

# GRAINGER LABORATORIES

INCORPORATED

ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street

Raleigh, North Carolina 27603

(919) 828-3360

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## ANALYTICAL LABORATORY

Environment Analysis  
Construction Materials  
Identification of Unknowns  
Agriculture  
Fuels  
Textiles  
Chemicals  
Hazardous Waste

June 4, 1982

## CONSULTATION

Metallurgical Services  
Pollution Abatement  
Process Development  
Quality Control  
Methods Development  
Special Investigation  
Pesticides  
RCRA

Ms. Elizabeth Betz  
Dept. of the Navy  
Supvy. Chem. Q.C. Lab.  
NREAB  
Base Maintenance Div.  
Marine Corp. Base  
Camp Lejeune, NC 28542

Subject: Resampling - May Trihalomethane Samples

Dear Ms. Betz:

I appreciate the opportunity to discuss with you the sampling procedures for trihalomethanes on May 27. This letter will confirm our discussions and explanations for our re-test request.

The May sample bottles sent to you by Grainger Laboratories were of two different types. The septum was different in coloration. As originally sent to you, the septums were inserted properly in the vial caps. When your personnel noted the difference in cap appearance, we discussed by telephone how the caps should look. I instructed you that the white side should be next to the water sample. The teflon cap liner on the different caps was not always white and many of the cap liners were turned upside down.

In addition, several of the vials contained air space or bubbles and this would in many cases invalidate our trihalomethane analyses.

The samples that had the butyl rubber side of the septum in contact with the water samples were also of questionable value.

When the samples were received by our laboratory, a comparison of the split samples was made. We found:

1. As much as 50% variation in trihalomethanes present was noted on duplicate samples.
2. The bubbles and air spaces had also influenced trihalomethane levels.
3. Solvent peaks noted on our previous report were present but comparison of duplicate samples indicated poor repeatability.



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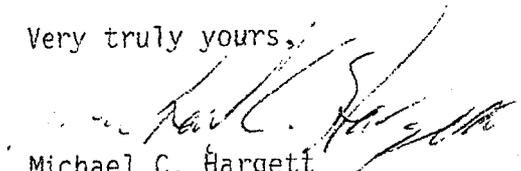
In summary, the samples submitted have a poor reproducibility and reliability for analytical reporting purposes.

For these reasons, we strongly suggest your systems be resampled for the month of May. There will be no charge for the analytical work performed on the first set of May samples submitted to our laboratory. There also will be no charge for first set of sample bottles.

Please use the sampling procedure that I demonstrated to you and your personnel and I believe you will not capture bubbles in the sample vials. Also, the teflon side of the septum will be the hard side and the thinnest of the layers in the septum.

We appreciate your assistance and support in correcting this problem.

Very truly yours,



Michael C. Hargett  
Vice President of Marketing

MCH:sb

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