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NREAD (L)
23 Dec 86

Mr. W. B. Edwards
NCRD/DEM Laboratory Branch
Post Office Box 27687
Raleigh, North Carolina 27611

Dear Sir:

In accordance with your 9 December 1986 letter, the instruction and reporting forms for analysis of suspended residue and oil and grease are submitted.

The initial evaluation sampled for total phosphorus and ammonia nitrogen were received on 15 December 1986. Their results will follow later.

Questions regarding this report should be forwarded to Ms. Elizabeth Betz, Supervisory Chemist, Natural Resources and Environmental Affairs Division, Assistant Chief of Staff, Facilities at (919) 451-5977.

Sincerely,

D. D. SHARPE
Acting Director

Encls:
(1) Instruction & Rpting Form for Analysis for Suspended Residue
(2) Instruction & Rpting Form for Analysis of Oil & Grease

Copy to:
ECML, NREA

CLW

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Instruction and Reporting Form for
Analysis of Total and Suspended Residue

Please verify that the ampul you received corresponds with the number listed below:

R

The contents of this ampul are to be used to prepare an analytical performance sample for total and suspended residue analysis.

When you are ready to perform the analysis, remove the rubber seal from the vial containing the solids, being careful not to lose particles clinging to the rubber seal.

Pour the contents of the vial through a glass funnel into the 1000 ml volumetric flask. Use deionized water to quantitatively rinse the solids from the vial and rubber seal into the volumetric flask. Rinse the glass funnel by adding deionized water to make the sample up to the 1000 ml mark.

Mix well and analyze by standard procedures.

NOTE: Some labs have found it necessary to correct for their distilled water residue content when analyzing this type of sample.

See the table below for information on the concentration range and pertinent reporting information. Please report your findings in the "Value Obtained" column in accordance with the directions provided in the "Report Results" column.

Perform analyses Marked (X)	Analysis	Concentration Range	Report Results	Value Obtained
	Total Residue	1-1000 mg/l	to 1.0 mg/l	
X	Suspended Residue	1-1000 mg/l	to 1.0 mg/l	21.5

Return a signed copy of this completed form to:

Dept. of Natural Resources & Community Development
Laboratory Section
Division of Environmental Management
P. O. Box 27687
Raleigh, North Carolina 27611

within 30 days of receiving this sample. Retain one copy for your file.

Laboratory Code # _____ Certificate # _____

Laboratory reporting data Environmental Chemistry and Microbiology Laboratory

Signature of Laboratory Supervisor Elizabeth A Boyle

Date Completed 15 December 1986

CLW

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(LC7-4/81)

Instruction and Reporting Form for
Analysis of Oil and Grease

Please verify that the number on the ampul you received corresponds with the number listed here: G.

The contents of this ampul are to be used to prepare a sample for the analytical performance test for oil and grease analysis. Add 500 ml of distilled or deionized water and 2.5 ml concentrated HCl to a separatory funnel. Transfer 10.0 ml of the ampul contents to the separatory funnel. Complete the analysis as detailed in the required procedure. Calculate the oil or grease concentration using the formula below:

$$\text{mg/l grease or oil} = \frac{(\text{mg oil or grease in sample} - \text{mg oil or grease in blank}) \times 1000}{500}$$

(20.5 − 1.2)

Please record your result in the "Value Obtained" column in accordance with the directions provided in the "Report Results" column.

Perform analyses Marked (X)	Analysis	Concentration R.	Report Results	Value Obtained
	Oil & Grease	1-1000 mg/l	to 1 mg/l	37.0

Return the ampul mailing container and a signed copy of this completed form to:

Dept. of Natural Resources & Community Development
Division of Environmental Management
Laboratory Branch
P. O. Box 27687
Raleigh, North Carolina 27611

within 30 days of receiving this sample. Retain one copy for your file.

Laboratory Code # _____ Certificate # _____

Laboratory reporting data Environmental Chemistry and Microbiology Laboratory

Signature of laboratory supervisor Elizabeth A Batty

Date completed 15 December 1986

CLW

0000001535

(LC-33-82)