

SPECTRUM ANALYTICAL, INC. AIR TESTING SERVICES

Methods TO-14A, TO-15, APH and More

The analytical air laboratory offers EPA Compendium Method TO-14A and TO-15, as well as Mass DEP Air Phase Petroleum Hydrocarbon (APH) testing, along with many specialized tests. Spectrum continues to work with clients to develop specialized air testing to suit specific project needs. This collaborative effort has resulted in the addition of several air testing methodologies including PCBs by Modified EPA TO-4A, PAHs by Modified EPA TO-13A, Fixed Gases by Modified EPA 3C, Formaldehyde, Hydrogen Sulfide, Sulfur and more.

To further ensure the integrity of the air sampling techniques listed above, the air laboratory is housed in an independent building.

Special Points of Interest

- Isolated laboratory performance
- Competitive pricing
- State-of-the-art equipment
- Quick turnaround time
- Technical Support
- On-site Seminars

Visit Spectrum Analytical's web site at www.spectrum-analytical.com for more information on these and other services.

Summa Canister Technology

The summa canisters are the latest development in air sampling technology. Spectrum utilizes canisters with "Silcosteel" treated lining. The Silcosteel increases inertness to improve analysis of many difficult compounds such as sulfur and polar compounds. These canisters also include Silcosteel valves and flow controllers to ensure that the sample does not come in contact with the more reactive surface of stainless steel that is the traditional material of summa canister and flow controllers. Each container may be equipped with a gauge attached to the valve to allow for accurate measurement and recording of canister pressure both before and after sampling. This alleviates any guessing in the field concerning collection of adequate sample volume.

Air Sampling Media Terms of Use

Due to the high costs of media used for air sampling, certain terms and conditions apply for their use. These conditions include fees for damaged or unreturned media; media not returned to the laboratory within ten days of receipt; cleaning fee for media returned unused.

A complete listing of terms and conditions is outlined on Spectrum Analytical's Air Sampling Media Order Form and Agreement which is accessible online from the "Services" web page at www.spectrum-analytical.com.



Please contact our Air Department at (800) 789-9115 for further information or assistance regarding air sampling and analysis.

SPECTRUM ANALYTICAL, INC. FEATURING HANIBAL TECHNOLOGY

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ANALYTICAL, INC.



Methods TO-14A and TO-15 and Massachusetts APH Method Analytical Parameters and Sampling Holding Time

Samples are collected in either Tedlar bags or Summa canisters. Compounds of interest are as follows:

TO-14A AND TO-15 PARAMETERS

Benzene
Benzyl chloride
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chloroform
Chloroethane
Chloromethane
1,2-Dibromoethane (EDB)
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane (Freon 12)
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2 Dichloroethene
1,2-Dichloropropane
cis 1,3-Dichloropropene
trans 1,3-Dichloropropene
1,2-Dichlorotetrafluoroethane (Freon 114)
Ethylbenzene
4-Ethyltoluene
Hexachlorobutadiene
Methyl tert-butyl ether (MTBE)
Methylene chloride
m-p Xylene
o-Xylene
Styrene
Tetrachloroethene
Toluene
1,1,2-Trichloroethane

1,1,2,2-Tetrachloroethane
1,1,1-Trichloroethane
Trichloroethene
Trichlorofluoromethane (Freon 11)
Trichlorotrifluoroethane (Freon 113)
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,2,4,Trichlorobenzene
Vinyl Chloride

ADDITIONAL PARAMETERS INCLUDED IN THE TO-15 METHOD

Acetone
Acrylonitrile
Bromodichloromethane
Bromoform
1,3-Butadiene
2-Butanone (MEK)
n-Butylbenzene
sec-Butylbenzene
Carbon disulfide
Cyclohexane
Dibromochloromethane
trans-1,2-Dichloroethene
1,4-Dioxane
Ethanol
Ethyl acetate
n-Heptane
Hexane
2-Hexanone (MBK)
Isopropyl alcohol
Isopropylbenzene
4-Isopropyltoluene
4-Methyl-2-pentanone (MIBK)
Propene
1,1,2-Tetrachloroethane
Tetrahydrofuran

APH PARAMETERS

Tedlar bags are not recommended for this method.

Benzene
1,3-Butadiene
Ethylbenzene
m-p Xylene
Methyl tert-butyl ether (MTBE)
o-Xylene
2-Methylnaphthalene
Naphthalene
Toluene

Carbon Ranges:
C₅-C₈ Aliphatics
C₉-C₁₂ Aliphatics
C₉-C₁₀ Aromatics



*State-of-the-Art Canister Cleaner
16-Position; 3100 Entech System*

ADDITIONAL SPECIAL ANALYTICAL SERVICES available on a per quote basis. Please contact our Air Laboratory at (413) 789-9018..

SAMPLE COLLECTION AND HOLDING TIME

METHOD TO-14A and TO-15

Collected in SUMMA CANISTERS:
In accordance with CLP criteria established by the EPA, holding time is 30 days from date of collection.

METHOD TO-14A AND TO-15

Collected in TEDLAR BAGS:
In accordance with Massachusetts Landfill Regulations and the EPA, holding time is 24-72 hours from date of collection.

APH METHOD

Collected in SUMMA CANISTERS:
Sampling with Tedlar Bags for this method is not recommended. Holding time for APH samples is 28 days from date of collection.