

"Accurate News" is a publication of Accurate Labs
Stillwater, OK 74074

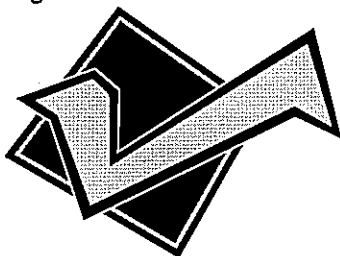
Is Your Laboratory Qualified?

When you submit samples to a laboratory for testing, it is your responsibility to see that the lab you have chosen is certified to perform those tests. Accurate Labs & Training Center is certified by the state of Oklahoma to test drinking water, wastewater, surface waters, ground waters, soils, sediments, sludges and hazardous wastes. We also maintain certifications in Arkansas and Kansas and are one of a very few labs in the state to have achieved National Environmental Laboratory Accreditation Program (NELAP) certification.

Is your laboratory staffed with qualified people? Accurate Labs is staffed with a very high percentage of degreed professionals. Our collective experience gives us expertise in chemistry, engineering, biology, regulatory issues, training, laboratory operations, quality assurance and the operation of water and wastewater plants. If you have a problem, we have a professional that can help you solve it.

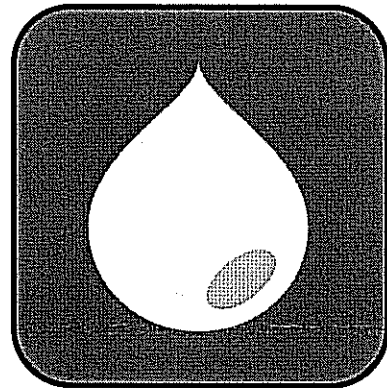
To find out more about the many services we offer, please give us a call. You will find our staff to be helpful, courteous and genuinely concerned about your needs.

Vernon Seaman
Marketing Manager



Chemistry of Disinfection By-Products (DBPs)

The control of DBP is becoming a big problem for water treatment plant operators since 1979. In order to be able to control formation of DBPs, we need to understand the chemistry of DBPs. Formation of haloform reaction occurred with the resorcinol-type moiety of fulvic acids (component of Natural Organic Matters). The proposed pathway first involved a fast chlorination of carbon atoms that are activated by ortho hydroxide (OH) substituents or phenoxide ions in an alkaline environment. The reaction initially gives the intermediate carbanion, which is rapidly halogenated and opened, in two sections and two carcinogenic compounds. The first cleavage will result of formation of THMs and second cleavage, which is oxidative and hydrolytic cleavage alternatively, will yield an HAA (haloacetic acids).



Accurate Laboratories - Oklahoma City

The staff at OKC has been working diligently readying the new laboratory for analysis. With the new location in OKC we are better equipped to serve our metro-area clients. If you are in the OKC area, you may now pick-up sample containers and drop off samples for analysis. In addition to all the other parameters we have provided in the past, we can now perform tests for heat of combustion analysis as well. We currently conduct this test at our OKC laboratory and report results in BTU/lb. If you have questions concerning this or any other type of analysis, do not hesitate to contact Melissa Brake, Assistant Lab Manager at our OKC location at 405-751-3132.



Accurate Environmental Training Center

Stillwater Classes



July

22 – 24 Class "C" Water Operator

August

12 – 14 Class "D" W & WW Operator

18 – 21 Class "C" Water Laboratory

25 – 28 Class "A / B" Water Operator

29 Sampling Class

September

09 – 11 Class "D" W & WW Operator

16 – 18 Class "C" Wastewater Operator

19 Biological Process - Beginning

30 – 02 Class "D" W & WW Operator

Tulsa Classes



July

15 – 17 Class "D" W & WW Operator

21 – 24 Class "C" Wastewater Laboratory

29 – 31 Class "C" Water Operator

August

12 – 14 Class "C" Wastewater Operator

26 – 28 Class "D" W & WW Operator

September

09 – 11 Class "C" Water Operator

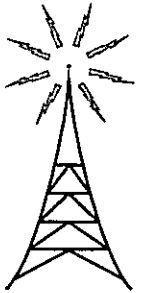
15 – 18 Class "C" Water Laboratory

23 – 25 Class "D" W & WW Operator

Accurate Training Center Has New Name

Accurate Training Center has upgraded their name to **Accurate Environmental Training Center**. We believe the new name conveys the type of training we provide better than before. **Accurate Environmental Training Center** still provides high quality environmental training and service for the industry.

Accurate Environmental Training Center 100% Guarantee Update



Accurate Environmental Training Center (AETC) provides 100% guarantee on their Class "C" and "D" Operator classes at both the Stillwater and Tulsa locations. AETC has a very high success rate of students passing the state examinations on the first attempt after attending one of AETC's classes.

With the 100% guarantee, the students who do not pass on the first attempt are welcome to come back to the portion of the class, up to the full duration of the class, if necessary, to receive further instruction to pass the examination.

This offer is only good for up to six (6) months after taking the initial Class "C" or "D" Operator Class at AETC.

After the six months period following the class dates, the student will be responsible for the full tuition of taking the class again.

Keep Track of Your Class Attendance Records

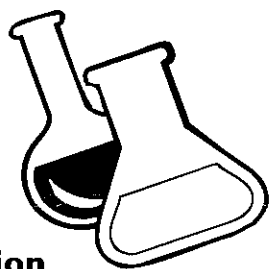


Remember, ***you are the only one responsible to keep track of your hours.*** You can do this quite easily – ***keep your class attendance records in a safe place and remember where they are when June comes around.*** If you lose them, you will not have any proof of taking the hours. If your employer requires a copy of your training hours and certification, give them a ***"copy"*** and you keep the original. Keep your records, even if you leave the field of water treatment. Your hours are good for life.

SUVA

Some drinking water treatment plants that can not meet the overall Total Organic Carbon removal requirements may still be considered in compliance if the SUVA (Specific UV Absorbance) is equal to or less than 2.0 liters per milligram-meter (as cited in the Stage I of D/DBP rule). SUVA is the ratio between UV254 absorption and the dissolved organic carbon in a water sample. SUVA can be used as a rough indicator measurement to characterize the dissolved organic carbon. This dissolved organic carbon is the major factor of the formation of DBPs (Disinfection By-products) such as THMs and HAAs. For systems serving fewer than 10,000, this upcoming summer season should give you a worse case condition for DBPs. Your sampling at this time could predict if your system could have a possible DBP violation next year when you fall under the DBP program. If there is a problem, you have 6 months to correct it before you DBP exceedences will generate a Notice of Violation from the ODEQ. If you have questions on how to bring you system under compliance call our Environmental Services group or feel free to request sampling containers for TOC, THMs & HAAs.

Kenneth Crawford
QA / QC Officer



Sample Preservation

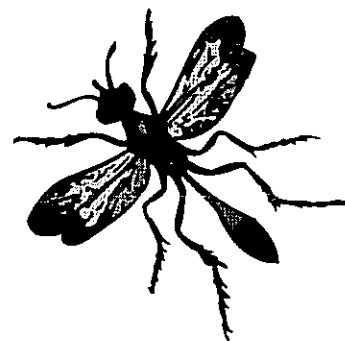
Sample preservation is a very important part of sampling technique. When taking a sample for total metals, such as Table III, the sample should be preserved to a pH of less than 2 with Nitric Acid (HNO_3). If you have pre-preserved containers, there is no need to further add acid. If using non-preserved containers, use 100mL, or one-tenth of a milliliter (mL), for every 100mL of sample. In other words, if you collect a 500mL sample, 0.5mL of concentrated trace metal grade HNO_3 should be sufficient to bring the pH to <2. When sampling for soluble or dissolved metals, do not add acid before filtering with a 0.45 mm filter. If you cannot filter the sample in the field, send us the unpreserved sample, and we will filter it in the lab, then preserve the sample in the same manner as for total metals. When sampling monitoring wells, as for Appendix A or B, do not acid preserve the sample. Preserving a monitor well sample with acid will dissolve a portion of the solids and add to the total metal concentration. I hope this information will help. Have a great summer, and give Mark Vaughan if you have any questions regarding metals preservation and analysis.

Mark Vaughan
Metals Department Manager

Geosmin and MIB

Just as a reminder, Accurate Labs is now testing for geosmin and MIB in drinking water. Since summer is here and water usage is increasing, now is the time to start testing for geosmin and MIB. We are one of a very few labs in Oklahoma and possibly the only commercial lab that is currently analyzing for geosmin and MIB. Any questions or comments please feel free to contact Danny Chance at (405) 372-4500.

Danny Chance
Organics Department Manager



Pesticide Toxicity

Recent news events and articles have pointed out the dangers of pesticides in our environment. Whether in food or water supplies, they present a major problem. People use pesticides in their lawn or garden and do not fully understand the damages they can cause to the environment and to one's own health. Many of these products are banned in the United States but are irresponsibly being used by the general public. Organophosphorus pesticides, that breakdown within months, have replaced the older organochlorine pesticides that may remain in the environment for years. Even with the shorter half-lives, organophosphorus pesticides pose just as serious of a threat as their organochlorine counterparts. Accurate Labs is currently certified to test for a wide range of both organophosphorus and organochlorine pesticides. If you suspect presence of any pesticides or have not tested for them, feel free to contact us at 1-800-516-LABS.

Danny Chance
Organics Department Manager

www.accuratelabs.com

Accurate Labs

Accurate Labs is an NELAP certified environmental laboratory primarily serving municipal and industrial clients in Kansas, Oklahoma, Texas, Arkansas and Louisiana. We provide analytical support for projects involving wastewater, drinking water, ground water, soil, sediment and sludge. In addition, we offer complete field sampling services. We maintain certifications in Oklahoma, Arkansas and Kansas for wastewater and hazardous waste analysis. Accurate Labs is the only commercial lab in Oklahoma fully certified for drinking water analysis.

Accurate Environmental Training Center (AETC)

Accurate Environmental Training Center provides ODEQ State Certification Classes and Training for the Water and Wastewater Treatment Facility Operators, Laboratory Technicians, Distribution and Collection Operators and Technicians, Industry and Pretreatment Personnel, Rural Water Districts, Indian Tribes, State Parks, Public and Private Camp Grounds, Mobile Home Parks, and Construction and Contract Personnel.

Accurate Laboratory Supply (ALS)

Accurate Laboratory Services provides basic laboratory supplies needed by most water and wastewater treatment plant and laboratory facilities, industries, and educational facilities, or any other facility in the Oklahoma, Arkansas and Kansas region. Our pricing is very competitive, but the **real value** of ALS is the **service and convenience** we provide. ALS is prepared to help our customers set up and design a lab from scratch if necessary. Another benefit of ALS is free delivery of supplies along our routine weekly routes. For those not serviced by one of our routes, we will use a courier for delivery and charge a small fee.

Accurate Laboratory Services is an **Authorized HACH Regional Distributor** in the state of Kansas, Oklahoma and Arkansas.

Accurate Environmental Services (AES)

Accurate Environmental Services provides environmental technical services related to municipal and industrial water, wastewater, solid wastes and biosolids, industrial pretreatment and environmental site assessments.