also report results for the individual Target Analytes and the C9 – C10 Aromatic Hydrocarbon range .

**North Carolina** - These values are commonly referred to as UNCORRECTED. When calculating and reporting results for the C5 – C8 Aliphatic Hydrocarbons include the n-alkanes that fall within this range plus Benzene, Toluene and MTBE. When calculating and reporting

results for the C9-C12 Aliphatic Hydrocarbons include the n-alkanes that fall within this range, Ethylbenzene, Xylenes and the C9-C10 aromatic hydrocarbons. You should also report results for the individual Target Analytes and the C9 – C10 Aromatic Hydrocarbon range.

**Washington** – Determine and report results for any or all of the hydrocarbon ranges and/or target analytes shown on the data reporting sheets.

### **SAMPLE PREPARATION AND ANALYSIS**

1. For best results, the PT standard should be refrigerated and then brought to room temperature (near 20°C) when used.
2. Bring a 100 mL class A volumetric flask to volume with volatile free deionized water.
3. Carefully open the ampule by snapping off the top at the narrow part of the neck.
4. Transfer exactly 200 µL (micro liters) of the PT standard concentrate to the flask using a gas tight syringe and delivering the aliquot below the surface of the water.
5. Mix the solution by inverting the volumetric flask a minimum of three times.
6. The standard is now ready for analysis per your routine method for the determination of VPH in a water sample. We recommend the standard be analyzed as soon as possible after dilution. If this is not possible, store the diluted standard in VOA vials at 4°C until analysis.

### **REPORTING RESULTS**

1. Report results to three significant figures.



2. Report your VPH data per the requirements of the Massachusetts, North Carolina and/or Washington methods (see "Standard Design and Calculating Results" section of these instructions). 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).