

NC DEQ/DWR WASTEWATER/GROUNDWATER LABORATORY CERTIFICATION

LABORATORY NAME:		CERT #:	
PRIMARY ANALYST:		DATE:	
NAME OF PERSON COMPLETING CHECKLIST (PRINT):			
SIGNATURE OF PERSON COMPLETING CHECKLIST:			

Parameter: **Paint Filter Liquids**  
Method: **SW-846 9095 B**

Equipment:

Conical Paint Filter, mesh #60 ± 5% (fine meshed size)	Glass funnel, fluted or with large mouth allowing at least 1 in. filter mesh protrusion	Ring stand and ring, or tripod
Graduated cylinder, 100 ml	Beaker, 100 ml	Timer, or equivalent

**PLEASE COMPLETE CHECKLIST IN INDELIBLE INK**

Please mark Y, N or NA in the column labeled LAB to indicate the common lab practice and in the column labeled SOP to indicate whether it is addressed in the SOP.

	GENERAL	L A B	S O P	EXPLANATION
1	What is the most recent review/revision date of the SOP? [15A NCAC 2H .0805 (a) (7)]			<b>Date:</b> Verify proper method reference. During review notate deviations from the approved method and SOP. Recommend an annual review. Update SOPs any time changes are made to procedure and make a list or highlight any changes that were made to methodology.
2	Is there North Carolina data available for review?			If not, review PT data.
	PRESERVATION and STORAGE	L A B	S O P	EXPLANATION
3	Are samples iced to above freezing but ≤ 6 °C during shipment?			Not regulated. Recommended to prevent bacteriological degradation.
4	Are samples refrigerated above freezing but ≤ 6 °C during storage?			Not regulated. Recommended to prevent bacteriological degradation.
5	What holding time is used? Answer:			Not regulated. It is recommended that the laboratory establish, implement and document a routine holding time.
	PROCEDURE – Sample Preparation and Analysis	L A B	S O P	EXPLANATION
6	Is a 100-mL or 100-g, representative sample measured for the test? [SW-846 Method 9095 B (6.0)]			<b>SW-846 9095B:</b> A 100-mL or 100-g representative sample is required for the test.
7	If larger sample sizes must be used to sufficiently represent the waste, are the larger samples divided into 100-mL or 100-g portions and tested separately? [SW-846 Method 9095 B (6.0)]			<b>SW-846 9095B:</b> If it is not possible to obtain a sample of 100 mL or 100 g that is sufficiently representative of the waste, the analyst may use larger size samples in multiples of 100 mL or 100 g, i.e., 200, 300, 400 L or g. However, when larger samples are used, analysts shall divide the sample into 100-mL or 100-g portion and test each portion separately. If any portion contains free liquids, the entire sample is considered to have free liquids.
8	Is the volume or weight of sample analyzed documented? [15A NCAC 2H .0805 (a) (7) and 15A NCAC 2H .0805 (a) (7) (H)]			<b>15A NCAC 2H .0805 (a) (7):</b> Supporting records shall be maintained as evidence that these practices are being effectively carried out. <b>15A NCAC 2H .0805 (a) (7) (H):</b> All laboratories must use printed laboratory bench worksheets that include a space to enter the signature or initials of the analyst, date of analyses, samples identification, volume of sample analyzed, value from the measurement

			system, factor and final value to be reported and each item must be recorded each time samples are analyzed.
9	Are volumetrically measured samples free of major air spaces or voids? [SW-846 Method 9095 B (6.0)]		<b>SW-846 9095B:</b> If the sample is measured volumetrically, then it should lack major air spaces or voids.
10	How are samples of such light bulk density that they overflow the filter analyzed? [SW-846 Method 9095 B (7.2)] Answer:		<b>SW-846 9095B:</b> If the sample is of such light bulk density that it overflows the filter, then the sides of the filter can be extended upward by taping filter paper to the inside of the filter and above the mesh. Settling the sample into the paint filter may be facilitated by lightly tapping the side of the filter as it is being filled.
11	Are materials, such as sorbent pads or pillows, cut into pieces 1 cm or smaller? [SW-846 Method 9095 B (7.3)]		<b>SW-846 9095B:</b> In order to assure uniformity and standardization of the test, material such as sorbent pads or pillows which do not conform to the shape of the paint filter should be cut into small pieces and poured into the filter. Sample size reduction may be accomplished by cutting the sorbent material with scissors, shears, a knife, or other such device so as to preserve as much of the original integrity of the sorbent fabric as possible. Sorbents enclosed in a fabric should be mixed with the resultant fabric pieces. The particles to be tested should be reduced smaller than 1 cm (i.e., should be capable of passing through a 9.5 mm (0.375 inch) standard sieve). Grinding sorbent materials should be avoided as this may destroy the integrity of the sorbent and produce many "fine particles" which would normally not be present.
12	How are brittle materials larger than 1 cm that do not conform to the filter analyzed? [SW-846 Method 9095 B (7.4)] Answer:		<b>SW-846 9095B:</b> For brittle materials larger than 1 cm that do not conform to the filter, light crushing to reduce oversize particles is acceptable if it is not practical to cut the material. Materials such as clay, silica gel, and some polymers may fall into this category.
13	Is the test performed at a temperature above the freezing point of any liquid in the sample? [SW-846 9095B (3.2)]		<b>SW-846 9095B:</b> Temperature can affect the test results if the test is performed below the freezing point of any liquid in the sample. Tests must be performed above the freezing point and can, but are not required to, exceed room temperature of 25°C.
14	How long are samples allowed to drain into the graduated cylinder? [SW-846 9095 B (7.5)] Answer:		<b>SW-846 9095B:</b> Allow sample to drain for 5 min into the graduated cylinder.
15	Are the start/stop times documented? [15A NCAC 2H .0805 (a) (7) and 15A NCAC 2H .0805 (a) (7) (H)]		<b>15A NCAC 2H .0805 (a) (7):</b> Supporting records shall be maintained as evidence that these practices are being effectively carried out. <b>15A NCAC 2H .0805 (a) (7) (H):</b> All laboratories must use printed laboratory bench worksheets that include a space to enter the signature or initials of the analyst, date of analyses, samples identification, volume of sample analyzed, value from the measurement system, factor and final value to be reported and each item must be recorded each time samples are analyzed.
16	Is the sample left undisturbed during draining? [SW-846 9095B (3.1)]		<b>SW-846 9095B:</b> Filter media were observed to separate from the filter cone on exposure to alkaline materials. This development causes no problem if the sample is not disturbed.

17	What criterion is used for characterizing the material as containing free liquids? [SW-846 9095 B (7.6)]			<p><b>SW-846 9095B:</b> If any portion of the test material collects in the graduated cylinder in the 5-min period, then the material is deemed to contain free liquids for purposes of <b>40 CFR 264.314</b> and <b>265.314</b>.</p> <p><b>NOTE:</b> This would be considered a test fail. If no liquids pass through the test is considered a pass.</p>
<b>QUALITY ASSURANCE</b>		<b>Y</b>	<b>N</b>	<b>EXPLANATION</b>
18	Is there documented traceability of consumables (e.g., filters)? [NC WW/GW LC Policy]			<p>All chemicals, reagents, standards and consumables used by the laboratory must have the following information documented: Date received, Date Opened (in use), Vendor, Lot Number, and Expiration Date (where specified). A system (e.g., traceable identifiers) must be in place that links standard/reagent preparation information to analytical batches in which the solutions are used. Documentation of solution preparation must include the analyst's initials, date of preparation, the volume or weight of standard(s) used, the solvent and final volume of the solution. This information as well as the vendor and/or manufacturer, lot number, and expiration date must be retained for primary standards, chemicals, reagents, and materials used for a period of five years. Consumable materials such as pH buffers, lots of pre-made standards and/or media, solids and bacteria filters, etc. are included in this requirement.</p>
19	Is the data qualified on the report or client report if Quality Control (QC) requirements are not met? [NC WW/GW LC Policy]			<p>All documented results (e.g., benchsheets, reports and DMRs) must indicate appropriate qualifications.</p>

**NOTE:** If you encounter a sample that is a very fine solid (powder) and some of the material passes through the filter and a percent moisture determination of the tested material determines that there was no liquid in the sample, the solid materials should not be considered. Since the material passing through the filter in the paint filter test is not a liquid and the test fails only if free liquids pass through the filter, NC DEQ/DWM Hazardous Waste Section considers this sample as passing the paint filter test.

**NOTE:** Duplicates are not required for this test. NC WW/LC Policy.

Additional Comments:

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Inspector: \_\_\_\_\_ Date: \_\_\_\_\_