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MESSY CHANGES!

Oil & Grease Analysis to Change Soon

The passing of the Clean Air Act Amendments of 1990 has set the stage for a change in the method for Oil & Grease (O&G) analysis. The traditional O&G method uses CFC-113 (Freon) as the extraction solvent. Even though this particular Freon is not the major culprit in air pollution, it is being caught in the squeeze along with the other Freons, such as those used for air conditioners. Thus, it will be only a short time before it is unavailable.

Actually, Freon was supposed to have been discontinued at the end of last year. However, the EPA failed to take into account the time needed to develop replacements for Freon, so they extended permission to manufacture it for one more year. At this point it is still a bit unclear as to when it will really become "extinct."

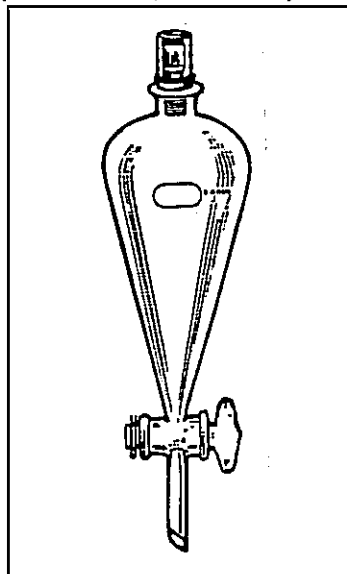
The method being recommended to replace the current crop of methods is called Method 1664. Its proper name will be "N-Hexane Extractable Material", or HEM for short--in science it seems everything must have an abbreviation. At the time of this newsletter Method 1664 has not

been approved and published in the CFR. But, it is anticipated that it will be approved before the end of 1995.

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What are the implications of this new method to those who must have samples analyzed for O&G? It is impossible to say how the results of this method will compare to Methods 413.1 or 9070. Since hexane does not have exactly the same extraction efficiency as CFC-113, the result may vary greatly (both higher and lower) depending on the nature of the material to be extracted.

(cont. on back; see O&G.)



SIMPLE SAMPLING...



OWEA Speaker Examines the Contract Lab

Contract laboratories remain "crucial" in the field of drinking water and waste water analysis said speaker, Dr. Don Kincannon, at the Oklahoma Water Environment Association meeting on May 17, 1995. He explained that the contract lab is usually the only type of facility that has the equipment, personnel and expertise to do the required tests. Therefore, lab selection is critical and Kincannon emphasized that lab certification should not be your "guiding factor" in selecting the best lab for your needs. Of course a lab should be certified, but other selection considerations should be priority:

- a. Evaluate the account executive—how does that person treat you?
- b. Ask to speak to the Lab Manager—if they are evasive, then avoid this lab.
- c. Read the lab's information.
- d. Obtain a list of personnel qualifications.
- e. Get a list of available equipment.
- f. Obtain a client list and call them to see how they were treated.
- g. Tour the lab—is it professional looking or not?

You must be cautious and ask questions of any lab under consideration. The contract lab sells a service, and it is the customer's responsibility to demand quality treatment.

—by Todd Unruh, Marketing Manager

View from the Field

Customers can play a significant role in our effort to improve efficiency and lower the cost of testing. For instance, when taking a sample, remember that easily prevented errors sometimes occur which can have a major impact on the data produced. Here are a few suggestions which can help insure a proper sampling event:

1. Each section on the Chain of Custody form must be completed. This information is necessary to satisfy legal requirements and insure accuracy.
2. The proper size and type of EPA approved container must be used for the sample. Also, a preservative is required for some

samples. If in doubt about these containers please contact your lab.

3. Cooling the sample is an effective method used for preservation. You should cool all samples with ice to guarantee a temperature of less than 4° C.

4. VOC vials must be filled completely to achieve accurate testing. Leave no headspace (air bubbles) in the vial. The best way to force out unwanted air is to create an inverted meniscus (doming of the sample over the edge of the container) being careful not to overfill if the vial contains a preservative. Then, tighten the lid. Check the filled vial by inverting it and tapping gently, revealing any bubbles still trapped in the container.

Remember: Producing the highest quality data in the report starts with proper sampling in the field.

—by John Russell, Field Services Manager



O&G (cont. from pg. 1)

It is certain that the Infrared methods, 418.1 and 413.2, will not be possible with the new method. CFC-113 was valuable for this method since it has no Carbon-Hydrogen bonds, which are the basis for Infrared detection. N-Hexane, being a hydrocarbon, will not work in this way. For those who have O&G as a required parameter on a permit, this new method may be troublesome. If the N-Hexane produces a lower result than the CFC-113 did, the permittee will probably be able to relax. However, if the result is higher, particularly if the new result is suddenly over the limit, a period of difficulty may follow as the permittee argues with their

Accurate News

regulator over the new results. A correlation study (a series of tests in which the same sample is analyzed by both old and new methods) may prove useful in this case. If you think a correlation study might be necessary, it would be a good idea not to wait too long since CFC-113 might be gone soon.

So, if you are planning a project that may require methods 418.1 or 413.2 you will need to consider that these methods may become unavailable soon and leave you "caught in midstream" without a comparable method. Also, you should talk to your regulatory officials making them aware of this upcoming change.

—by George Drye, Lab Manager

From the editor:

Accurate News is for you, our customers and friends! We welcome any questions, comments or article suggestions you may have.

Perhaps you have a question that we can answer or investigate in future issues. Or, you might have a comment with information helpful in updating articles already printed in past editions of our newsletter.

Let us hear from you; we are eager to help you with your testing needs.

You can reach us in...

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Watch for the Sept./ Oct. issue!
 ...Thanks, Todd Unruh