

Instructions for UST in Water Standards – NELAC Accreditation Set

SCOPE AND APPLICATION

Wibby Environmental's Underground Storage Tank (UST) Proficiency Testing (PT) Standards are designed to be used with promulgated federal and state methods as well as applicable methods from consensus organizations such as AWWA and ASTM. If you have any questions about the use of these standards, please contact Wibby Environmental Customer Service at 1-866-WibbyPT (866-942-2978).

INDIVIDUAL INSTRUCTION SHEETS ALSO AVAILABLE

NOTE: This sheet contains instructions for all standards included in Wibby Environmental's UST in Water NELAC Accreditation Set. Individual instruction sheets for these standards are also available on line at www.wibby.com (click on the "PT" link in the blue bar that runs horizontally across the home page) or upon request. If your laboratory would prefer to receive individual instruction sheets with future orders instead of this sheet, please call customer service at 1-866-WibbyPT (866-942-2978).

SAMPLE PREPARATION, ANALYSIS AND STORAGE

As summarized in the following steps, UST PT standards are supplied as ready to use standards or as concentrates that require spiking into hydrocarbon free water prior to use. For best results, all UST PT standards should be stored at the temperature listed on the label. PT standards stored at 4°C should be brought to room temperature (near 20°C) prior to use.

UST Gasoline

1. Bring a 100 mL class A volumetric flask to volume with volatile free deionized water.
2. Carefully open the ampule by snapping off the top at the narrow part of the neck.
3. Transfer exactly 50.0 µL of the standard concentrate to the flask using a gas tight syringe and delivering the aliquot below the surface of the water.
4. Mix the solution by inverting the volumetric flask a minimum of three times.
5. The standard is now ready for preparation and analysis per the selected method(s).

UST Diesel Standards

1. Add approximately 990 mL of organic free deionized water to a 1000 mL class A volumetric flask.
2. Warm ampule to room temperature (EPH requires sonication, see reverse side for specific details). Carefully open the ampule by snapping off the top at the narrow part of the neck.
3. 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.
4. Bring the volumetric flask to volume with organic free deionized water.
5. 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).

UST TPH and Oil & Grease Standards

1. Add approximately 950 mL of ASTM Type 1 water to a 1000 mL class A volumetric flask.
2. Carefully add 10.0 mL of the acid your lab normally uses to preserve samples for oil and grease determination (either hydrochloric or sulfuric).
3. Mix the standard concentrate thoroughly prior to transfer by shaking vigorously.
4. Immediately open the supplied vial and quantitatively transfer the entire contents into to the flask. Rinse the vial into the flask a minimum of three times.
5. Bring the flask to volume with ASTM Type 1 water.
6. Oil and grease also has a tendency to adhere to the vial and cap. After transferring the concentrate to your extraction vessel or apparatus, rinse the standard bottle and cap a minimum of two times with the extraction solvent. The solvent used for rinsing the container should be combined with that used for extraction of the sample.
7. The standard is now ready for preparation and analysis per the selected method(s).

REPORTING RESULTS

1. Report results to three significant figures.
2. Report your results on line at www.wibby.com. Click on the "Online Data Entry" link or the "PT Manage" link.
3. 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.
4. 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).

ADDITIONAL INFORMATION

UST Total Petroleum Hydrocarbons and UST Oil and Grease

Please keep in mind when preparing your TPH and Oil and Grease standards that these standards have a tendency to adhere to the vial walls and cap. After transferring the concentrate as described in these instructions, rinse the standard vial and cap with the solvent used for extraction of the standard. Combine the solvent used for rinsing with that used to extract the standard.

Prefer whole volume or acetone concentrates for your Oil and Grease or TPH standards?

These standards have been provided as concentrates in water that must be diluted prior to analysis. We also offer both as whole volume ready-to-use standards (Oil and Grease 1 L, catalog #PT-OGR1L-USTW; TPH 1 L, catalog #PT-TPH1L-USTW) and as concentrates in acetone (Oil and Grease – acetone concentrate, catalog #PT-OGRA-USTW; TPH – acetone concentrate, catalog #PT-TPHA-USTW). If you would like to order either the 1 L or acetone concentrate versions of either standard, please call customer service at 1-866-WibbyPT (866-942-2978).

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