



CEN
TEK

LABORATORIES

SERVICE CATALOG

**COMPLETE SOLUTIONS
FOR VOLATILE SAMPLING
& ANALYSIS**

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CONTACT INFORMATION

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**Mrs. Janice Scala
President**

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Director of Technical Services**

**Mr. Michael Palmer
Director of Client Services**

INTRODUCTION

Centek Laboratories, LLC investment in superior instrumentation, advanced technology and its professional team provides client-focused service. Using EPA TO-15, NIOSH and OSHA PV2120 recognized methods for compliance, Centek Laboratories routinely identifies known and unknown VOCs in air, liquid, soil and other matrices. Centek Laboratories prides itself on building customer loyalty through providing the best possible service. Our Laboratory Information Management System (LIMS) has been designed and developed by chemists and project managers working in a commercial analytical laboratory specializing in VOC analysis with the client's needs in mind.

What We Can Do

Choosing the correct analytical method and sampling technique is vital to the success of any air sampling program. Centek Laboratories can simplify your air sampling event or program by using coated 1.4L, 1L or 400cc Minicans. Adapted from EPA's Indoor Air Quality Method EPA TO-15, Minicans can provide a quick "no tool or power required" sampling approach to your Industrial Hygiene (IH), Indoor Air Quality (IAQ) Monitoring, STEL Monitoring, TWA Monitoring, Environmental Monitoring, PAMS, Air Toxics (TO) Analysis and Landfill Gas and Soil Gas Analysis. Vacuum draws the sample into the Minican, completing the sampling event in as little as 4 seconds AND AS LONG AS 30 HOURS. The Minicans small size dramatically reduces storage space and shipping costs. Sample holding times can go up to several weeks due to the dense, inert coating used to line the inside of Minicans. Minicans can be cleaned and reused. The Minican is durable and inexpensive as well as usable over a large concentration range. The universal sampling system can provide quantitative and qualitative data for polar, non-polar and reactive volatile organics as well as fixed gases. Detection range extends from pptv to the percent range.

Whole air samples are analyzed with state-of-the-art cryo-focusing and advanced GC/MS technology. The samples are frozen and quickly injected for maximum resolution. This analytical process allows for a sub parts per billion (ppb) to sub parts per trillion (ppt) detection limits. Centek Laboratories' LIMS and data processing power are key elements for providing an average **5 business day turnaround time** and maintaining pace with growing sample workloads.

We provide defensible data through a strict Quality Assurance/Quality Control (QA/QC) program. Method performance is monitored through the analysis of laboratory control samples, duplicate samples, method blanks, internal standards and surrogates. Standards are second source verified and are traceable. Canisters are QC checked for cleanliness and is documented on a computerized database for traceability of equipment history and availability.

Centek Laboratories has built an interactive web site with our Laboratory Information Management System (**LIMS**) that has been designed and developed by staff, project managers, analysts and chemists with the client in mind. This system has more automated features and capabilities to interact with the client than ever before, delivering premium electronic data deliverables. Some of the exciting features of Centek Laboratories LIMS are automated data entry, automated data validation and electronic data deliverables.



SERVICES

Soil Vapor Intrusion

Indoor Air Quality (IAQ)

Industrial Hygiene (IH)

TO-14 & TO-15 Analysis

Area Monitoring

TWA Monitoring

STEL Monitoring

Ethylene Oxide Analysis

BTEX Analysis

Naphthalene Analysis

Beverage Testing

PAMS (Photochemical Analysis Monitoring System)

Product Off-gassing

Headspace VOC's

Landfill Monitoring

Emergency Response

Research & Development

Contact client services to find out which sampling analysis will be right for you.



LABORATORY POLICIES

Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.CentekLabs.com. A sample version is also incorporated at the back of this schedule. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in an Minican, summa canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Methods

Centek Laboratories provides a full range of testing using EPA TO-14 and EPA TO-15 methods.

Compatibility of Compounds

Virtually all volatile organic compounds (VOCs) can be collected in the same whole air sampler - Minican, summa canister or Tedlar bag.

Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory.

Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) are also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit application on file to extend credit. Purchase orders or checks information must be submitted for us to release results.



LABORATORY POLICIES

Rush Turnaround Samples

Expedited turn around times are available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:

Same day TAT = 200%

Next business day TAT by Noon = 150%

Next business day TAT by 6:00pm = 100%

Second business day TAT by 6:00pm = 75%

Third business day TAT by 6:00pm = 50%

Fourth business day TAT by 6:00pm = 35%

Fifth business day = Standard

Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

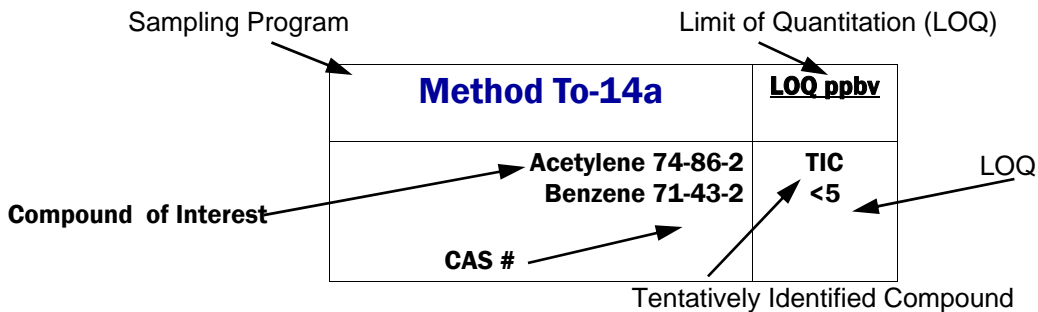
Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.



ABBREVIATIONS

COC	Chain of Custody
CAS #	Chemical Abstracts Service (Registry Number)
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrophotometer
IAQ	Indoor Air Quality
IH	Industrial Hygiene
LOQ	Limit of Quantitation
LIMS	Laboratory Information Management System
ppbV	Parts per Billion (Volume of Air)
pptV	Parts per Trillion (Volume of Air)
QA/QC	Quality Assurance /Quality Control
STEL	Short Term Exposure Limit
TAT	Turnaround Time
TIC	Tentatively Identified Compound
TWA	Time Weighted Average
VOC	Volatile Organic Compound

Sampling Program Key





GENERAL PRICING

SOIL GAS VAPOR INTRUSION

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
EPA TO-15		1 ug/m3	TO-15 list at 1 ug/m3 (sub slab/ Soil gas)
EPA TO-15		TCE @ .25 ug/m3	NYS ambient & indoor air Vapor Intrusion protocol
EPA TO-15 w/ Naphthalene	Call for Pricing	1ug/M3	
EPA TO-15 (Select List)	Call for Pricing	1ug/m3 & TCE @ 0.25 ug/M3	1-4 individual compounds

INDUSTRIAL HYGIENE & INDOOR AIR QUALITY

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
EPA TO-15		5 ppbv	63 compounds TO-15 list
EPA TO-15 + TIC's		5 ppbv	
EPA TO-15 (Select List)	Call for Pricing	5ppbV	1-4 individual compounds
EPA TO-15 w/ Naphthalene	Call for Pricing	5ppbV	
EPA TO-14		5 ppbv	Complete TO-14 list
EPA TO-14 + TIC's		5 ppbv	
EPA TO-14 (Select List)	Call for Pricing	5ppbV	1-4 individual compounds
BTEX / MTBE only		5 ppbv	Selected Compounds
Freon's		5ppbv	
Freon's + TIC's		5ppbv	
EPA T01		5ppbv	
EPA T02		5ppbv	
EPA T03		5ppbv	
Chlorinated Solvents		5ppbv	
Chlorinated Solvents + TIC's		5ppbv	

OZONE PRECURSORS

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
Ozone Precursors		5ppbv	
Ozone Precursors + TIC's		5ppbv	



GENERAL PRICING

URBAN AIR TOXICS (HAP'S)

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
Volatile Hazardous Air Pollutants (HAP's)		5ppbV	

PHOTOCHEMICAL ASSESSMENT MONITORING (PAMS)

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
PAMS		5ppbv	

ETHYLENE OXIDE

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
Ethylene oxide		5ppbV	Price to change Pending volume Of samples

PRODUCT TESTING

<u>Test</u>	<u>Price</u>	<u>Detection Limit</u>	<u>Comments</u>
Pending on compounds, detection limits Analysis and prep time			Call for pricing

****If you do not see a VOC analysis and detection limit/s that you require, please call Client Services – we offer much more than what is listed.***

Standard Turnaround Time is 5 business days
No Charges for Can Quality Control
No Charges for Can and Regulator Rental

SURCHARGES FOR RUSH TURNAROUND SAMPLES:

Same day TAT = 200%

Next business day TAT by Noon = 150%

Next business day TAT by 6:00pm = 100%

Second business day TAT by 6:00pm = 75%

Third business day TAT by 6:00pm = 50%

Fourth business day TAT by 6:00pm = 35%

Fifth business day = Standard



SOIL GAS VAPOR INTRUSION

<p style="text-align: center;">TO-15</p> <p style="text-align: center;"><u>POLAR AND NON-POLAR VOLATILE COMPOUNDS</u></p> <p style="text-align: right;">CAS#</p>	<p style="text-align: center;">Detection Limit</p> <p style="text-align: center;">0.15ppbv</p> <p style="text-align: center;">1ug/m3 (varies pending MW)</p>	<p style="text-align: center;">Detection Limit</p> <p style="text-align: center;">1ug/m3+ TCE@.25 (varies pending MW)</p>
<p style="text-align: right;">acetone 67-64-1</p> <p style="text-align: right;">allyl chloride 107-05-1</p> <p style="text-align: right;">benzene 71-43-2</p> <p style="text-align: right;">benzyl chloride 100-44-7</p> <p style="text-align: right;">bromodichloromethane 75-27-4</p> <p style="text-align: right;">bromoform 75-25-2</p> <p style="text-align: right;">bromomethane 74-83-9</p> <p style="text-align: right;">1,3-butadiene 106-99-0</p> <p style="text-align: right;">2-butanone (Methyl Ethyl Ketone) 78-93-3</p> <p style="text-align: right;">carbon disulfide 75-15-0</p> <p style="text-align: right;">carbon tetrachloride 56-23-5</p> <p style="text-align: right;">chlorobenzene 108-90-7</p> <p style="text-align: right;">chloroethane 75-00-3</p> <p style="text-align: right;">chloroform 67-66-3</p> <p style="text-align: right;">chloromethane 74-87-3</p> <p style="text-align: right;">cyclohexane 110-82-7</p> <p style="text-align: right;">dibromochloromethane 124-48-1</p> <p style="text-align: right;"><i>trans</i>-1,2-dichloroethene 156-60-5</p> <p style="text-align: right;">1,2-dibromoethane 106-93-4</p> <p style="text-align: right;">1,2-dichlorobenzene 95-50-1</p> <p style="text-align: right;">1,3-dichlorobenzene 541-73-1</p> <p style="text-align: right;">1,4-dichlorobenzene 106-46-7</p> <p style="text-align: right;">1,1-dichloroethane 75-34-3</p> <p style="text-align: right;">1,2-dichloroethane 107-06-2</p> <p style="text-align: right;">1,1-dichloroethene 75-35-4</p> <p style="text-align: right;"><i>cis</i>-1,2-dichloroethene 156-59-2</p> <p style="text-align: right;">1,2-dichloropropane 78-87-5</p> <p style="text-align: right;"><i>cis</i>-1,3-dichloropropene 10061-01-5</p> <p style="text-align: right;"><i>trans</i>-1,3-dichloropropene 10061-02-6</p> <p style="text-align: right;">1,4-dioxane 123-91-1</p> <p style="text-align: right;">ethylbenzene 100-41-4</p> <p style="text-align: right;">ethyl acetate 141-78-6</p> <p style="text-align: right;">4-ethyltoluene 622-96-8</p> <p style="text-align: right;">halocarbon 11 75-69-4</p> <p style="text-align: right;">halocarbon 12 75-71-8</p> <p style="text-align: right;">halocarbon 113 76-13-1</p> <p style="text-align: right;">halocarbon 114 76-14-2</p> <p style="text-align: right;">hexachloro-1,3-butadiene 87-68-3</p> <p style="text-align: right;">hexane 110-54-3</p> <p style="text-align: right;">2-hexanone (Methyl Butyl Ketone) 591-78-6</p> <p style="text-align: right;">4-methyl-2-pentanone (Methyl Isobutyl Ketone) 108-10-1</p> <p style="text-align: right;">methyl <i>tert</i>-butyl ether 163-04-4</p> <p style="text-align: right;">methylene chloride 75-09-2</p>	<p>(cont)</p>	<p>(cont)</p>



SOIL GAS VAPOR INTRUSION

<p>TO-15</p> <p><u>POLAR AND NON-POLAR VOLATILE COMPOUNDS</u></p> <p>CAS#</p>	<p>Detection Limit</p> <p>0.15ppbv</p> <p>1ug/m3 (varies pending MW)</p>	<p>Detection Limit</p> <p>1ug/m3+ TCE@.25 (varies pending MW)</p>
<p>2-propanol (isopropyl alcohol) 67-63-0 propylene 115-07-1 styrene 100-42-5 1,1,2,2-tetrachloroethane 71-55-6 tetrachloroethene 127-18-4 tetrahydrofurn 109-99-9 toluene 108-88-3 1,2,4-trichlorobenzene 120-82-1 1,1,1-trichloroethane 71-55-6 1,1,2-trichloroethane 79-00-5 trichloroethene 79-01-6 1,2,4-trimethylbenzene 95-63-6 1,3,5-trimethylbenzene 108-67-8 2,2,4-trimethylpentane 540-84-1 vinyl chloride 75-01-4 vinyl acetate 108-05-4 vinyl bromide 593-60-02 <i>m</i>& <i>p</i>-xylene 108-38-3 <i>o</i>-xylene 95-47-6</p> <p>Single Compound List List + TIC's TIC's Only</p>	<p>Call for pricing</p>	<p>Call for pricing</p>



SOIL GAS VAPOR INTRUSION NAPHTHALENE

<p>TO-15</p> <p><u>NAPHTHALENE</u></p> <p>CAS#</p>	<p>Detection Limit</p> <p>1ug/m3</p>	<p>Detection Limit</p> <p>1ug/m3+ TCE@.25</p>
<p>Naphthalene 91-20-3</p> <p>Single Compound Or with list</p>	<p>Call for pricing</p>	<p>Call for pricing</p>



INDUSTRIAL HYGIENE & INDOOR AIR QUALITY

<p style="text-align: center;">TO-15</p> <p style="text-align: center;"><u>POLAR AND NON-POLAR VOLATILE COMPOUNDS</u></p> <p style="text-align: right;">CAS#</p>	<p style="text-align: center;">Detection Limit (ppbv)</p>	<p style="text-align: center;">Detection Limit (ppbv)</p>
acetone 67-64-1 allyl chloride 107-05-1 benzene 71-43-2 benzyl chloride 100-44-7 bromodichloromethane 75-27-4 bromoform 75-25-2 bromomethane 74-83-9 1,3-butadiene 106-99-0 2-butanone (Methyl Ethyl Ketone) 78-93-3 carbon disulfide 75-15-0 carbon tetrachloride 56-23-5 chlorobenzene 108-90-7 chloroethane 75-00-3 chloroform 67-66-3 chloromethane 74-87-3 cyclohexane 110-82-7 dibromochloromethane 124-48-1 <i>trans</i> -1,2-dichloroethene 156-60-5 1,2-dibromoethane 106-93-4 1,2-dichlorobenzene 95-50-1 1,3-dichlorobenzene 541-73-1 1,4-dichlorobenzene 106-46-7 1,1-dichloroethane 75-34-3 1,2-dichloroethane 107-06-2 1,1-dichloroethene 75-35-4 <i>cis</i> -1,2-dichloroethene 156-59-2 1,2-dichloropropane 78-87-5 <i>cis</i> -1,3-dichloropropene 10061-01-5 <i>trans</i> -1,3-dichloropropene 10061-02-6 1,4-dioxane 123-91-1 ethylbenzene 100-41-4 ethyl acetate 141-78-6 4-ethyltoluene 622-96-8 halocarbon 11 75-69-4 halocarbon 12 75-71-8 halocarbon 113 76-13-1 halocarbon 114 76-14-2 hexachloro-1,3-butadiene 87-68-3 hexane 110-54-3 2-hexanone (Methyl Butyl Ketone) 591-78-6 4-methyl-2-pentanone (Methyl Isobutyl Ketone) 108-10-1 methyl <i>tert</i> -butyl ether 163-04-4 methylene chloride 75-09-2	(cont)	(cont)



**INDUSTRIAL HYGIENE &
INDOOR AIR QUALITY**

<p align="center">TO-15</p> <p align="center"><u>POLAR AND NON-POLAR VOLATILE COMPOUNDS</u></p> <p align="right">CAS#</p>	<p align="center">Detection Limit (ppbv)</p>	<p align="center">Detection Limit (ppbv)</p>
<p>2-propanol (isopropyl alcohol) 67-63-0 propylene 115-07-1 styrene 100-42-5 1,1,2,2-tetrachloroethane 71-55-6 tetrachloroethene 127-18-4 tetrahydrofurn 109-99-9 toluene 108-88-3 1,2,4-trichlorobenzene 120-82-1 1,1,1-trichloroethane 71-55-6 1,1,2-trichloroethane 79-00-5 trichloroethene 79-01-6 1,2,4-trimethylbenzene 95-63-6 1,3,5-trimethylbenzene 108-67-8 2,2,4-trimethylpentane 540-84-1 vinyl chloride 75-01-4 vinyl acetate 108-05-4 vinyl bromide 593-60-02 <i>m&p</i>-xylene 108-38-3 <i>o</i>-xylene 95-47-6</p> <p align="right">Single Compound List List + TIC's TIC's Only</p>	<p align="center">Call for pricing</p>	<p align="center">Call for pricing</p>

<p align="center">TO-15</p> <p align="center"><u>NAPHTHALENE</u></p> <p align="right">CAS#</p>	<p align="center">Detection Limit (ppbv)</p>	<p align="center">Detection Limit (ppbv)</p>
<p>Naphthalene 91-20-3</p> <p align="right">Single Compound Or with list</p>	<p align="center"><5</p> <p align="center">Call for pricing</p>	<p align="center"><5</p> <p align="center">Call for pricing</p>



**INDUSTRIAL HYGIENE &
INDOOR AIR QUALITY**

<p style="text-align: center;">TO-14</p> <p style="text-align: center;"><u>NON-POLAR VOLATILE COMPOUNDS</u></p> <p style="text-align: right;">CAS#</p>	<p style="text-align: center;">Detection Limit (ppbv)</p>	<p style="text-align: center;">Detection Limit (ppbv)</p>
<p style="text-align: center;">benzene 71-43-2 bromomethane 74-83-9 carbon tetrachloride 56-23-5 chlorobenzene 108-90-7 chloroethane 75-00-3 chloroform 67-66-3 chloromethane 74-87-3 1,2-dibromoethane 106-93-4 1,2-dichlorobenzene 95-50-1 1,3-dichlorobenzene 541-73-1 1,4-dichlorobenzene 106-46-7 1,1-dichloroethane 75-34-3 1,2-dichloroethane 107-06-2 1,1-dichloroethene 75-35-4 <i>cis</i>-1,2-dichloroethene 156-59-2 1,2-dichloropropane 78-87-5 <i>cis</i>-1,3-dichloropropene 10061-01-5 <i>trans</i>-1,3-dichloropropene 10061-02-6 ethylbenzene 100-41-4 halocarbon 11 75-69-4 halocarbon 12 75-71-8 halocarbon 113 76-13-1 halocarbon 114 76-14-2 hexachloro-1,3-butadiene 87-68-3 methylene chloride 75-09-2 styrene 100-42-5 1,1,2,2,-tetrachloroethane 71-55-6 tetrachloroethene 127-18-4 toluene 108-88-3 1,2,4-trichlorobenzene 120-82-1 1,1,1-trichloroethane 71-55-6 1,1,2-trichloroethane 79-00-5 trichloroethene 79-01-6 1,2,4-trimethylbenzene 95-63-6 1,3,5-trimethylbenzene 108-67-8 vinyl chloride 75-01-4 <i>m&p</i>-xylene 108-38-3 <i>o</i>-xylene 95-47-6</p> <p style="text-align: center;">Single Compound TO14 List only List + TIC's TIC's Only</p>	<p style="text-align: center;">Call for pricing</p>	<p style="text-align: center;">Call for pricing</p>



**INDUSTRIAL HYGIENE &
INDOOR AIR QUALITY**

TO-15 <u>BTEX / MTBE</u>	Detection Limit (ppbv)	Detection Limit (ppbv)
benzene 71-43-2	<5	<1
ethyl benzene 100-41-4	<5	<1
methyl tert-butyl ether 1634-04-4	<5	<1
toluene 108-88-3	<5	<1
m&p-xylene 108-38-3,106-42-3	<10	<2
o-xylene 95-47-6	<5	<1
Single Compound List only List + TIC's TIC's Only	Call for pricing	Call for pricing

TO-15 <u>FREON'S</u>	Detection Limit (ppbv)	Detection Limit (ppbv)
CAS#		
freon 11 (trichlorofluoromethane) 75-69-4	<5	<1
freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane) 76-13-1	<5	<1
freon 114 (1,2-dichlorotetrafluoroethane) 76-14-2	<5	<1
freon 114B2 (1,2-dibromotetrafluoroethane) 124-73-2	TIC	TIC
freon 115 (chloropentafluoroethane) 76-15-3	TIC	TIC
freon 12 (dichlorodifluoromethane) 75-71-8	<5	<1
freon 123 (2,2-dichloro-1,1,1-trifluoroethane) 354-23-4	TIC	TIC
freon 124 (2-chloro-1,1,1,2-tetrafluoroethane)		
freon 125 (pentafluoroethane)		
freon 12B1 (bromochlorodifluoromethane) 353-59-3	TIC	TIC
freon 13 (chlorotrifluoromethane) 75-72-9	TIC	TIC
freon 134 (1,1,2,2,-tetrafluoroethane) 359-35-3	TIC	TIC
freon 134a (tetrafluoroethane) 359-35-3	TIC	TIC
freon 13b1 (bromotrifluoromethane) 75-63-8	TIC	TIC
freon 141b (1,1-dichloro-1-fluoroethane)		
freon 142b (1-chloro-1,1-difluoroethane) 75-68-3	TIC	TIC
freon 143a (1,1,1-trifluoroethane) 420-46-2	TIC	TIC
freon 152a (1,1-difluoroethane) 75-37-6	TIC	TIC
freon 160 (chloroethane) 75-00-3	TIC	TIC
freon 21 (dichlorofluoromethane) 75-43-4	TIC	TIC
freon 22 (chlorodifluoromethane) 75-45-6	TIC	TIC
freon 23 (trifluoromethane) 75-46-7	TIC	TIC
freon 40 (chloromethane)	TIC	TIC
Single Compound List only List + TIC's TIC's Only	Call for pricing	Call for pricing



**INDUSTRIAL HYGIENE &
INDOOR AIR QUALITY**

TO-1		
<u>VOLATILE ORGANIC COMPOUNDS</u>	Detection Limit (ppbv)	Detection Limit (ppbv)
CAS#		
benzene 71-43-2	<5	<1
bromoform 75-25-2	<5	<1
bromobenzene 108-86-1	TIC	TIC
carbon tetrachloride 56-23-5	<5	<1
chlorobenzene 108-90-7	<5	<1
chloroform 67-66-3	<5	<1
cumene 98-82-8	TIC	TIC
ethylene dibromide 106-93-4	TIC	TIC
1-heptene 592-76-7	TIC	TIC
1,2-dichloroethane 107-06-2	<5	<1
1,2-dichloropropane 78-87-5	<5	<1
1,3-dichloropropane 142-28-9	TIC	TIC
1,1-dichloroethene 75-35-4	<5	<1
n-heptane 142-82-5	TIC	TIC
1,1,2,2,-tetrachloroethane 71-55-6	<5	<1
tetrahydrofurn 109-99-9	<5	<1
toluene 108-88-3	<5	<1
1,1,1-trichloroethane 71-55-6	<5	<1
trichloroethene 79-01-6	<5	<1
<i>m&p</i> -xylene 108-38-3	<10	<10
<i>o</i> -xylene 95-47-6	<5	<1
Single Compound List only List + TIC's TIC's Only	Call for pricing	Call for pricing



**INDUSTRIAL HYGIENE &
INDOOR AIR QUALITY**

TO-2		
<u>VOLATILE ORGANIC COMPOUNDS</u>	Detection Limit (ppbv)	Detection Limit (ppbv)
CAS#		
acrylonitrile 107-13-1	TIC	TIC
allyl chloride 107-05-1	<5	<1
benzene 71-43-2	<5	<1
carbon tetrachloride 56-23-5	<5	<1
chloroform 67-66-3	<5	<1
1,2-dichloroethane 107-06-2	<5	<1
1,1-dichloroethane 75-34-3	<5	<1
methylene chloride 75-09-2	<5	<1
toluene 108-88-3	<5	<1
1,1,1-trichloroethane 71-55-6	<5	<1
vinyl chloride 75-01-4	<5	<1
Single Compound List only List + TIC's TIC's Only	Call for pricing	Call for pricing

TO-3		
<u>VOLATILE ORGANIC COMPOUNDS</u>	Detection Limit (ppbv)	Detection Limit (ppbv)
CAS#		
benzene 71-43-2	<5	<1
chloroform 67-66-3	<5	<1
chlorobenzene 108-90-7	<5	<1
1,2-dichloroethane 107-06-2	<5	<1
1,1-dichloroethane 75-34-3	<5	<1
1,1,1-trichloroethane 71-55-6	<5	<1
trichloroethene 79-01-6	<5	<1
tetrachloroethene 127-18-4	<5	<1
Single Compound List only List + TIC's TIC's Only	Call for pricing	Call for pricing



**INDUSTRIAL HYGIENE &
INDOOR AIR QUALITY**

TO-15		
<u>CHLORINATED SOLVENTS</u>	Detection Limit (ppbv)	Detection Limit (ppbv)
CAS#		
1,1,1-trichloroethane 71-55-6	TIC	TIC
1,1,2,2-tetrachloroethane 79-34-5	<5	<1
1,1,2-trichloroethane 79-00-5	<5	<1
1,1-dichloroethane 75-34-3	<5	<1
1,1-dichloroethene 75-35-4	<5	<1
1,2,4-trichlorobenzene 120-82-1	<5	<1
1,2-dichlorobenzene 95-50-1	<5	<1
1,2-dichloroethane 107-06-2	<5	<1
1,2-dichloropropane 78-87-5	<5	<1
1,3-dichlorobenzene 541-73-1	<5	<1
1,4-dichlorobenzene 106-46-7	<5	<1
bromodichloromethane 75-27-4	<5	<1
carbon Tetrachloride 56-23-5	<5	<1
chlorobenzene 108-90-7	<5	<1
chloroethane 75-00-3	<5	<1
chloroform 67-66-3	<5	<1
chloromethane 74-87-3	<5	<1
chloroprene 126-99-8	TIC	TIC
chlorotoluene 100-44-7	TIC	TIC
dibromochloromethane 124-48-1	<5	<1
freon 11 (Trichlorofluoromethane) 75-69-4	<5	<1
freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane) 76-13-1	<5	<1
freon 114 (1,2-Dichlorotetrafluoroethane) 76-14-2	<5	<1
freon 12 (Dichlorodifluoromethane) 75-71-8	<5	<1
hexachlorobutadiene 87-68-3	<5	<1
methylene chloride 75-09-2	<5	<1
tetrachloroethene 127-18-4	<5	<1
trichloroethene 79-01-6	<5	<1
vinyl chloride 75-01-4	<5	<1
cis-1,2-dichloroethene 156-59-2	<5	<1
cis-1,3-dichloropropene 10061-01-5	<5	<1
trans-1,2-dichloroethene 156-60-5	<5	<1
trans-1,3-dichloropropene 10061-02-6	<5	<1
Single Compound List List + TIC's TIC's Only	Call for pricing	Call for pricing



OZONE PRECURSORS

TO-15	Detection Limit
<u>OZONE PRECURSORS</u>	(ppbv)
CAS#	
1,2,4-trimethylbenzene 95-63-6	<5
1,3,5-trimethylbenzene 108-67-8	<5
1,3-butadiene 106-99-0	<5
1,4-diethylbenzene 105-05-5	<5
1-butene 106-98-9	TIC
1-heptene 592-76-7	TIC
1-hexene 592-41	<5
methyl tert-butyl Ether 1634-04-4	<5
methylacetylene 74-99-7	<5
methylcyclohexane 108-87-2	TIC
methylcyclopentane 96-37-7	TIC
nonane 111-84-2	TIC
octane 111-65-9	TIC
pentane 109-66-0	TIC
propane 74-98-6	TIC
propylbenzene 103-65-1	TIC
propylene 115-07-1	TIC
styrene 100-42-5	<5
toluene 108-88-3	<5
alpha-pinene 80-56-8	TIC
beta-pinene 127-91-3	TIC
cis-2-butene 590-18-1	TIC
cis-2-hexene 7688-21-3	TIC
cis-2-pentene 627-20-3	TIC
d-limonene 5989-27-5	TIC
m&p-xylene 108-83-3,106-42-3	<5
m-ethyltoluene 620-14-4	TIC
o-ethyltoluene 611-14-3	TIC
o-xylene 95-47-6	<5
p-cymene 99-87-6	TIC
p-ethyltoluene 622-96-8	TIC
trans-2-butene 624-64-6	TIC
trans-2-hexene 4050-45-7	TIC
trans-2-pentene 646-04-8	TIC
1-nonene 124-11-8	TIC
1-octene 111-66-0	TIC
1-pentene 109-67-1	TIC
2,2-dimethylbutane 75-83-2	<5
2,2-dimethylpropane 463-82-1	TIC
2,3,4-trimethylpentane 565-75-3	TIC
2,3-dimethylbutane 79-29-8	TIC
2,3-dimethylpentane 565-59-3	TIC
2,4-dimethylhexane 589-43-5	TIC
2,4-dimethylpentane 108-08-7	TIC

(cont)



OZONE PRECURSORS

TO-15	Detection Limit (ppbv)
<u>OZONE PRECURSORS</u>	
CAS#	
2-methyl-1-butene 563-46-2	TIC
2-methyl-2-butene 513-35-9	TIC
2-methyl-2-pentene 625-27-4	TIC
2-methylheptane 592-27-8	TIC
2-methylhexane 591-76-4	TIC
2-methylpentane 107-83-5	TIC
3-methylhexane 589-34-4	TIC
3-methylpentane 96-14-0	TIC
4-methyl-1-pentene 691-37	TIC
acetylene 74-86-2	TIC
benzene 71-43-2	<5
butane 106-97-8	TIC
butylbenzene 104-51-8	TIC
cumene 98-82-8	TIC
cyclohexane 110-82-7	<5
cyclopentane 287-92-3	TIC
cyclopentene 142-29-0	TIC
decane 124-18-5	TIC
dimethylacetylene 503-17-3	TIC
ethane 74-84-0	TIC
ethyl benzene 100-41-4	<5
ethylacetylene 107-00-6	TIC
ethylene 74-85-1	TIC
heptane 142-82-5	<5
hexane 110-54-3	<5
isobutane 75-28-5	TIC
isobutylene 115-11-7	TIC
isooctane 540-84-1	TIC
isopentane 78-78-4	TIC
isoprene 78-79-5	TIC
Single Compound	
List	Call for pricing
List + TIC's	
TIC's Only	



URBAN AIR TOXICS VOLATILE HAZARDOUS AIR POLLUTANTS

<u>VOLATILE HAZARDOUS AIR POLLUTANTS</u> <u>(HAPS)</u>	<u>Detection</u> <u>Limit</u> <u>(ppbv)</u>
CAS#	
cumene 98-82-8	TIC
diazomethane 334-88-3	TIC
diethyl sulfate 64-67-5	TIC
dimethyl sulfate 77-78-1	TIC
dimethylcarbaryl chloride 79-44-7	TIC
epichlorohydrin 106-89-8	TIC
ethyl acrylate 140-88-5	TIC
ethyl benzene 100-41-4	<5
ethyl carbamate 51-79-6	TIC
ethylene dibromide 106-93-4	TIC
ethylene oxide 75-21-8	<5
ethyleneimine 151-56-4	TIC
formaldehyde 50-00-0	TIC
hexachlorobutadiene 87-68-3	TIC
hexachloroethane 67-72-1	TIC
hexane 110-54-3	<5
iodomethane 74-88-4	TIC
isophorone 78-59-1	TIC
methyl ethyl ketone 78-93-3	<20
methyl isobutyl ketone 108-10-1 \	<20
methyl isocyanate 624-83-9	TIC
methyl methacrylate 80-62-6	TIC
methyl tert-butyl ether 1634-04-4	<5
methylene chloride 75-09-2	<5
methylhydrazine 60-34-4	TIC
N,N-dimethylaniline 121-69-7	TIC
N,N-dimethylformamide 68-12-2	TIC
N-nitrosodimethylamine 62-75-9	TIC
N-nitrosomorpholine 59-89-2	TIC
nitrobenzene 98-95-3	TIC
phenol 108-95-2	TIC
phosgene 75-44-5	TIC
propionaldehyde 123-38-6	TIC
propylene oxide 75-56-9	TIC
styrene oxide 96-09-3	TIC
styrene 100-42-5	<5
tetrachloroethene 127-18-4	<5
toluene 108-88-3	<5
triethylamine 121-44-8	TIC
vinyl acetate 108-05-4	<5
vinyl bromide 593-60-2	<5
vinyl chloride 75-01-4	<5
beta-propiolactone 57-57-8	TIC
m&p-xylene 108-38-3,106-42-3	<5
o-cresol 95-48-7	TIC
o-hydroxyphenol 120-80-9	TIC
o-xylene 95-47-6	<5
Single Compound List List + TIC's TIC's Only	Call for pricing



PHOTOCHEMICAL ASSESSMENT AND MONITORING SYSTEM (PAMS)

<u>PHOTOCHEMICAL ASSESSMENT AND MONITORING SYSTEM (PAMS)</u>	<u>Detection Limit</u> (ppbv)
CAS#	
acetylene 74-86-2	TIC
benzene 71-43-2	<5
<i>n</i> -butane 106-947-8	TIC
1-butene 106-98-9	TIC
<i>cis</i> -2-butene 590-18-1	TIC
<i>trans</i> -2-butene 624-64-6	TIC
cyclohexane 110-82-7	<5
cyclopentane 287-92-3	TIC
<i>n</i> -decane 124-18-5	TIC
<i>m</i> -diethylbenzene 141-93-5	TIC
<i>p</i> -diethylbenzene 105-05-5	TIC
2,2-dimethylbutane 75-83-2	TIC
2,3-dimethylbutane 79-29-8	TIC
2,3-dimethylpentane 565-59-3	TIC
2,4-dimethylpentane 108-08-7	TIC
<i>n</i> -dodecane 112-40-3	TIC
ethane 74-84-0	TIC
ethylbenzene 100-41-4	<5
ethylene 74-85-1	TIC
<i>o</i> -ethyltoluene 611-14-3	TIC
<i>m</i> -ethyltoluene 620-14-4	TIC
<i>p</i> -ethyltoluene 622-96-8	<5
<i>n</i> -heptane 142-82-5	TIC
<i>n</i> -hexane 110-54-3	<5
<i>n</i> -hexene 592-41-6	TIC
isobutane 75-28-5	TIC
isopentane 78-78-4	TIC
isoprene 78-79-5	TIC
isopropylbenzene (cumene) 98-82-8	TIC
methylcyclohexane 108-87-2	TIC
methylcyclopentane 96-37-7	TIC
2-methylheptane 592-27-8	TIC
3-methylheptane 96-14-0	TIC
2-methylhexane 591-76-4	TIC
3-methylhexane 589-34-4	TIC
2-methylpentane 107-83-5	TIC
3-methylpentane 96-14-0	TIC
<i>n</i> -nonane 11-84-2	TIC
<i>n</i> -octane 11-65-9	TIC
<i>n</i> -pentane 109-66-0	TIC
1-pentene 109-67-1	TIC
<i>cis</i> -2-pentene 627-20-3	TIC
<i>trans</i> -2-pentene 646-04-8	TIC
propane 74-98-6	TIC
<i>n</i> -propylbenzene 103-65-1	TIC
propylene 115-07-1	<5
styrene 100-42-5	<5
	(cont)



PHOTOCHEMICAL ASSESSMENT AND MONITORING SYSTEM (PAMS)

<u>PHOTOCHEMICAL ASSESSMENT AND MONITORING SYSTEM (PAMS)</u> CAS#	Detection Limit (ppbv)
toluene 108-88-3 1,2,3-trimethylbenzene 526-73-8 1,2,4-trimethylbenzene 95-63-6 1,3,5-trimethylbenzene 108-67-8 2,2,4-trimethylpentane 565-75-3 2,3,4-trimethylpentane 565-75-3 <i>n</i> -undecane 1120-21-4 <i>o</i> -xylene 95-47-6 <i>m&p</i> -xylene 108-38-3	<5 TIC <5 <5 <5 TIC TIC <5 <10
Single Compound List List + TIC's TIC's Only	Call for pricing



**ETHYLENE OXIDE &
NAPHTHALENE**

<p align="center"><u>ETHYLENE OXIDE TO-15</u></p> <p align="center"><u>VOLATILE ORGANIC COMPOUNDS</u></p> <p align="right">CAS#</p>	<p align="center">Detection Limit (ppbv)</p>
<p align="right">Ethylene oxide 75-21-8</p> <p align="center">Single Compound</p>	<p align="center"><5</p> <p align="center">Call for pricing</p>
<p align="center">TO-15</p> <p align="center"><u>NAPHTHALENE</u></p> <p align="right">CAS#</p>	<p align="center">Detection Limit (ppbv)</p>
<p align="right">Naphthalene 91-20-3 For Gas Vapor Intrusion</p> <p align="center">Single Compound Or with list</p>	<p align="center"><5 <1 ug/M3</p> <p align="center">Call for pricing</p>



PRODUCT TESTING

<p align="center"><u>METHOD TO-15</u></p> <p align="center"><u>VOLATILE ORGANIC COMPOUNDS</u></p> <p align="right">CAS#</p>	<p align="center">Detection Limit (ppbv)</p>
<p>Pending on prep time, analysis and compounds</p>	<p align="center">Call for pricing</p>



NOTES

