HAKS

ADDENDUM TO:

INTERIM REMEDIAL MEASURE (IRM)

WORK PLAN

Offsite Soil Vapor Intrusion Mitigation

Prepared For:

Residential Property Adjacent to Tibetan Community of New York and New Jersey

32-12 58th Street

Block 1159; Lot 15

Queens, New York

Prepared By:

HAKS Engineers, Architects, and Land Surveyors DPC

40 Wall Street, 9th Floor

New York, NY 10005

Prepared On:

7 August, 2017

TABLE OF CONTENTS

Figures

Appendices

1.0 INTRODUCTION

This addendum to the New York State Department of Environmental Conservation (NYSDEC) approved IRM work plan addresses off-site soil vapor intrusion mitigation measures for the off-site adjacent property located south of the site at 32-12 58th Street in Woodside, Queens. In order to investigate whether chlorinated solvents in the soil are impacting the sub-slab in this property, an impact assessment was performed beneath the adjacent house on April 11, 2017. The investigation was performed as per NYSDEC requirements, which were communicated verbally via a site walk-through on January 25, 2017. The results of the investigation were presented to NYSDEC and the New York City Department of Health and this addendum was prepared in response to recommendations from both agencies.

2.0 OFF-SITE VAPOR INTRUSION IMPACT ASSESSMENT

When permission to this facility was granted, an interior inspection of the basement floor was performed prior to the vapor intrusion investigation in order to determine the appropriate location of one (1) sub-slab vapor sampling point. Sub-slab soil vapor sampling involved the installation of one implant that is a very small hole, about 3/8 inch outer diameter, to be installed to a depth of 2 inches beneath the existing building's slab. After sampling, the floor surface was restored to its original condition with cement. One (1) indoor air sample and one (1) ambient (outdoor) air sample were also collected at the residential property.

All air samples were collected utilizing 6 liter pre-cleaned (as certified by the laboratory), passivated and evacuated whole air Summa® Canister. Each air sampling canister was connected to a flow control valve set to collect the 6-L sample over a period of 8 hours at a rate of less than 0.2 liter per minute. All Summa Canisters were labeled and sent to a laboratory certified to perform air analysis in New York State. The air samples were analyzed for common VOCs via EPA Method TO-15.

The vapor intrusion investigation was conducted in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006 guidance. Additionally, in accordance with New York State Department of Health (NYSDOH) requirements, an NYSDOH Indoor Air Quality Questionnaire and Building Inventory was completed for this site and is provided in **Appendix C**.

3.0 IMPACT ASSESSMENT FINDINGS

A summary of the laboratory results for sub-slab vapor samples and indoor air samples listed in the Decision Matrices 1 and 2 of the NYSDOH Guidance for Evaluating Soil Vapor in the State of New York are included in the table below. Laboratory analytical data is provided in **Appendix A** and the validated data is provided in **Appendix B**. Soil vapor analytical results and indoor air analytical results were compared to NYSDOH indoor air guidance values and soil vapor matrices published in the NYSDOH Guidance for Evaluating Soil Vapor in the State of New York. Results were also compared to NYSDOH Indoor Air Guidance values for tetrachloroethene and trichloroethene and no exceedances were found. The following table summarizes the analytical results and recommended actions in accordance with the NYSDOH decision matrices.

SAMPLES	**AIR MATRIX 1 COMPOUND LIST RESULTS AND RECOMMENDATIONS**			**AIR MATRIX 2 COMPOUND LIST RESULTS AND RECOMMENDATIONS**			
	Carbon Tetra-chloride	Trichloro-ethene	Vinyl Chloride	1,1,1-Trichloro-ethane	1,1-Dichloro-ethene	cis-1,2-Dichloroethene	Tetrachloro-ethene
SVP-1 (NYSDOH Action)	**Action 2 (Take reasonable and practical actions to identify sources and reduce exposures)**	Action 13 (Mitigate)	Action 1 (NFA)	Action 1 (NFA)	Action 1 (NFA)	Action 1 (NFA)	Action 1 (NFA)
Sub slab Vapor (SS-1) (µg/m3)	1.21	318	ND	ND	ND	ND	31.8
Indoor Air (IA-1) (µg/m3)	0.69	ND	ND	ND	ND	ND	2.39

NOTES
ND - Not detected
NFA- No further action

Based on a comparison of sub-slab vapor results to the NYSDOH Air Guidance Matrices, mitigation is recommended due to concentrations of Trichloroethene (TCE) detected in the sub-slab sample SS-1. Additionally, taking reasonable and practical actions to identify sources and reduce exposure is recommended based on concentrations of Carbon Tetrachloride in SS-1 and IA-1 collected in the residential building.

These findings were presented to NYSDEC. Based on discussions with NYSDEC and NYCDOH, the existing SSDS design of the Site was modified to include an additional soil vapor extraction (SVE) component. This SVE system will be installed at the boundary of the Site where it borders the adjacent residential property and is designed to protect building occupants from the potential migration of chlorinated VOC vapors from the subsurface.

The site is located in a commercial area and is surrounded by an auto parts shop, a tire repair shop, and an auto repair shop to the southwest. Due to the makeup of the neighborhood and the presence of other potential contributors, further delineation south of the site for soil vapor intrusion would not be conclusive as to the source. Furthermore, the proposed modifications to the DEC-approved SSDS design at this site would mitigate potential for vapor intrusion south of the site. Therefore, additional off-site delineation is not warranted.

4.0 SVE PIT DESIGN, CONSTRUCTION AND OPERATION PROCEDURES

The following sections detail the soil vapor extraction (SVE) pit design, installation and operation protocols prior and after system start-up.

Figure 1 provides the SSDS and and SVE system design and details. **Appendices D and E** provide specification cut sheets for the RadonAway ventilation fan, the Rotron blower and related components.

4.1 Site Preparation

Preliminary work that will be performed by the Contractor prior to performance of IRM Work Plan Addendum activities will include the following:

Site Mobilization: Mobilization will be conducted as necessary for each phase of work at the Site. Mobilization includes field personnel orientation, equipment mobilization, marking and utility mark-outs. Each field team member will attend an orientation meeting to become familiar with the general operation of the Site, health and safety requirements, and field procedures.

Utility Marker Layouts, Easement Layouts: The presence of utilities and easements on the Site or the adjacent residential structure will be fully investigated prior to the performance of invasive work such as drilling under this plan by using, at a minimum, the One-Call System (811). All invasive activities will be performed in compliance with applicable laws and regulations to assure safety. Utility companies and other responsible authorities will be contacted to locate and mark the locations, and prior to the start of drilling or other operations will retain a copy of the Mark out Ticket. Proper safety and protective measures pertaining to utilities and easements, and compliance with all laws and regulations will be employed during invasive and other work contemplated under this Plan. The integrity and safety of on-Site and off-Site structures will be maintained during drilling or other remedial activity performed under the IRM Work Plan Addendum.

Equipment and Material Staging: Equipment and materials will be stored and staged on-site in a manner that complies with applicable laws and regulations. The locations of proposed equipment and material staging areas, drum storage area and the project manager will define other pertinent remedial management features during the Site preparation activities.

Decontamination: if needed, a temporary decontamination pad will be set up at the Site and will be maintained throughout ongoing IRM Work Plan Addendum field activities. The decontamination pad will be used to remove waste from reusable equipment, trucks, etc.

Demobilization: Demobilization will include:

- As necessary, restoration of temporary access areas and areas that may have been disturbed to accommodate support areas (e.g., staging areas, decontamination areas, storage areas, temporary water management areas, and access area);
- Removal of sediment from erosion control measures and disposal of materials in accordance with applicable laws and regulations;
- Equipment decontamination, and;
- Equipment will be decontaminated and demobilized at the completion of field activities. Investigation equipment and large equipment (e.g., soil excavator) will be washed at a secluded station as necessary. In addition, all investigation derived waste will be appropriately disposed.

4.2 Extraction Well Design Details

In order to implement immediate remedial measures to reduce potential exposure to chlorinated solvent vapors in the adjacent residential property, two (2) SVE pits will be installed at the site boundary directly adjacent to the residential property.

Each extraction well will be installed using a geoprobe. Construction will be performed during normal business hours and the well will be constructed using a (2) two inch diameter schedule 40 PVC pipe. The well screen will be 0.030 inch slotted, with a screened depth from 10'-15' for both pits. Extraction well details are as follows:

1. The annular space surrounding the extraction wells will be filled with clean sand to 1' above the top of the screen;

2. Bentonite chips will be used to seal each well location to ensure no ambient air interferences.
3. Each well will be capped with a butterfly or ball valve or barbed connection for VOC testing via a photoionization detector.
4. A protective flush mounted cover will be provided for each well at the surface.

The SVE pits will be manifolded together in the sub-slab of the parking lot, run to the southeast side of the building up to the roof, and coupled with a Gast R6130Q-50 Regenerative Blower located on the roof of the building. As with the sub-slab depressurization system (SSDS) components, the locations of the piping outlets to the roof will be coordinated with the Architect to avoid visual conflicts and to minimize bends, or other flow reducing impedances. All roof venting locations will be 10 feet away from any exhaust or air intake vents.

Upon completion of the SVE pit installation, all excavated soils will be properly characterized for off-site disposal per applicable federal, state, and local regulations. No disturbed soils will be re-used for backfill. Any backfill requirements will be certified clean fill or gravel.

4.3 Post-Installation Diagnostics

Post installation, the Environmental Engineer will mobilize to the site to perform post installation SVE diagnostics. The engineer will access the SVE riser pipes, roof vents and existing concrete slab.

4.4 System Startup

The system will then be started with 100% applied suction from the fan in order to maximize the air flow drawn from the indoor space of the adjacent residential property. The pressure gauges will also be configured to read between 0 and 2" inches of water column of vacuum pressure to verify vacuum operation of the system. System parameters including airflow and organic vapor concentrations at the effluents will be monitored following start-up. Vapor concentrations will be measured with the PID at the effluent. System monitoring will be conducted during the first two days of operation as follows: Hourly for 5 consecutive hours on the first day and once on the second day. Sub-slab sampling and indoor air sampling for VOCs via EPA Method TO-15 will be conducted at the offsite property 7 days following the initial startup period.

Field logs will be completed during the course of system monitoring and will be submitted to the NYSDEC Project Manager before noon the next business day. A field log will be completed on a daily basis that will describe all field activities including:

- Project number, name, manager, and address;
- Description of field activities;
- Date and time of performed tasks;
- Monitoring equipment;
- Apparent weather conditions (e.g. precipitation, outdoor temperature and wind direction) of the work zone; and
- Record of monitoring data on spreadsheets with all requested parameters and point of measurements.
- Any public complaints will be sent to NYSDEC immediately.

5.0 REPORT OF FINDINGS & PROJECT SCHEDULE

5.1 Report of Findings

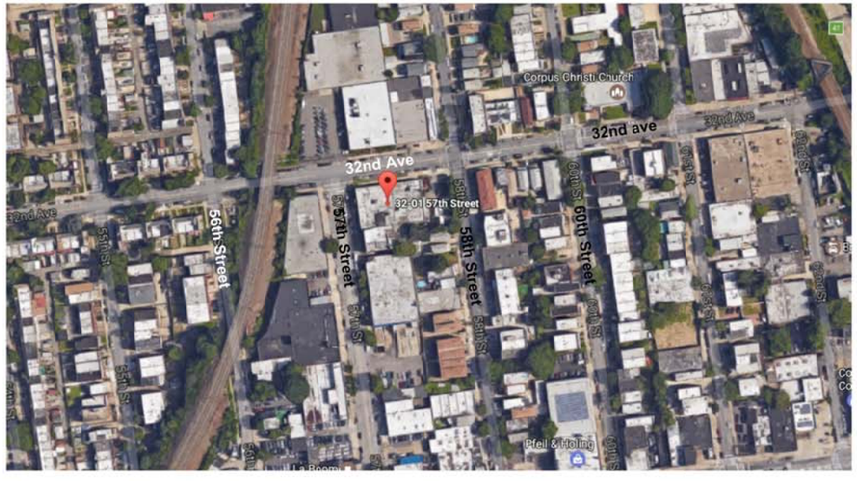
The final as built design of the SSDS and SVE system including all modifications will be documented in a Construction Completion Report (CCR). The CCR will be prepared 45 days after system start up and will include post-startup system operational data (flow rate and PID reading). The CCR also include the as-built drawings of the system, plus cut sheets for system components. An OM&M Plan will also be included as an appendix in the CCR.

5.2 Project Schedule

The proposed IRM Addendum activities associated with the construction of the SSDS and SVE system will be completed following NYSDEC approval of system design. Once NYSDEC approval of the system design has been granted, it is anticipated that the SSDS installation will be conducted concurrent with the ongoing building renovation. The building renovation is ongoing.

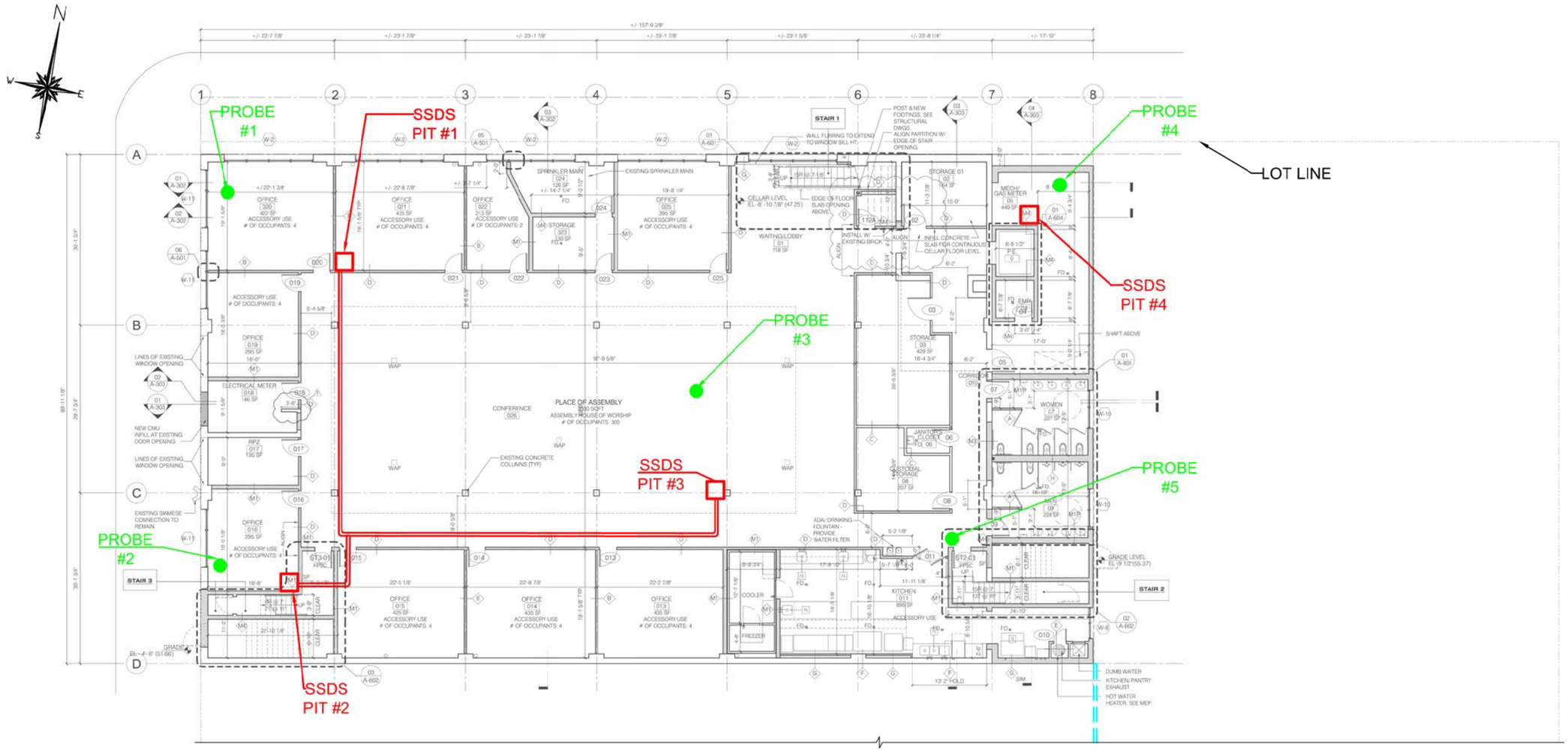
FIGURE 1 – SSDS AND SVE DESIGN AND DETAILS

DESIGN DRAWINGS
SUB SLAB DEPRESSURIZATION SYSTEM & SOIL VAPOR EXTRACTION SYSTEM
TIBETAN COMMUNITY OF NEW YORK AND NEW JERSEY
32-01 57TH STREET , QUEENS, NY
AUGUST 2017



1. COVER SHEET WITH SITE LOCATION MAP
2. PROPOSED CELLAR PLAN
3. PROPOSED ROOF PLAN
4. DETAILS
5. NOTES

HAKS PROJECT NO.			
TIBETAN COMMUNITY OF NEW YORK and NEW JERSEY 32-01 57th St. Queens, NY			
25 YEARS HAKS 1991-2016 Client Focused - Quality Services 40 Wall St., 11th Floor, New York, NY 10005	PREPARED BY: HAKS IN CHARGE TZK DRAFTER BR DESIGNER TZK CHECKER DA	BASE DRAWING FROM:	Site Location Map
			DWG. NO. 1 / SCALE N.T.S. / DATE AUGUST 2017 / SHEET 1 OF 5



LEGEND

- SSDS PIT
  SPECS: 24" X 24" X 24"
- SSDS PIPING
  4" Cast Iron Piping (above grade) or
  4" PVC (below grade).
  Vertical Riser Pipes run throughout the building to the roof. Locations are estimates and will be finalized by Architect of Record
- LOCATION OF SMOKE/PRESSURE PROBE
- SVE PIT
- SVE PIPING
  4" Cast Iron Piping (above grade) or
  4" PVC (below grade).
  Vertical Riser Pipes run up the side of the building to the roof. Locations are estimates and will be finalized by Architect of Record

1 / - PROPOSED CELLAR PLAN

N.T.S.

HAKS PROJECT NO.

TIBETAN COMMUNITY OF NEW YORK and NEW JERSEY
32–01 57th St. Queens, NY

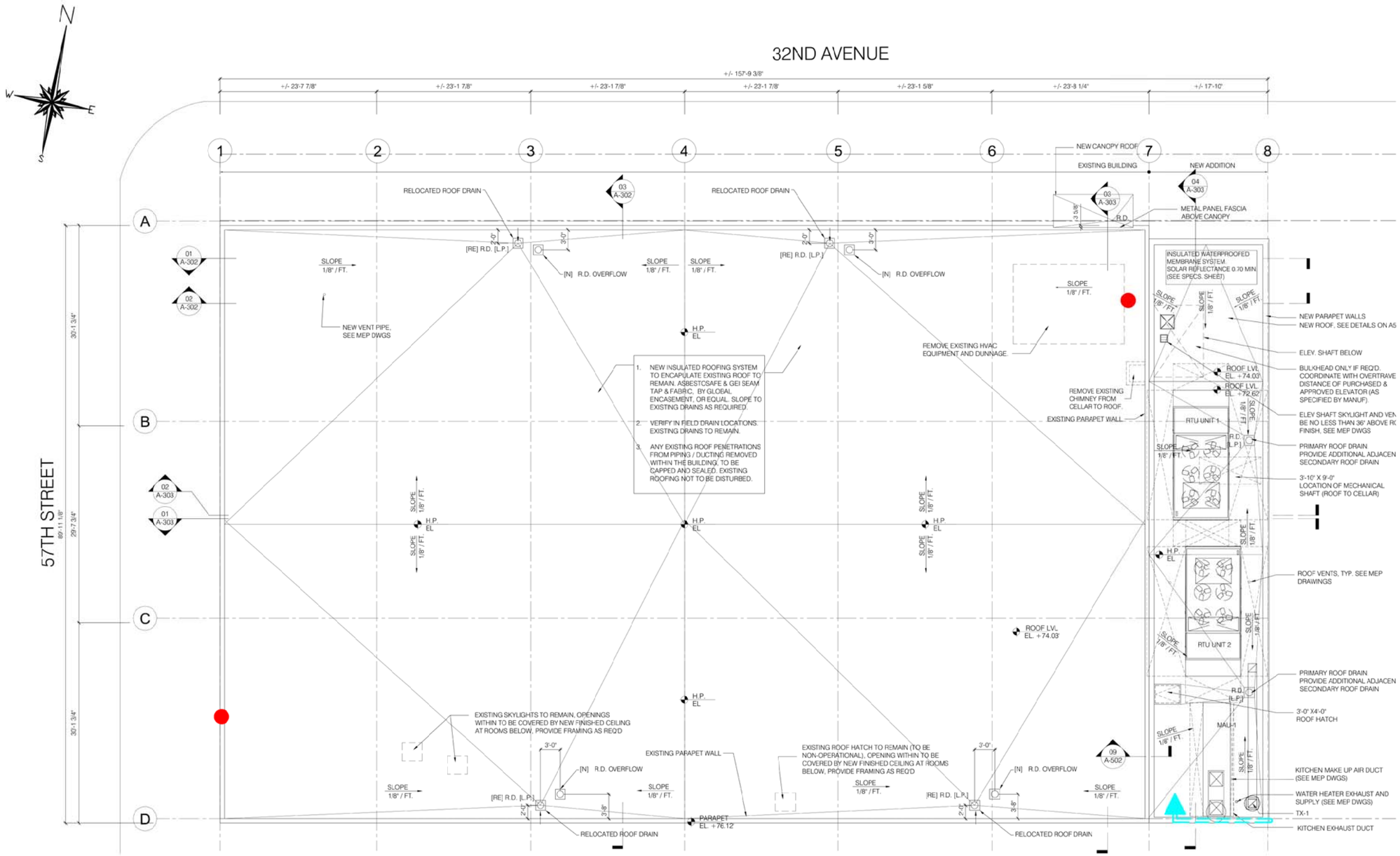
PROPOSED CELLAR PLAN

DWG. NO.	SCALE	DATE	SHEET
1	N.T.S.	AUGUST 2017	2 OF 5

25 YEARS HAKS
1991-2016 Client Focused - Quality Services
40 Wall St., 11th Floor, New York, NY 10005

PREPARED BY: HAKS
IN CHARGE TZK DRAFTER BR
DESIGNER TZK CHECKER DA

BASE DRAWING FROM:
NANDINEE PHOOKAN ARCHITECTS
45 Main St, Brooklyn, NY 11201



1 PROPOSED ROOF PLAN
N.T.S.

LEGEND

- Roof Penetration to SSDS fan
  - Locations are estimates ; to be finalized by Architect of Record
- SVE fan
  - Locations are estimates ; to be finalized by Architect of Record
- SVE PIPING
  4" Cast Iron Piping (above grade)

Locations are estimates and will be finalized by Architect of Record

HAKS PROJECT NO.

TIBETAN COMMUNITY OF NEW YORK and NEW JERSEY
32-01 57th St. Queens, NY

PROPOSED ROOF PLAN

DWG. NO.	SCALE	DATE	SHEET
1	N.T.S.	AUGUST 2017	3 OF 5

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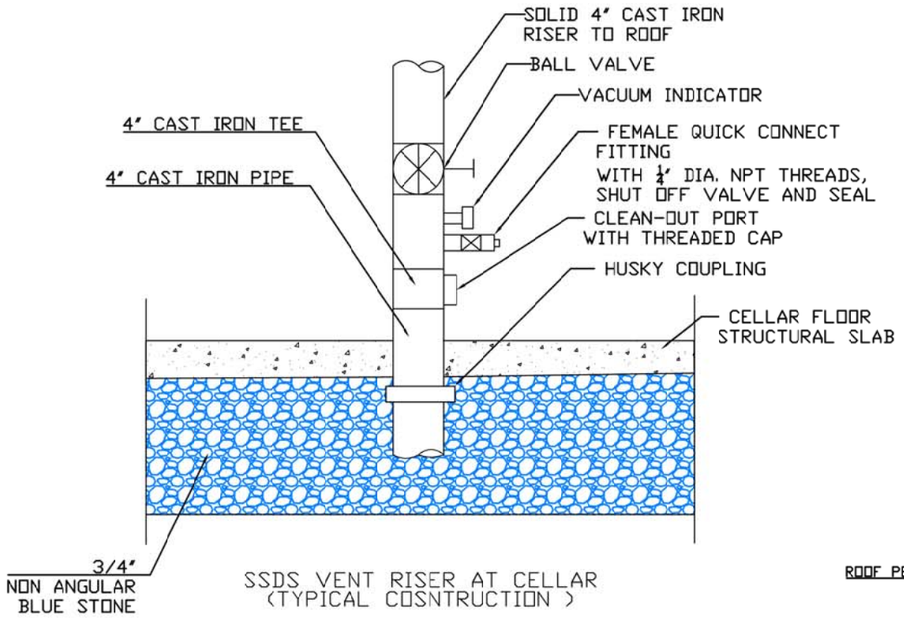
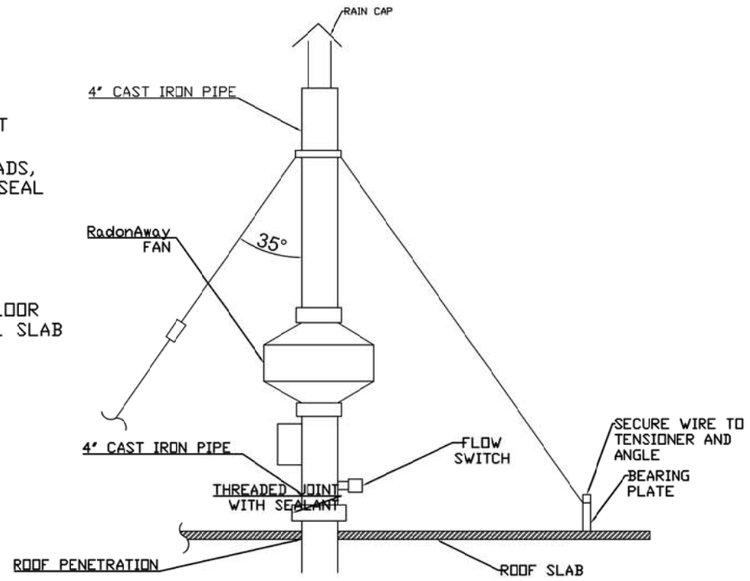
NANDINEE PHOOKAN ARCHITECTS
45 Main St, Brooklyn, NY 11201

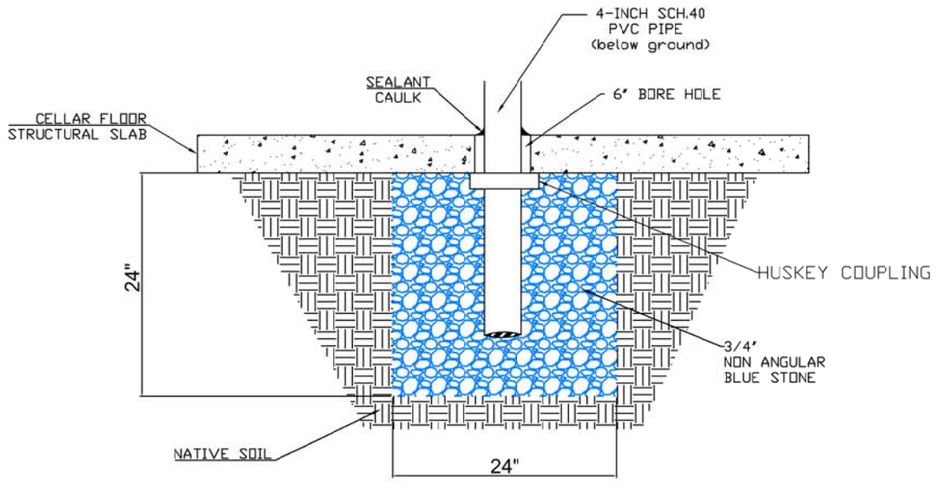
SSDS COMPONENTS



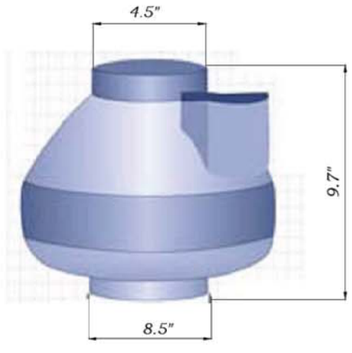
SSDS VENT RISER AT CELLAR
(TYPICAL COSNTRUCTION)



SSDS VENT RISER AT ROOF
(TYPICAL CONSTRUCTION)

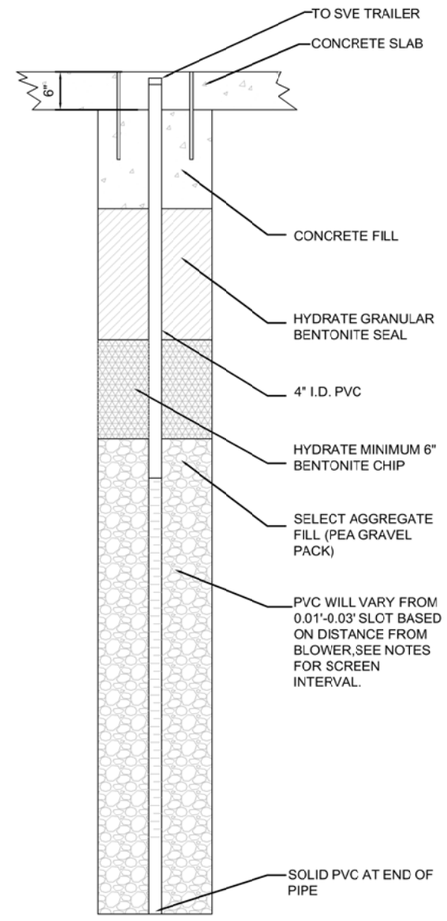


SSDS PITS 1 -4
(SEE ABOVE DETAIL)



RadonAway Fan (x2)

SVE COMPONENT



6" DIA. BOREHOLE

SOIL VAPOR EXTRACTION WELL (TYPICAL)
SCALE: 1"=1'-0

SVE WELL ID	SCREENED INTERVAL	WELL SCREEN DIA.
SVE - 1	10' - 15'	0.03'
SVE - 2	10' -15'	0.03'

HAKS PROJECT NO.

TIBETAN COMMUNITY OF NEW YORK and NEW JERSEY
32-01 57th St. Queens, NY

DETAILS

DWG. NO.	SCALE	DATE	SHEET
1	N.T.S	AUGUST 2017	4 OF 5

25 YEARS HAKS
1991-2016 Client Focused - Quality Services
40 Wall St., 11th Floor, New York, NY 10005

PREPARED BY: HAKS
IN CHARGE TZK DRAFTER BR
DESIGNER TZK CHECKER DA

BASE DRAWING FROM:

DRAWING NOTES

General Notes:

1. The work depicted on these drawings shall be performed by an experienced contractor who has working knowledge of applicable code standards and industry accepted standard good practice. Not every condition or element is or can be explicitly shown on these drawings.
2. The contractor shall confer with and seek the approval of the engineer and/or Architect of Record for the final locations of all venting system components.
3. The contractor will provide an as-built drawing of the installed venting system upon completion.
4. All inspections required by the building code shall be provided by an independent inspection company or the local building department where applicable.
5. The venting system shall be in compliance with New York City Mechanical Code, Chapter 5 Section MC-512 Subslab exhaust systems.
6. Vertical piping runs shall be marked "Soil Vapor Venting System - Do Not Tamper with or Disturb". The labels shall be easily read within three (3) feet.
7. All piping shall be supported according to all applicable codes.
8. Provide 120V AC 20 AMP electrical service with a dedicated circuit breaker to within five (5) feet of the location of the venting fan for roof installation options.
9. Smoke testing - Smoke testing will be performed at the five probe locations as define on the figure. A small diameter (¼") pilot hole will be drilled through the existing concrete floor slab into the gravel base layer. The testing will be conducted by lighting a smoke stick at the probe location to illustrate the negative influence of the SSDS system. photographs of the smoke entering the probe location will be collected during the testing.
10. Pressure Testing - A small diameter (¼") pilot hole will be drilled through the existing concrete floor slab into the gravel base layer. A manometer will be used to analyze the pressure beneath the slab at the pilot hole location. A negative pressure reading will indicate the influence of the SSDS system at each probe location and confirm communication from the SSDS pit to the probe location.

Venting Fan Notes:

1. SSDS Ventilation Fan to be specified as RadonAway RP 145, Part Number 23030-1, or engineer approved equivalent. One (1) ventilation fan is to be installed for SSDS pits #1-3 and one (1) ventilation fan is to be installed for SSDS pit #4 as identified in the contract drawings. SVE Ventilation Fan to be specified as RadonAway RP 260, Part Number 28462, or engineer approved equivalent. One (1) ventilation fan is to be installed for SVE pits #1 and #2.
2. Electrical connection to be provided per Radon Away Specifications.
3. Selected contractor must conform to all installation instructions as provided per the included RadonAway installation instructions.
4. Fan to be mounted to roof or roof ledger using RadonAway Fan Mounting Bracket, SKU 25007.

Contractor Notes

1. The Contractor shall furnish all labor, material, equipment, supplies and incidentals required for the installation of the RadonAway fan (or engineer approved equivalent) system as shown on the Drawings. The work shall include, but not limited to the following: installation in basement, associated piping and mechanical and electrical appurtenances in their entirety, fan installation, grouting and restoration to existing conditions and in accordance with all applicable federal, state and local requirements. Final restoration of all disturbances to existing conditions.
2. The Contractor shall be responsible to comply with all local, state, and federal rules and regulations concerning emissions and disposal of solids and other materials generated by the work. Containment, handling and disposal of materials, and means and methods employed by the Contractor are the responsibility of the Contractor.
3. Compliance assurance shall be the responsibility of the Contractor. Communication between Contractor and governing authorities, regulatory agencies, and similar entities, shall be coordinated through the Owner.
4. All permits, bonds, easements, or licenses required to perform the Work shall be obtained by the Contractor.
5. The Contractor shall coordinate with the Owner to ensure all permits are in place prior to the Contractor starting work.
6. Determination of license and permit requirements shall be the responsibility of the Contractor.
7. Copies of all executed permits and licenses shall be transmitted to the Owner upon receipt.

Pipe Notes:

1. Hubless Cast Iron pipe and fittings shall be manufactured from gray cast iron and shall conform to ASTM A 888 and CISPI Standard 301. The Charlotte Pipe and Foundry Company hubless Cast Iron Soil Pipe shall be specified, or approved equivalent. All piping to be 4" inches diameter unless otherwise noted.
2. All pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute ® and listed by NSF® International.
3. Hubless Couplings shall conform to CISPI Standard 310 and be certified by NSF® International.
4. Heavy Duty couplings shall conform to ASTM C 1540 and shall be used if indicated. Gaskets shall conform to ASTM C 564.
5. The cast iron riser shall be installed vertically to the exterior of the building to the roof and shall terminate a minimum of one (1) foot above the roof line and at least ten (10) feet from HVAC RTU air intakes, doors, windows, or other openings into the occupied space of the building or adjacent buildings.

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PREPARED BY: HAKS
IN CHARGE TZK DRAFTER BR
DESIGNER TZK CHECKER DA

BASE DRAWING FROM:

NOTES

DWG. NO.	SCALE	DATE	SHEET
1	N.T.S	AUGUST 2017	5 OF 5

APPENDIX A – LAB RESULTS FOR OFF-SITE SAMPLING

PHOENIX
Environmental Laboratories, Inc.

Wednesday, April 19, 2017

Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Project ID: 32-12 58TH STREET
Sample ID#s: BY03105 - BY03107

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2017

FOR: Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	MR	04/11/17	16:35
Location Code:	AIRTEK	Received by:	SW	04/12/17	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	16-0981				
Canister Id:	12864				

Laboratory Data

SDG ID: GBY03105
Phoenix ID: BY03105

Project ID: 32-12 58TH STREET
Client ID: SS-1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/13/17	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	04/13/17	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/13/17	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	04/13/17	KCA	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	04/13/17	KCA	1	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	04/13/17	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	04/13/17	KCA	1	
1,2,4-Trimethylbenzene	0.720	*0.204*	3.54	*1.00*	04/13/17	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	04/13/17	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	KCA	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	04/13/17	KCA	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	04/13/17	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	04/13/17	KCA	1	
1,3,5-Trimethylbenzene	0.237	*0.204*	1.16	*1.00*	04/13/17	KCA	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	04/13/17	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	KCA	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	04/13/17	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	04/13/17	KCA	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	04/13/17	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	04/13/17	KCA	1	1
4-Methyl-2-pentanone(MIBK)	2.38	*0.244*	9.7	*1.00*	04/13/17	KCA	1	
Acetone	293	*12.6*	696	*29.9*	04/17/17	KCA	30	
Acrylonitrile	ND	*0.461*	ND	*1.00*	04/13/17	KCA	1	
Benzene	2.23	*0.313*	7.12	*1.00*	04/13/17	KCA	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	04/13/17	KCA	1	

Project ID: 32-12 58TH STREET
Client ID: SS-1

Phoenix I.D.: BY03105

Parameter	ppbv Result		ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	ND	*1.00*	04/13/17	KCA	1	
Bromoform	ND		*0.097*	ND	*1.00*	04/13/17	KCA	1	
Bromomethane	ND		*0.258*	ND	*1.00*	04/13/17	KCA	1	
Carbon Disulfide	0.699		*0.321*	2.18	*1.00*	04/13/17	KCA	1	
Carbon Tetrachloride	0.192		*0.040*	1.21	*0.25*	04/13/17	KCA	1	
Chlorobenzene	ND		*0.217*	ND	*1.00*	04/13/17	KCA	1	
Chloroethane	ND		*0.379*	ND	*1.00*	04/13/17	KCA	1	
Chloroform	1.50		*0.205*	7.32	*1.00*	04/13/17	KCA	1	
Chloromethane	ND		*0.485*	ND	*1.00*	04/13/17	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	04/13/17	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	04/13/17	KCA	1	
Cyclohexane	ND		*0.291*	ND	*1.00*	04/13/17	KCA	1	
Dibromochloromethane	ND		*0.118*	ND	*1.00*	04/13/17	KCA	1	
Dichlorodifluoromethane	ND		*0.202*	ND	*1.00*	04/13/17	KCA	1	
Ethanol	41.8	E	*0.531*	78.7	*1.00*	04/13/17	KCA	1	1
Ethyl acetate	ND		*0.278*	ND	*1.00*	04/13/17	KCA	1	1
Ethylbenzene	5.21		*0.230*	22.6	*1.00*	04/13/17	KCA	1	
Heptane	ND		*0.244*	ND	*1.00*	04/13/17	KCA	1	
Hexachlorobutadiene	ND		*0.094*	ND	*1.00*	04/13/17	KCA	1	
Hexane	ND		*0.284*	ND	*1.00*	04/13/17	KCA	1	
Isopropylalcohol	ND		*0.407*	ND	*1.00*	04/13/17	KCA	1	
Isopropylbenzene	ND		*0.204*	ND	*1.00*	04/13/17	KCA	1	
m,p-Xylene	23.3		*0.230*	101	*1.00*	04/13/17	KCA	1	
Methyl Ethyl Ketone	54.5		*10.2*	161	*30.1*	04/17/17	KCA	30	
Methyl tert-butyl ether(MTBE)	0.824		*0.278*	2.97	*1.00*	04/13/17	KCA	1	
Methylene Chloride	ND		*0.288*	ND	*1.00*	04/13/17	KCA	1	
n-Butylbenzene	ND		*0.182*	ND	*1.00*	04/13/17	KCA	1	1
o-Xylene	4.11		*0.230*	17.8	*1.00*	04/13/17	KCA	1	
Propylene	46.4		*17.4*	79.8	*29.9*	04/17/17	KCA	30	1
sec-Butylbenzene	ND		*0.182*	ND	*1.00*	04/13/17	KCA	1	1
Styrene	ND		*0.235*	ND	*1.00*	04/13/17	KCA	1	
Tetrachloroethene	4.59		*0.037*	31.1	*0.25*	04/13/17	KCA	1	
Tetrahydrofuran	29.5		*10.2*	86.9	*30.1*	04/17/17	KCA	30	1
Toluene	64.5		*7.97*	243	*30.0*	04/17/17	KCA	30	
Trans-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	04/13/17	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	04/13/17	KCA	1	
Trichloroethene	59.2		*1.40*	318	*7.52*	04/17/17	KCA	30	
Trichlorofluoromethane	0.250		*0.178*	1.40	*1.00*	04/13/17	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	ND	*1.00*	04/13/17	KCA	1	
Vinyl Chloride	ND		*0.098*	ND	*0.25*	04/13/17	KCA	1	
QA/QC Surrogates									
% Bromofluorobenzene	113		*%*	113	*%*	04/13/17	KCA	1	

Project ID: 32-12 58TH STREET
Client ID: SS-1

Phoenix I.D.: BY03105

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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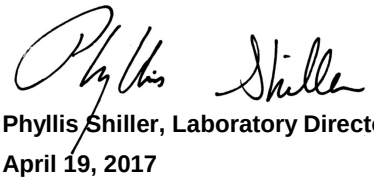

Phyllis Shiller, Laboratory Director

April 19, 2017

Reviewed and Released by: Ethan Lee, Project Manager

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2017

FOR: Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	MR	04/11/17	16:11
Location Code:	AIRTEK	Received by:	SW	04/12/17	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	16-0981				
Canister Id:	21323				

Laboratory Data

SDG ID: GBY03105
Phoenix ID: BY03106

Project ID: 32-12 58TH STREET
Client ID: IA-1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/13/17	DD	1	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	04/13/17	DD	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/13/17	DD	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	04/13/17	DD	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	04/13/17	DD	1	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	04/13/17	DD	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	04/13/17	DD	1	
1,2,4-Trimethylbenzene	0.329	*0.204*	1.62	*1.00*	04/13/17	DD	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	04/13/17	DD	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	DD	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	04/13/17	DD	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	04/13/17	DD	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	04/13/17	DD	1	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	04/13/17	DD	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	04/13/17	DD	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	DD	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	DD	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	04/13/17	DD	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	04/13/17	DD	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	04/13/17	DD	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	04/13/17	DD	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	04/13/17	DD	1	
Acetone	11.7	*0.421*	27.8	*1.00*	04/13/17	DD	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	04/13/17	DD	1	
Benzene	0.329	*0.313*	1.05	*1.00*	04/13/17	DD	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	04/13/17	DD	1	

Project ID: 32-12 58TH STREET
Client ID: IA-1

Phoenix I.D.: BY03106

Parameter	ppbv Result		ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	ND	*1.00*	04/13/17	DD	1	
Bromoform	ND		*0.097*	ND	*1.00*	04/13/17	DD	1	
Bromomethane	ND		*0.258*	ND	*1.00*	04/13/17	DD	1	
Carbon Disulfide	ND		*0.321*	ND	*1.00*	04/13/17	DD	1	
Carbon Tetrachloride	0.109		*0.040*	0.69	*0.25*	04/13/17	DD	1	
Chlorobenzene	ND		*0.217*	ND	*1.00*	04/13/17	DD	1	
Chloroethane	ND		*0.379*	ND	*1.00*	04/13/17	DD	1	
Chloroform	ND		*0.205*	ND	*1.00*	04/13/17	DD	1	
Chloromethane	ND		*0.485*	ND	*1.00*	04/13/17	DD	1	
Cis-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	04/13/17	DD	1	
cis-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	04/13/17	DD	1	
Cyclohexane	ND		*0.291*	ND	*1.00*	04/13/17	DD	1	
Dibromochloromethane	ND		*0.118*	ND	*1.00*	04/13/17	DD	1	
Dichlorodifluoromethane	0.554		*0.202*	2.74	*1.00*	04/13/17	DD	1	
Ethanol	179	E	*0.531*	337	*1.00*	04/13/17	DD	1	1
Ethyl acetate	ND		*0.278*	ND	*1.00*	04/13/17	DD	1	1
Ethylbenzene	ND		*0.230*	ND	*1.00*	04/13/17	DD	1	
Heptane	0.320		*0.244*	1.31	*1.00*	04/13/17	DD	1	
Hexachlorobutadiene	ND		*0.094*	ND	*1.00*	04/13/17	DD	1	
Hexane	ND		*0.284*	ND	*1.00*	04/13/17	DD	1	
Isopropylalcohol	2.17		*0.407*	5.33	*1.00*	04/13/17	DD	1	
Isopropylbenzene	ND		*0.204*	ND	*1.00*	04/13/17	DD	1	
m,p-Xylene	0.747		*0.230*	3.24	*1.00*	04/13/17	DD	1	
Methyl Ethyl Ketone	0.659		*0.339*	1.94	*1.00*	04/13/17	DD	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	ND	*1.00*	04/13/17	DD	1	
Methylene Chloride	2.16	S	*0.288*	7.50	*1.00*	04/13/17	DD	1	
n-Butylbenzene	ND		*0.182*	ND	*1.00*	04/13/17	DD	1	1
o-Xylene	0.291		*0.230*	1.26	*1.00*	04/13/17	DD	1	
Propylene	1.62		*0.581*	2.79	*1.00*	04/13/17	DD	1	1
sec-Butylbenzene	ND		*0.182*	ND	*1.00*	04/13/17	DD	1	1
Styrene	ND		*0.235*	ND	*1.00*	04/13/17	DD	1	
Tetrachloroethene	0.352		*0.037*	2.39	*0.25*	04/13/17	DD	1	
Tetrahydrofuran	ND		*0.339*	ND	*1.00*	04/13/17	DD	1	1
Toluene	1.77		*0.266*	6.67	*1.00*	04/13/17	DD	1	
Trans-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	04/13/17	DD	1	
trans-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	04/13/17	DD	1	
Trichloroethene	ND		*0.047*	ND	*0.25*	04/13/17	DD	1	
Trichlorofluoromethane	0.266		*0.178*	1.49	*1.00*	04/13/17	DD	1	
Trichlorotrifluoroethane	ND		*0.131*	ND	*1.00*	04/13/17	DD	1	
Vinyl Chloride	ND		*0.098*	ND	*0.25*	04/13/17	DD	1	
QA/QC Surrogates									
% Bromofluorobenzene	118		*%*	118	*%*	04/13/17	DD	1	

Project ID: 32-12 58TH STREET
Client ID: IA-1

Phoenix I.D.: BY03106

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

S - Laboratory solvent, contamination is possible.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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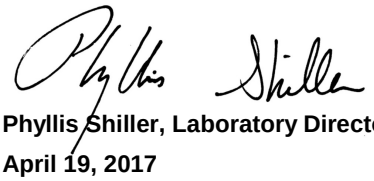

Phyllis Shiller, Laboratory Director
April 19, 2017
Reviewed and Released by: Ethan Lee, Project Manager

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 19, 2017

FOR: Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	MR	04/11/17	16:21
Location Code:	AIRTEK	Received by:	SW	04/12/17	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	16-0981				
Canister Id:	21333				

Laboratory Data

SDG ID: GBY03105
Phoenix ID: BY03107

Project ID: 32-12 58TH STREET
Client ID: OA-1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/13/17	DD	1	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	04/13/17	DD	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/13/17	DD	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	04/13/17	DD	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	04/13/17	DD	1	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	04/13/17	DD	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	04/13/17	DD	1	
1,2,4-Trimethylbenzene	ND	*0.204*	ND	*1.00*	04/13/17	DD	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	04/13/17	DD	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	DD	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	04/13/17	DD	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	04/13/17	DD	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	04/13/17	DD	1	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	04/13/17	DD	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	04/13/17	DD	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	DD	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/13/17	DD	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	04/13/17	DD	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	04/13/17	DD	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	04/13/17	DD	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	04/13/17	DD	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	04/13/17	DD	1	
Acetone	7.55	*0.421*	17.9	*1.00*	04/13/17	DD	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	04/13/17	DD	1	
Benzene	ND	*0.313*	ND	*1.00*	04/13/17	DD	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	04/13/17	DD	1	

Ver 1

Project ID: 32-12 58TH STREET
Client ID: OA-1

Phoenix I.D.: BY03107

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	04/13/17	DD	1	
Bromoform	ND	*0.097*	ND	*1.00*	04/13/17	DD	1	
Bromomethane	ND	*0.258*	ND	*1.00*	04/13/17	DD	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	04/13/17	DD	1	
Carbon Tetrachloride	0.080	*0.040*	0.50	*0.25*	04/13/17	DD	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	04/13/17	DD	1	
Chloroethane	ND	*0.379*	ND	*1.00*	04/13/17	DD	1	
Chloroform	ND	*0.205*	ND	*1.00*	04/13/17	DD	1	
Chloromethane	ND	*0.485*	ND	*1.00*	04/13/17	DD	1	
Cis-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	04/13/17	DD	1	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	04/13/17	DD	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	04/13/17	DD	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	04/13/17	DD	1	
Dichlorodifluoromethane	0.502	*0.202*	2.48	*1.00*	04/13/17	DD	1	
Ethanol	6.41	*0.531*	12.1	*1.00*	04/13/17	DD	1	1
Ethyl acetate	2.03	*0.278*	7.31	*1.00*	04/13/17	DD	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	04/13/17	DD	1	
Heptane	0.391	*0.244*	1.60	*1.00*	04/13/17	DD	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	04/13/17	DD	1	
Hexane	ND	*0.284*	ND	*1.00*	04/13/17	DD	1	
Isopropylalcohol	1.20	*0.407*	2.95	*1.00*	04/13/17	DD	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	04/13/17	DD	1	
m,p-Xylene	0.569	*0.230*	2.47	*1.00*	04/13/17	DD	1	
Methyl Ethyl Ketone	0.473	*0.339*	1.39	*1.00*	04/13/17	DD	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	04/13/17	DD	1	
Methylene Chloride	11.9	*0.288*	41.3	*1.00*	04/13/17	DD	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	04/13/17	DD	1	1
o-Xylene	0.245	*0.230*	1.06	*1.00*	04/13/17	DD	1	
Propylene	0.901	*0.581*	1.55	*1.00*	04/13/17	DD	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	04/13/17	DD	1	1
Styrene	ND	*0.235*	ND	*1.00*	04/13/17	DD	1	
Tetrachloroethene	0.189	*0.037*	1.28	*0.25*	04/13/17	DD	1	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	04/13/17	DD	1	1
Toluene	1.30	*0.266*	4.90	*1.00*	04/13/17	DD	1	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	04/13/17	DD	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	04/13/17	DD	1	
Trichloroethene	ND	*0.047*	ND	*0.25*	04/13/17	DD	1	
Trichlorofluoromethane	0.267	*0.178*	1.50	*1.00*	04/13/17	DD	1	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	04/13/17	DD	1	
Vinyl Chloride	ND	*0.098*	ND	*0.25*	04/13/17	DD	1	
QA/QC Surrogates								
% Bromofluorobenzene	115	*%*	115	*%*	04/13/17	DD	1	

Ver 1

Project ID: 32-12 58TH STREET
Client ID: OA-1

Phoenix I.D.: BY03107

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
April 19, 2017
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

April 19, 2017

QA/QC Data

SDG I.D.: GBY03105

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 382907 (ppbv), QC Sample No: BY03107 (BY03105, BY03106, BY03107)													
Volatiles													
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25	
1,1,1-Trichloroethane	ND	0.183	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	87	ND	ND	ND	ND	NC	70 - 130	25	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
1,1-Dichloroethane	ND	0.247	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
1,1-Dichloroethene	ND	0.252	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25	
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	143	ND	ND	ND	ND	NC	70 - 130	25	l
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	114	ND	1.53	ND	0.311	NC	70 - 130	25	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichloroethane	ND	0.247	ND	1.00	105	ND	ND	ND	ND	NC	70 - 130	25	
1,2-dichloropropane	ND	0.216	ND	1.00	86	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25	
1,3-Butadiene	ND	0.452	ND	1.00	83	ND	ND	ND	ND	NC	70 - 130	25	
1,3-Dichlorobenzene	ND	0.166	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
1,4-Dioxane	ND	0.278	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25	
2-Hexanone(MBK)	ND	0.244	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
4-Ethyltoluene	ND	0.204	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25	
4-Isopropyltoluene	ND	0.182	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25	
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25	
Acetone	ND	0.421	ND	1.00	92	17.9	29.9	7.55	12.6	50.1	70 - 130	25	r
Acrylonitrile	ND	0.461	ND	1.00	79	ND	ND	ND	ND	NC	70 - 130	25	
Benzene	ND	0.313	ND	1.00	85	ND	ND	ND	ND	NC	70 - 130	25	
Benzyl chloride	ND	0.193	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
Bromodichloromethane	ND	0.149	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25	
Bromoform	ND	0.097	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25	
Bromomethane	ND	0.257	ND	1.00	85	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Disulfide	ND	0.321	ND	1.00	87	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Tetrachloride	ND	0.040	ND	0.25	116	0.50	0.69	0.080	0.109	NC	70 - 130	25	
Chlorobenzene	ND	0.217	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25	
Chloroethane	ND	0.379	ND	1.00	74	ND	ND	ND	ND	NC	70 - 130	25	
Chloroform	ND	0.205	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
Chloromethane	ND	0.484	ND	1.00	76	ND	ND	ND	ND	NC	70 - 130	25	
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	90	ND	ND	ND	ND	NC	70 - 130	25	
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25	
Cyclohexane	ND	0.291	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
Dibromochloromethane	ND	0.117	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
Dichlorodifluoromethane	ND	0.202	ND	1.00	111	2.48	2.56	0.502	0.519	NC	70 - 130	25	
Ethanol	ND	0.531	ND	1.00	75	12.1	365	6.41	194	187.2	70 - 130	25	r

QA/QC Data

SDG I.D.: GBY03105

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Ethyl acetate	ND	0.278	ND	1.00	98	7.31	5.91	2.03	1.64	21.3	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.244	ND	1.00	100	1.60	1.48	0.391	0.362	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.284	ND	1.00	84	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.407	ND	1.00	74	2.95	5.87	1.20	2.39	NC	70 - 130	25	
Isopropylbenzene	ND	0.204	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	107	2.47	3.25	0.569	0.748	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.339	ND	1.00	82	1.39	2.04	0.473	0.693	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.277	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.288	ND	1.00	79	41.3 S	7.95 S	11.9 S	2.29 S	135.4	70 - 130	25	r
n-Butylbenzene	ND	0.182	ND	1.00	118	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	104	1.06	1.20	0.245	0.277	NC	70 - 130	25	
Propylene	ND	0.581	ND	1.00	78	1.55	2.49	0.901	1.45	NC	70 - 130	25	
sec-Butylbenzene	ND	0.182	ND	1.00	114	ND	1.67	ND	0.305	NC	70 - 130	25	
Styrene	ND	0.235	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	115	1.28	2.09	0.189	0.309	48.2	70 - 130	25	r
Tetrahydrofuran	ND	0.339	ND	1.00	88	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.266	ND	1.00	104	4.90	6.82	1.30	1.81	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.047	ND	0.25	101	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.178	ND	1.00	109	1.50	1.51	0.267	0.269	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.131	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.098	ND	0.25	85	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	110	%	110	%	96	115	117	115	117	NC	70 - 130	25	
QA/QC Batch 383260 (ppbv), QC Sample No: BY04726 (BY03105 (30X))													
Volatiles													
Acetone	ND	0.421	ND	1.00	78	27.1	23.6	11.4	9.95	13.6	70 - 130	25	
Methyl Ethyl Ketone	ND	0.339	ND	1.00	91	11.0	10.3	3.73	3.49	6.6	70 - 130	25	
Propylene	ND	0.581	ND	1.00	89	ND	ND	ND	ND	NC	70 - 130	25	
Tetrahydrofuran	ND	0.339	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.266	ND	1.00	97	6.18	5.76	1.64	1.53	NC	70 - 130	25	
Trichloroethene	ND	0.047	ND	0.25	90	ND	ND	ND	ND	NC	70 - 130	25	

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 19, 2017

Wednesday, April 19, 2017

Criteria: NY: DOH

State: NY

Sample Criteria Exceedances Report

GBY03105 - AIRTEK

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

April 19, 2017 SDG I.D.: GBY03105

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

AIRSIM

CHEM20 04/13/17-1: BY03105, BY03106, BY03107

The following Continuing Calibration compounds did not meet % deviation criteria: 1,4-Dichlorobenzene(sim) 33%H (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: 1,4-Dichlorobenzene(sim) 33%H (30%)

CHAIN OF CUSTODY RECORD AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Data Delivery:
Fax #:
Email: cchen@airtekenv.com

Report to:	Airtek Environmental Corp.	**Invoice to:**	Christine Chen	**Project Name:**	32-12 58th Street
Address:	39-37 29th Street, Long Island City, NY 11101	**Address:**	39-37 29th Street, Long Island City, NY 11101	**Location:**	Woodside, Queens
Project Mgr:	Christine Chen	**P.O. #**	16-0981	**State:**	NY 11377
Phone #	(718) 937-3720/(732) 670-6370 (Cell)	**Quote #**	Airtek 05/14/2015	**Sampled by:**	M. Rivera

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)		TO-14	TO-15				Is Canister Returned Unused? Y/N
		LAB USE ONLY											MATRIX				ANALYSES					
03105	SS-1	12864	6.0	-30	-5	5396	10.8	0835	1635	4/11/2017	-30	-5		X	X			X				
03106	IA-1	21323	6.0	-30	-6	4991	10.8	0811	1611	4/11/2017	-31	-6	X		X			X				
03107	OA-1	21333	6.0	-30	-5	5594	10.8	0821	1621	4/11/2017	-30	-4	X		X			X				

Relinquished by:	Accepted by:	Date:	Time:
M Rivera		4-12-17	12:45
		4-12-17	15:49

Criteria Requested: **Deliverable:**
RCP ☐
MCP ☐
State where samples collected: X **NY**

Data Format:
Excel X Equis ☐
PDF X Other: ☐
GISKey ☐

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Please provide NYSDOH Criteria Comparing Data

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: Date: 4/11/17

APPENDIX B – VALIDATED LAB DATA

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

NY ANALYTICAL SERVICES PROTOCOL DATA PACKAGE

Airtek Environmental Corp

32-12 58TH STREET

GBY03105

Ver 1

Data Package Table of Contents

PHOENIX
Environmental Laboratories, Inc.

Friday, May 19, 2017

Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Project ID: 32-12 58TH STREET
Sample ID#s: BY03105 - BY03107

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client: Airtek Environmental Corp

Project: 32-12 58TH STREET

Laboratory Project: GBY03105

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

NY Analytical Services Protocol Format

May 19, 2017

SDG I.D.: GBY03105

Airtek Environmental Corp 32-12 58TH STREET

Methodology Summary

Volatiles in Air

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air: Method TO-15, Second Edition, U. S. Environmental Protection Agency, January 1999.

Sample Id Cross Reference

Client Id	Lab Id	Matrix
SS-1	BY03105	AIR
IA-1	BY03106	AIR
OA-1	BY03107	AIR

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

NY Analytical Services Protocol Format

May 19, 2017

SDG I.D.: GBY03105

Airtek Environmental Corp 32-12 58TH STREET

Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
BY03105	Volatiles (TO15)	04/11/17	04/17/17	04/17/17	KCA	Y
BY03106	Volatiles (TO15)	04/11/17	04/13/17	04/13/17	DD	Y
BY03107	Volatiles (TO15)	04/11/17	04/13/17	04/13/17	DD	Y

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 19, 2017

FOR: Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	MR	04/11/17	16:35
Location Code:	AIRTEK	Received by:	SW	04/12/17	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	16-0981				
Canister Id:	12864				

Laboratory Data

SDG ID: GBY03105
Phoenix ID: BY03105

Project ID: 32-12 58TH STREET
Client ID: SS-1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	04/13/17	KCA	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	04/13/17	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	04/13/17	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	04/13/17	KCA	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	04/13/17	KCA	1	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	04/13/17	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	04/13/17	KCA	1	
1,2,4-Trimethylbenzene	0.720	*0.204*	0.204	3.54	*1.00*	1.00	04/13/17	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	04/13/17	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	KCA	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	04/13/17	KCA	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	04/13/17	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	04/13/17	KCA	1	
1,3,5-Trimethylbenzene	0.237	*0.204*	0.204	1.16	*1.00*	1.00	04/13/17	KCA	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	04/13/17	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	KCA	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	04/13/17	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	04/13/17	KCA	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	04/13/17	KCA	1	1
4-Methyl-2-pentanone(MIBK)	2.38	*0.244*	0.244	9.7	*1.00*	1.00	04/13/17	KCA	1	
Acetone	293	D *12.6*	12.6	696	*29.9*	29.9	04/17/17	KCA	30	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	04/13/17	KCA	1	
Benzene	2.23	*0.313*	0.313	7.12	*1.00*	1.00	04/13/17	KCA	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	04/13/17	KCA	1	

Project ID: 32-12 58TH STREET
Client ID: SS-1

Phoenix I.D.: BY03105

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	04/13/17	KCA	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	04/13/17	KCA	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	04/13/17	KCA	1	
Carbon Disulfide	0.699		*0.321*	0.321	2.18	*1.00*	1.00	04/13/17	KCA	1	
Carbon Tetrachloride	0.192		*0.040*	0.040	1.21	*0.25*	0.25	04/13/17	KCA	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	04/13/17	KCA	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	04/13/17	KCA	1	
Chloroform	1.50		*0.205*	0.205	7.32	*1.00*	1.00	04/13/17	KCA	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	04/13/17	KCA	1	
Cis-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	04/13/17	KCA	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	04/13/17	KCA	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	04/13/17	KCA	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	04/13/17	KCA	1	
Dichlorodifluoromethane	ND		*0.202*	0.202	ND	*1.00*	1.00	04/13/17	KCA	1	
Ethanol	41.8	E	*0.531*	0.531	78.7	*1.00*	1.00	04/13/17	KCA	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	04/13/17	KCA	1	1
Ethylbenzene	5.21		*0.230*	0.230	22.6	*1.00*	1.00	04/13/17	KCA	1	
Heptane	ND		*0.244*	0.244	ND	*1.00*	1.00	04/13/17	KCA	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	04/13/17	KCA	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	04/13/17	KCA	1	
Isopropylalcohol	ND		*0.407*	0.407	ND	*1.00*	1.00	04/13/17	KCA	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	04/13/17	KCA	1	
m,p-Xylene	23.3		*0.230*	0.230	101	*1.00*	1.00	04/13/17	KCA	1	
Methyl Ethyl Ketone	54.5	D	*10.2*	10.2	161	*30.1*	30.1	04/17/17	KCA	30	
Methyl tert-butyl ether(MTBE)	0.824		*0.278*	0.278	2.97	*1.00*	1.00	04/13/17	KCA	1	
Methylene Chloride	ND		*0.288*	0.288	ND	*1.00*	1.00	04/13/17	KCA	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	04/13/17	KCA	1	1
o-Xylene	4.11		*0.230*	0.230	17.8	*1.00*	1.00	04/13/17	KCA	1	
Propylene	46.4	D	*17.4*	17.4	79.8	*29.9*	29.9	04/17/17	KCA	30	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	04/13/17	KCA	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	04/13/17	KCA	1	
Tetrachloroethene	4.59		*0.037*	0.037	31.1	*0.25*	0.25	04/13/17	KCA	1	
Tetrahydrofuran	29.5	D	*10.2*	10.2	86.9	*30.1*	30.1	04/17/17	KCA	30	1
Toluene	64.5	D	*7.97*	7.97	243	*30.0*	30.0	04/17/17	KCA	30	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	04/13/17	KCA	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	04/13/17	KCA	1	
Trichloroethene	59.2	D	*1.40*	1.40	318	*7.52*	7.52	04/17/17	KCA	30	
Trichlorofluoromethane	0.250		*0.178*	0.178	1.40	*1.00*	1.00	04/13/17	KCA	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	04/13/17	KCA	1	
Vinyl Chloride	ND		*0.098*	0.098	ND	*0.25*	0.25	04/13/17	KCA	1	
QA/QC Surrogates											
% Bromofluorobenzene	113		*%*	%	113	*%*	%	04/13/17	KCA	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director

May 19, 2017

Reviewed and Released by: Jon Carlson, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

May 19, 2017

FOR: Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	MR	04/11/17	16:11
Location Code:	AIRTEK	Received by:	SW	04/12/17	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	16-0981				
Canister Id:	21323				

Laboratory Data

SDG ID: GBY03105
Phoenix ID: BY03106

Project ID: 32-12 58TH STREET
Client ID: IA-1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	04/13/17	DD	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	04/13/17	DD	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	04/13/17	DD	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	04/13/17	DD	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	04/13/17	DD	1	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	04/13/17	DD	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	04/13/17	DD	1	
1,2,4-Trimethylbenzene	0.329	*0.204*	0.204	1.62	*1.00*	1.00	04/13/17	DD	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	04/13/17	DD	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	04/13/17	DD	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	DD	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	DD	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	04/13/17	DD	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	04/13/17	DD	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	04/13/17	DD	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	04/13/17	DD	1	
Acetone	11.7	*0.421*	0.421	27.8	*1.00*	1.00	04/13/17	DD	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	04/13/17	DD	1	
Benzene	0.329	*0.313*	0.313	1.05	*1.00*	1.00	04/13/17	DD	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	04/13/17	DD	1	

Project ID: 32-12 58TH STREET
Client ID: IA-1

Phoenix I.D.: BY03106

Parameter	ppbv Result		ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	0.149	ND	*1.00*	1.00	04/13/17	DD	1	
Bromoform	ND		*0.097*	0.097	ND	*1.00*	1.00	04/13/17	DD	1	
Bromomethane	ND		*0.258*	0.258	ND	*1.00*	1.00	04/13/17	DD	1	
Carbon Disulfide	ND		*0.321*	0.321	ND	*1.00*	1.00	04/13/17	DD	1	
Carbon Tetrachloride	0.109		*0.040*	0.040	0.69	*0.25*	0.25	04/13/17	DD	1	
Chlorobenzene	ND		*0.217*	0.217	ND	*1.00*	1.00	04/13/17	DD	1	
Chloroethane	ND		*0.379*	0.379	ND	*1.00*	1.00	04/13/17	DD	1	
Chloroform	ND		*0.205*	0.205	ND	*1.00*	1.00	04/13/17	DD	1	
Chloromethane	ND		*0.485*	0.485	ND	*1.00*	1.00	04/13/17	DD	1	
Cis-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	04/13/17	DD	1	
cis-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	04/13/17	DD	1	
Cyclohexane	ND		*0.291*	0.291	ND	*1.00*	1.00	04/13/17	DD	1	
Dibromochloromethane	ND		*0.118*	0.118	ND	*1.00*	1.00	04/13/17	DD	1	
Dichlorodifluoromethane	0.554		*0.202*	0.202	2.74	*1.00*	1.00	04/13/17	DD	1	
Ethanol	179	E	*0.531*	0.531	337	*1.00*	1.00	04/13/17	DD	1	1
Ethyl acetate	ND		*0.278*	0.278	ND	*1.00*	1.00	04/13/17	DD	1	1
Ethylbenzene	ND		*0.230*	0.230	ND	*1.00*	1.00	04/13/17	DD	1	
Heptane	0.320		*0.244*	0.244	1.31	*1.00*	1.00	04/13/17	DD	1	
Hexachlorobutadiene	ND		*0.094*	0.094	ND	*1.00*	1.00	04/13/17	DD	1	
Hexane	ND		*0.284*	0.284	ND	*1.00*	1.00	04/13/17	DD	1	
Isopropylalcohol	2.17		*0.407*	0.407	5.33	*1.00*	1.00	04/13/17	DD	1	
Isopropylbenzene	ND		*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	
m,p-Xylene	0.747		*0.230*	0.230	3.24	*1.00*	1.00	04/13/17	DD	1	
Methyl Ethyl Ketone	0.659		*0.339*	0.339	1.94	*1.00*	1.00	04/13/17	DD	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	0.278	ND	*1.00*	1.00	04/13/17	DD	1	
Methylene Chloride	2.16	S	*0.288*	0.288	7.50	*1.00*	1.00	04/13/17	DD	1	
n-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	04/13/17	DD	1	1
o-Xylene	0.291		*0.230*	0.230	1.26	*1.00*	1.00	04/13/17	DD	1	
Propylene	1.62		*0.581*	0.581	2.79	*1.00*	1.00	04/13/17	DD	1	1
sec-Butylbenzene	ND		*0.182*	0.182	ND	*1.00*	1.00	04/13/17	DD	1	1
Styrene	ND		*0.235*	0.235	ND	*1.00*	1.00	04/13/17	DD	1	
Tetrachloroethene	0.352		*0.037*	0.037	2.39	*0.25*	0.25	04/13/17	DD	1	
Tetrahydrofuran	ND		*0.339*	0.339	ND	*1.00*	1.00	04/13/17	DD	1	1
Toluene	1.77		*0.266*	0.266	6.67	*1.00*	1.00	04/13/17	DD	1	
Trans-1,2-Dichloroethene	ND		*0.252*	0.252	ND	*1.00*	1.00	04/13/17	DD	1	
trans-1,3-Dichloropropene	ND		*0.221*	0.221	ND	*1.00*	1.00	04/13/17	DD	1	
Trichloroethene	ND		*0.047*	0.047	ND	*0.25*	0.25	04/13/17	DD	1	
Trichlorofluoromethane	0.266		*0.178*	0.178	1.49	*1.00*	1.00	04/13/17	DD	1	
Trichlorotrifluoroethane	ND		*0.131*	0.131	ND	*1.00*	1.00	04/13/17	DD	1	
Vinyl Chloride	ND		*0.098*	0.098	ND	*0.25*	0.25	04/13/17	DD	1	
QA/QC Surrogates											
% Bromofluorobenzene	118		*%*	%	118	*%*	%	04/13/17	DD	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

E = Estimated value quantitated above calibration range for this compound.

S - Laboratory solvent, contamination is possible.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
May 19, 2017
Reviewed and Released by: Jon Carlson, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

May 19, 2017

FOR: Attn: Christine Chen
Airtek Environmental Corp
39-37 29th Street
Long Island City, NY 11101

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	MR	04/11/17	16:21
Location Code:	AIRTEK	Received by:	SW	04/12/17	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	16-0981				
Canister Id:	21333				

Laboratory Data

SDG ID: GBY03105
Phoenix ID: BY03107

Project ID: 32-12 58TH STREET
Client ID: OA-1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Volatiles (TO15)										
1,1,1,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	04/13/17	DD	1	1
1,1,1-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	04/13/17	DD	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	0.146	ND	*1.00*	1.00	04/13/17	DD	1	
1,1,2-Trichloroethane	ND	*0.183*	0.183	ND	*1.00*	1.00	04/13/17	DD	1	
1,1-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	04/13/17	DD	1	
1,1-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	04/13/17	DD	1	
1,2,4-Trichlorobenzene	ND	*0.135*	0.135	ND	*1.00*	1.00	04/13/17	DD	1	
1,2,4-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	0.130	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dichloroethane	ND	*0.247*	0.247	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-dichloropropane	ND	*0.217*	0.217	ND	*1.00*	1.00	04/13/17	DD	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	0.143	ND	*1.00*	1.00	04/13/17	DD	1	
1,3,5-Trimethylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	
1,3-Butadiene	ND	*0.452*	0.452	ND	*1.00*	1.00	04/13/17	DD	1	
1,3-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	DD	1	
1,4-Dichlorobenzene	ND	*0.166*	0.166	ND	*1.00*	1.00	04/13/17	DD	1	
1,4-Dioxane	ND	*0.278*	0.278	ND	*1.00*	1.00	04/13/17	DD	1	
2-Hexanone(MBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	04/13/17	DD	1	1
4-Ethyltoluene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	1
4-Isopropyltoluene	ND	*0.182*	0.182	ND	*1.00*	1.00	04/13/17	DD	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	0.244	ND	*1.00*	1.00	04/13/17	DD	1	
Acetone	7.55	*0.421*	0.421	17.9	*1.00*	1.00	04/13/17	DD	1	
Acrylonitrile	ND	*0.461*	0.461	ND	*1.00*	1.00	04/13/17	DD	1	
Benzene	ND	*0.313*	0.313	ND	*1.00*	1.00	04/13/17	DD	1	
Benzyl chloride	ND	*0.193*	0.193	ND	*1.00*	1.00	04/13/17	DD	1	

Project ID: 32-12 58TH STREET
Client ID: OA-1

Phoenix I.D.: BY03107

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	0.149	ND	*1.00*	1.00	04/13/17	DD	1	
Bromoform	ND	*0.097*	0.097	ND	*1.00*	1.00	04/13/17	DD	1	
Bromomethane	ND	*0.258*	0.258	ND	*1.00*	1.00	04/13/17	DD	1	
Carbon Disulfide	ND	*0.321*	0.321	ND	*1.00*	1.00	04/13/17	DD	1	
Carbon Tetrachloride	0.080	*0.040*	0.040	0.50	*0.25*	0.25	04/13/17	DD	1	
Chlorobenzene	ND	*0.217*	0.217	ND	*1.00*	1.00	04/13/17	DD	1	
Chloroethane	ND	*0.379*	0.379	ND	*1.00*	1.00	04/13/17	DD	1	
Chloroform	ND	*0.205*	0.205	ND	*1.00*	1.00	04/13/17	DD	1	
Chloromethane	ND	*0.485*	0.485	ND	*1.00*	1.00	04/13/17	DD	1	
Cis-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	04/13/17	DD	1	
cis-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	04/13/17	DD	1	
Cyclohexane	ND	*0.291*	0.291	ND	*1.00*	1.00	04/13/17	DD	1	
Dibromochloromethane	ND	*0.118*	0.118	ND	*1.00*	1.00	04/13/17	DD	1	
Dichlorodifluoromethane	0.502	*0.202*	0.202	2.48	*1.00*	1.00	04/13/17	DD	1	
Ethanol	6.41	*0.531*	0.531	12.1	*1.00*	1.00	04/13/17	DD	1	1
Ethyl acetate	2.03	*0.278*	0.278	7.31	*1.00*	1.00	04/13/17	DD	1	1
Ethylbenzene	ND	*0.230*	0.230	ND	*1.00*	1.00	04/13/17	DD	1	
Heptane	0.391	*0.244*	0.244	1.60	*1.00*	1.00	04/13/17	DD	1	
Hexachlorobutadiene	ND	*0.094*	0.094	ND	*1.00*	1.00	04/13/17	DD	1	
Hexane	ND	*0.284*	0.284	ND	*1.00*	1.00	04/13/17	DD	1	
Isopropylalcohol	1.20	*0.407*	0.407	2.95	*1.00*	1.00	04/13/17	DD	1	
Isopropylbenzene	ND	*0.204*	0.204	ND	*1.00*	1.00	04/13/17	DD	1	
m,p-Xylene	0.569	*0.230*	0.230	2.47	*1.00*	1.00	04/13/17	DD	1	
Methyl Ethyl Ketone	0.473	*0.339*	0.339	1.39	*1.00*	1.00	04/13/17	DD	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	0.278	ND	*1.00*	1.00	04/13/17	DD	1	
Methylene Chloride	11.9	*0.288*	0.288	41.3	*1.00*	1.00	04/13/17	DD	1	
n-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	04/13/17	DD	1	1
o-Xylene	0.245	*0.230*	0.230	1.06	*1.00*	1.00	04/13/17	DD	1	
Propylene	0.901	*0.581*	0.581	1.55	*1.00*	1.00	04/13/17	DD	1	1
sec-Butylbenzene	ND	*0.182*	0.182	ND	*1.00*	1.00	04/13/17	DD	1	1
Styrene	ND	*0.235*	0.235	ND	*1.00*	1.00	04/13/17	DD	1	
Tetrachloroethene	0.189	*0.037*	0.037	1.28	*0.25*	0.25	04/13/17	DD	1	
Tetrahydrofuran	ND	*0.339*	0.339	ND	*1.00*	1.00	04/13/17	DD	1	1
Toluene	1.30	*0.266*	0.266	4.90	*1.00*	1.00	04/13/17	DD	1	
Trans-1,2-Dichloroethene	ND	*0.252*	0.252	ND	*1.00*	1.00	04/13/17	DD	1	
trans-1,3-Dichloropropene	ND	*0.221*	0.221	ND	*1.00*	1.00	04/13/17	DD	1	
Trichloroethene	ND	*0.047*	0.047	ND	*0.25*	0.25	04/13/17	DD	1	
Trichlorofluoromethane	0.267	*0.178*	0.178	1.50	*1.00*	1.00	04/13/17	DD	1	
Trichlorotrifluoroethane	ND	*0.131*	0.131	ND	*1.00*	1.00	04/13/17	DD	1	
Vinyl Chloride	ND	*0.098*	0.098	ND	*0.25*	0.25	04/13/17	DD	1	
QA/QC Surrogates										
% Bromofluorobenzene	115	%	%	115	%	%	04/13/17	DD	1	

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
May 19, 2017
Reviewed and Released by: Jon Carlson, Project Manager

PHOENIX

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

May 19, 2017

QA/QC Data

SDG I.D.: GBY03105

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 382907 (ppbv), QC Sample No: BY03107 (BY03105, BY03106, BY03107)													
Volatiles													
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25	
1,1,1-Trichloroethane	ND	0.183	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	87	ND	ND	ND	ND	NC	70 - 130	25	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
1,1-Dichloroethane	ND	0.247	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
1,1-Dichloroethene	ND	0.252	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25	
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	143	ND	ND	ND	ND	NC	70 - 130	25	l
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	114	ND	1.53	ND	0.311	NC	70 - 130	25	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichloroethane	ND	0.247	ND	1.00	105	ND	ND	ND	ND	NC	70 - 130	25	
1,2-dichloropropane	ND	0.216	ND	1.00	86	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25	
1,3-Butadiene	ND	0.452	ND	1.00	83	ND	ND	ND	ND	NC	70 - 130	25	
1,3-Dichlorobenzene	ND	0.166	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
1,4-Dioxane	ND	0.278	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25	
2-Hexanone(MBK)	ND	0.244	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
4-Ethyltoluene	ND	0.204	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25	
4-Isopropyltoluene	ND	0.182	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25	
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25	
Acetone	ND	0.421	ND	1.00	92	17.9	29.9	7.55	12.6	50.1	70 - 130	25	r
Acrylonitrile	ND	0.461	ND	1.00	79	ND	ND	ND	ND	NC	70 - 130	25	
Benzene	ND	0.313	ND	1.00	85	ND	ND	ND	ND	NC	70 - 130	25	
Benzyl chloride	ND	0.193	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
Bromodichloromethane	ND	0.149	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25	
Bromoform	ND	0.097	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25	
Bromomethane	ND	0.257	ND	1.00	85	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Disulfide	ND	0.321	ND	1.00	87	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Tetrachloride	ND	0.040	ND	0.25	116	0.50	0.69	0.080	0.109	NC	70 - 130	25	
Chlorobenzene	ND	0.217	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25	
Chloroethane	ND	0.379	ND	1.00	74	ND	ND	ND	ND	NC	70 - 130	25	
Chloroform	ND	0.205	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
Chloromethane	ND	0.484	ND	1.00	76	ND	ND	ND	ND	NC	70 - 130	25	
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	90	ND	ND	ND	ND	NC	70 - 130	25	
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25	
Cyclohexane	ND	0.291	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
Dibromochloromethane	ND	0.117	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
Dichlorodifluoromethane	ND	0.202	ND	1.00	111	2.48	2.56	0.502	0.519	NC	70 - 130	25	
Ethanol	ND	0.531	ND	1.00	75	12.1	365	6.41	194	187.2	70 - 130	25	r

QA/QC Data

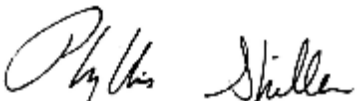
SDG I.D.: GBY03105

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Ethyl acetate	ND	0.278	ND	1.00	98	7.31	5.91	2.03	1.64	21.3	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.244	ND	1.00	100	1.60	1.48	0.391	0.362	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.284	ND	1.00	84	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.407	ND	1.00	74	2.95	5.87	1.20	2.39	NC	70 - 130	25	
Isopropylbenzene	ND	0.204	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	107	2.47	3.25	0.569	0.748	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.339	ND	1.00	82	1.39	2.04	0.473	0.693	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.277	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.288	ND	1.00	79	41.3 S	7.95 S	11.9 S	2.29 S	135.4	70 - 130	25	r
n-Butylbenzene	ND	0.182	ND	1.00	118	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	104	1.06	1.20	0.245	0.277	NC	70 - 130	25	
Propylene	ND	0.581	ND	1.00	78	1.55	2.49	0.901	1.45	NC	70 - 130	25	
sec-Butylbenzene	ND	0.182	ND	1.00	114	ND	1.67	ND	0.305	NC	70 - 130	25	
Styrene	ND	0.235	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	115	1.28	2.09	0.189	0.309	48.2	70 - 130	25	r
Tetrahydrofuran	ND	0.339	ND	1.00	88	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.266	ND	1.00	104	4.90	6.82	1.30	1.81	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.047	ND	0.25	101	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.178	ND	1.00	109	1.50	1.51	0.267	0.269	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.131	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.098	ND	0.25	85	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	110	%	110	%	96	115	117	115	117	NC	70 - 130	25	
QA/QC Batch 383260 (ppbv), QC Sample No: BY04726 (BY03105 (30X))													
Volatiles													
Acetone	ND	0.421	ND	1.00	78	27.1	23.6	11.4	9.95	13.6	70 - 130	25	
Methyl Ethyl Ketone	ND	0.339	ND	1.00	91	11.0	10.3	3.73	3.49	6.6	70 - 130	25	
Propylene	ND	0.581	ND	1.00	89	ND	ND	ND	ND	NC	70 - 130	25	
Tetrahydrofuran	ND	0.339	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.266	ND	1.00	97	6.18	5.76	1.64	1.53	NC	70 - 130	25	
Trichloroethene	ND	0.047	ND	0.25	90	ND	ND	ND	ND	NC	70 - 130	25	

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference



Phyllis Shiller, Laboratory Director
May 19, 2017

Sample Criteria Exceedances Report

GBY03105 - AIRTEK

Criteria: NY: DOH
State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD AIR ANALYSES

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-1102

Data Delivery:
Fax #: _____
Email: cchen@airtekenv.com

Report to:	Airtek Environmental Corp.	Invoice to:	Christine Chen	Project Name:	32-12 58th Street
Address:	39-37 29th Street, Long Island City, NY 11101	Address:	39-37 29th Street, Long Island City, NY 11101	Location:	Woodside, Queens
Project Mgr:	Christine Chen	P.O. #	16-0981	State:	NY 11377
Phone #	(718) 937-3720/(732) 670-6370 (Cell)	Quote #	Airtek 05/14/2015	Sampled by:	M. Rivera

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-14	TO-15	Is Canister Returned Unused? Y/N
		LAB USE ONLY											MATRIX			ANALYSES		
03105	SS-1	12864	6.0	-30	-5	5396	10.8	0835	1635	4/11/2017	-30	-5		X	X		X	
03106	IA-1	21323	6.0	-30	-6	4991	10.8	0811	1611	4/11/2017	-31	-6	X		X		X	
03107	OA-1	21333	6.0	-30	-5	5594	10.8	0821	1621	4/11/2017	-30	-4	X		X		X	

Relinquished by:	Accepted by:	Date:	Time:
		4-12-17	1245
		4-12-17	1549

Criteria Requested: Deliverable:
RCP ☐
MCP ☐
State where samples collected: X NY

Data Format:
Excel X Equis ☐
PDF X Other: ☐
GISKey ☐

SPECIAL INSTRUCTIONS: Please provide NYSDOH Criteria Comparing Data

QC REQUIREMENTS, REGULATORY INFORMATION:

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: _____ Date: 4/11/17

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client: Airtek Environmental Corp

32-12 58TH STREET

Laboratory Project: GBY03105

Volatile TO15
Ver 1

Organic Data Flags

LOD(MDL): Limit of Detection or Method Detection Limit
The minimum reportable concentration that can be measured with confidence.

PQL(RL): Practical Quantitation Level or Reporting Level
This value is at or above the MDL and is supported by the lowest calibration standard.

· Q Qualifiers:

U - The compound was analyzed for but not detected at or above the MDL. The number immediately preceding the “U” represents the PQL reporting level corrected for percent solids, weight and/or volume calculations, and dilution factors.

J - Indicates an estimated value, may indicate one of the following, depending on the situation:
a) The reported value is estimated and below the MDL
b) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.
c) QC associated with this analyte is within warning limits.

X - The concentration is not reported. This quantitation file was not evaluated for this compound at this dilution; a volatile purging or related issue may be the cause.

JL- The value is estimated. This flag is used on the form 1 when a compound is evaluated to the requested criteria. This value may be below the MDL.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified.

S - This compound is a solvent that is used in the laboratory. Laboratory contamination is suspected if concentration is less than five times the reporting level.

B - This compound was also present in the method blank

D - The reported concentration is the result of a diluted analysis.

E - The reported value is estimated because the concentration exceeded the calibration range.

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

P- Percent difference is greater than 25% between the two GC columns and the lower result is reported.

PHOENIX
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG: GBY03105

Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 32-12 58TH STREET, Airtek Environmental Corp

Form 1 (Analysis):

No observations noted.

Form 2 (Surrogates):

All surrogates met criteria with the following exceptions: None.

Form 3 (Laboratory Control/Matrix Spike):

Sample: BY03107 LCS
All LCS recoveries met criteria with the following exceptions: 1,2,4-Trichlorobenzene 143%

Sample: BY04726 LCS
All LCS recoveries met criteria with the following exceptions: None.

Form 4 (Method Blank):

File: CHEM20 0412_38.D
All compounds were non-detect with the following exceptions: None.

File: CHEM24 0417_06.D
All compounds were non-detect with the following exceptions: None.

Form 5 (Tune):

File: CHEM20 0405_02.D
All Tune criteria was met with the following exceptions: None.

File: CHEM20 0412_32.D
All Tune criteria was met with the following exceptions: None.

File: CHEM24 0411_02.D
All Tune criteria was met with the following exceptions: None.

File: CHEM24 0417_02.D
All Tune criteria was met with the following exceptions: None.

Form 6 (Initial Calibration):

Calibration: CHEM20 04/05/17 - 04/05/17
The following compounds did not meet maximum % deviations: None.

Calibration: CHEM24 04/11/17 - 04/12/17
The following compounds did not meet maximum % deviations: None.

Form 7 (Continuing Calibration):

File: CHEM20 0412_33.D (Opening)
The following compounds did not meet maximum % deviations: 1,4-Dichlorobenzene(sim) -33.0% (30)

File: CHEM20 0412_34.D (Opening)

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG: GBY03105

Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 32-12 58TH STREET, Airtek Environmental Corp

The following compounds did not meet maximum % deviations: 1,2,4-Trichlorobenzene -47.0% (30)

File: CHEM20 0412_61.D (Closing)
The following compounds did not meet maximum % deviations: 1,4-Dichlorobenzene(sim) -36.2% (30), 4-Isopropyltoluene(sim) -31.3% (30)

File: CHEM20 0412_62.D (Closing)
The following compounds did not meet maximum % deviations: Ethanol 32.4% (30), 1,4-Dichlorobenzene -30.6% (30), 1,2,4-Trichlorobenzene -54.7% (30)

File: CHEM24 0417_02.D (Opening)
The following compounds did not meet maximum % deviations: None.

File: CHEM24 0417_03.D (Opening)
The following compounds did not meet maximum % deviations: Ethanol 31.5% (30)

File: CHEM24 0417_31.D (Closing)
The following compounds did not meet maximum % deviations: Trichlorofluoromethane(sim) 30.5% (30)

File: CHEM24 0417_32.D (Closing)
The following compounds did not meet maximum % deviations: Ethanol 36.9% (30), Acetone 30.1% (30), Methylene Chloride 30.9% (30)

Form 8 (Internal Standard and Retention Time):

File: CHEM20 - 0405_08.D Full
All samples met internal standard area and retention time critieria with the following exceptions:
0405_13.D - ICAL 40: Chlorobenzene-d5; Area 348206 (146769 - 346571)

File: CHEM20 - 0405_08.D Sim
All samples met internal standard area and retention time critieria with the following exceptions:
0405_12.D - ICAL 25: Chlorobenzene-d5; Area 336052 (137387 - 324419)
0405_13.D - ICAL 40: Chlorobenzene-d5; Area 382219 (137387 - 324419)

File: CHEM20 - 0412_33.D Sim
All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 0412_34.D Full
All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 0411_08.D Full
All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 0411_08.D Sim
All samples met internal standard area and retention time critieria with the following exceptions:
0411_13.D - ICAL 40: Chlorobenzene-d5; Area 397958 (154978 - 365957)

File: CHEM24 - 0417_02.D Sim
All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 0417_03.D Full
All samples met internal standard area and retention time critieria with the following exceptions: None.

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG: GBY03105

Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 32-12 58TH STREET, Airtek Environmental Corp

05/16/17

Jon Carlson
Project Manager

2C
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SDG: GBY03105

QC Batch Id: 382907 QC Sample Id: BY03107

	CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01	BY03107 LCS	BY03107 LCS	96				0
02	BY03107 BLANK	BY03107 BLANK	110				0
03	IA-1	BY03106	118				0
04	OA-1	BY03107	115				0
05	OA-1 DUP	BY03107 DUP	117				0
06	SS-1	BY03105	113				0
07							
08							
09							
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			QC LIMITS
SMC1	BFB	Bromofluorobenzene	(70-130)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II AIR

2C
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SDG: GBY03105

QC Batch Id: 383260 QC Sample Id: BY04726

	CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01	BY04726 LCS	BY04726 LCS	99				0
02	BY04726 BLANK	BY04726 BLANK	111				0
03	SS-1 DIL	BY03105 30X	106				0
04	BY04726 QC	BY04726	106				0
05	BY04726 DUP	BY04726 DUP	105				0
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			QC LIMITS
SMC1	BFB	Bromofluorobenzene	(70-130)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II AIR

AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No: SAS No: SDG No GBY03105

LCS - Client Id: BY03107 LCS

COMPOUND	SPIKE ADDED (ppbv)		LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.	
Propylene	10		7.799	78	70	130
Dichlorodifluoromethane	10		11.12	111	70	130
Chloromethane	10		7.562	76	70	130
1,2-Dichlorotetrafluoroethane	10		10.23	102	70	130
Vinyl Chloride	10		8.451	85	70	130
1,3-Butadiene	10		8.254	83	70	130
Bromomethane	10		8.510	85	70	130
Chloroethane	10		7.382	74	70	130
Ethanol	6		4.473	75	70	130
Acetone	10		9.183	92	70	130
Trichlorofluoromethane	10		10.87	109	70	130
Isopropylalcohol	10		7.414	74	70	130
Acrylonitrile	10		7.936	79	70	130
1,1-Dichloroethene	10		9.692	97	70	130
Methylene Chloride	10		7.947	79	70	130
Carbon Disulfide	10		8.685	87	70	130
Trichlorotrifluoroethane	10		9.677	97	70	130
Trans-1,2-Dichloroethene	10		9.594	96	70	130
1,1-Dichloroethane	10		10.34	103	70	130
Methyl tert-butyl ether(MTBE)	10		9.844	98	70	130
Methyl Ethyl Ketone	10		8.156	82	70	130
Cis-1,2-Dichloroethene	10		9.000	90	70	130
Hexane	10		8.420	84	70	130
Chloroform	10		9.608	96	70	130
Ethyl acetate	10		9.786	98	70	130
Tetrahydrofuran	10		8.762	88	70	130
1,2-Dichloroethane	10		10.47	105	70	130
1,1,1-Trichloroethane	10		10.98	110	70	130
Benzene	10		8.464	85	70	130
Carbon Tetrachloride	10		11.59	116	70	130
Cyclohexane	10		10.69	107	70	130
1,2-dichloropropane	10		8.582	86	70	130
Bromodichloromethane	10		9.778	98	70	130
Trichloroethene	10		10.08	101	70	130
1,4-Dioxane	10		9.353	94	70	130
Heptane	10		9.975	100	70	130
cis-1,3-Dichloropropene	10		10.02	100	70	130
4-Methyl-2-pentanone(MIBK)	10		11.24	112	70	130
trans-1,3-Dichloropropene	10		10.34	103	70	130
1,1,2-Trichloroethane	10		9.552	96	70	130
Toluene	10		10.38	104	70	130
Dibromochloromethane	10		10.70	107	70	130
2-Hexanone(MBK)	10		11.43	114	70	130
1,2-Dibromoethane(EDB)	10		10.20	102	70	130
Tetrachloroethene	10		11.49	115	70	130

AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No: SAS No: SDG No GBY03105

LCS - Client Id: BY03107 LCS

COMPOUND	SPIKE ADDED (ppbv)		LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.	
1,1,1,2-Tetrachloroethane	10		10.13	101	70	130
Chlorobenzene	10		9.117	91	70	130
Ethylbenzene	10		10.17	102	70	130
m,p-Xylene	20		21.37	107	70	130
Bromoform	10		10.38	104	70	130
Styrene	10		10.58	106	70	130
1,1,2,2-Tetrachloroethane	10		8.700	87	70	130
o-Xylene	10		10.40	104	70	130
Isopropylbenzene	10		10.32	103	70	130
4-Ethyltoluene	10		11.30	113	70	130
1,3,5-Trimethylbenzene	10		10.39	104	70	130
1,2,4-Trimethylbenzene	10		11.38	114	70	130
Benzyl chloride	10		10.57	106	70	130
1,3-Dichlorobenzene	10		11.10	111	70	130
1,4-Dichlorobenzene	10		11.66	117	70	130
sec-Butylbenzene	10		11.38	114	70	130
4-Isopropyltoluene	10		11.86	119	70	130
1,2-Dichlorobenzene	10		10.56	106	70	130
n-Butylbenzene	10		11.82	118	70	130
1,2,4-Trichlorobenzene	10		14.27	143 *	70	130
Hexachlorobutadiene	10		11.70	117	70	130

AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No: SAS No: SDG No GBY03105

LCS - Client Id: BY04726 LCS

COMPOUND	SPIKE ADDED (ppbv)		LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.	
Propylene	10		8.899	89	70	130
Dichlorodifluoromethane	10		8.592	86	70	130
Chloromethane	10		8.980	90	70	130
1,2-Dichlorotetrafluoroethane	10		9.162	92	70	130
Vinyl Chloride	10		9.175	92	70	130
1,3-Butadiene	10		9.518	95	70	130
Bromomethane	10		8.677	87	70	130
Chloroethane	10		8.764	88	70	130
Ethanol	6		4.831	81	70	130
Acetone	10		7.838	78	70	130
Trichlorofluoromethane	10		8.515	85	70	130
Isopropylalcohol	10		8.475	85	70	130
Acrylonitrile	10		9.079	91	70	130
1,1-Dichloroethene	10		8.651	87	70	130
Methylene Chloride	10		7.474	75	70	130
Carbon Disulfide	10		8.982	90	70	130
Trichlorotrifluoroethane	10		8.395	84	70	130
Trans-1,2-Dichloroethene	10		9.302	93	70	130
1,1-Dichloroethane	10		9.013	90	70	130
Methyl tert-butyl ether(MTBE)	10		9.476	95	70	130
Methyl Ethyl Ketone	10		9.079	91	70	130
Cis-1,2-Dichloroethene	10		8.654	87	70	130
Hexane	10		9.130	91	70	130
Chloroform	10		8.519	85	70	130
Ethyl acetate	10		10.76	108	70	130
Tetrahydrofuran	10		9.897	99	70	130
1,2-Dichloroethane	10		8.839	88	70	130
1,1,1-Trichloroethane	10		8.405	84	70	130
Benzene	10		8.830	88	70	130
Carbon Tetrachloride	10		8.582	86	70	130
Cyclohexane	10		9.570	96	70	130
1,2-dichloropropane	10		9.526	95	70	130
Bromodichloromethane	10		8.651	87	70	130
Trichloroethene	10		9.034	90	70	130
1,4-Dioxane	10		9.187	92	70	130
Heptane	10		9.574	96	70	130
cis-1,3-Dichloropropene	10		9.612	96	70	130
4-Methyl-2-pentanone(MIBK)	10		9.700	97	70	130
trans-1,3-Dichloropropene	10		9.077	91	70	130
1,1,2-Trichloroethane	10		9.285	93	70	130
Toluene	10		9.654	97	70	130
Dibromochloromethane	10		9.094	91	70	130
2-Hexanone(MBK)	10		9.544	95	70	130
1,2-Dibromoethane(EDB)	10		8.946	89	70	130
Tetrachloroethene	10		9.052	91	70	130

AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No: SAS No: SDG No GBY03105

LCS - Client Id: BY04726 LCS

COMPOUND	SPIKE ADDED (ppbv)		LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.	
1,1,1,2-Tetrachloroethane	10		9.782	98	70	130
Chlorobenzene	10		9.088	91	70	130
Ethylbenzene	10		9.447	94	70	130
m,p-Xylene	20		19.20	96	70	130
Bromoform	10		8.772	88	70	130
Styrene	10		10.17	102	70	130
1,1,2,2-Tetrachloroethane	10		8.993	90	70	130
o-Xylene	10		9.638	96	70	130
Isopropylbenzene	10		9.706	97	70	130
4-Ethyltoluene	10		9.417	94	70	130
1,3,5-Trimethylbenzene	10		8.823	88	70	130
1,2,4-Trimethylbenzene	10		8.988	90	70	130
Benzyl chloride	10		9.092	91	70	130
1,3-Dichlorobenzene	10		8.538	85	70	130
1,4-Dichlorobenzene	10		8.736	87	70	130
sec-Butylbenzene	10		8.529	85	70	130
4-Isopropyltoluene	10		8.685	87	70	130
1,2-Dichlorobenzene	10		8.793	88	70	130
n-Butylbenzene	10		9.410	94	70	130
1,2,4-Trichlorobenzene	10		10.57	106	70	130
Hexachlorobutadiene	10		9.028	90	70	130

4A

AIR METHOD BLANK SUMMARY

Client ID: BY03107 BLANK

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Lab File ID: 0412_38.D Lab Sample ID: BY03107 BLK

Date Analyzed: 04/13/2017 Time Analyzed: 16:05

GC Column: zb-1ms Lab Batch ID: 382907

Instrument ID: CHEM20 Heated Purge:(Y/N) Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BY03107 LCS	BY03107 LCS	0412_35.D	14:19
02	IA-1	BY03106	0412_41.D	19:14
03	OA-1	BY03107	0412_42.D	19:55
04	OA-1 DUP	BY03107 DUP	0412_43.D	20:35
05	SS-1	BY03105	0412_45.D	21:57
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COMMENTS:

FORM IV AIR

4A

AIR METHOD BLANK SUMMARY

Client ID: BY04726 BLANK

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Lab File ID: 0417_06.D Lab Sample ID: BY04726 BLK

Date Analyzed: 04/17/2017 Time Analyzed: 12:11

GC Column: zb-1ms Lab Batch ID: 383260

Instrument ID: CHEM24 Heated Purge:(Y/N) Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BY04726 LCS	BY04726 LCS	0417_04.D	11:08
02	SS-1 DIL	BY03105 30X	0417_08.D	13:11
03	BY04726 QC	BY04726	0417_21.D	20:26
04	BY04726 DUP	BY04726 DUP	0417_22.D	21:19
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COMMENTS:

FORM IV AIR

5B
AIR INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Lab File ID: 0405_02.D BFB Injection Date: 04/05/17

Instrument ID: CHEM20 BFB Injection Time: 11:26

GC Column: zb-1ms Heated Purge: (Y/N) Y

AutoFind: Scans 986, 987, 988; Background Corrected with Scan 981

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE			
50	8.0 - 40.0% of mass 95	30.3			
75	30.0 - 66.0% of mass 95	59.0			
95	Base Peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	50.0 - 120.0% of mass 95	115.0			
175	4.0 - 9.0% of mass 174	7.7	(	8.9	)1
176	93.0 - 101.0% of mass 174	98.9	(	113.0	)1
177	5.0 - 9.0% of mass 176	6.6	(	7.5	)1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	ICAL 0.035	0.035ppb	0405_03.D	04/05/17	12:02	
02	ICAL 0.05	0.05ppb;air03m	0405_04.D	04/05/17	12:39	
03	ICAL 0.1	0.10ppb;air03m	0405_05.D	04/05/17	13:15	
04	ICAL 0.25	0.2ppb;air03m	0405_06.D	04/05/17	13:52	
05	ICAL 0.5	0.5ppb;air03m	0405_07.D	04/05/17	14:31	
06	ICAL 1	1.0ppb;air03y	0405_08.D	04/05/17	15:07	
07	ICAL 2.5	2.5ppb;air03y	0405_09.D	04/05/17	15:45	
08	ICAL 5	5.0ppb;air03w	0405_10.D	04/05/17	16:22	
09	ICAL 10	10ppb;air03w	0405_11.D	04/05/17	16:58	
10	ICAL 25	25ppb;air03w	0405_12.D	04/05/17	17:37	
11	ICAL 40	40ppb;air03w	0405_13.D	04/05/17	18:16	
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(*) Outside 24 hr clock

FORM V AIR

tuner0405_02.txt
CLPBFB

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_02.D
Acq On : 05 Apr 2017 11:26 am
Operator : CORTEX\ms
Sample : 0/0
Misc : istd;air05d
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p

Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Apr 06 08:58:57 2017

AutoFind: Scans 986, 987, 988; Background Corrected with Scan 981

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	30.3	67011	PASS
75	95	30	66	59.0	130299	PASS
95	95	100	100	100.0	220843	PASS
96	95	5	9	6.8	15057	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	114.7	253397	PASS
175	174	4	9	7.7	19596	PASS
176	174	93	101	98.9	250496	PASS
177	176	5	9	6.6	16505	PASS

20_AIR_0405.M Wed Apr 19 12:49:59 2017

5B
AIR INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Lab File ID: 0412_32.D BFB Injection Date: 04/13/17

Instrument ID: CHEM20 BFB Injection Time: 12:27

GC Column: zb-1ms Heated Purge: (Y/N) Y

Spectrum Information: Tune, Average of 10.689 to 10.704 min.; with background subtraction.

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE			
50	8.0 - 40.0% of mass 95	35.6			
75	30.0 - 66.0% of mass 95	64.0			
95	Base Peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.8			
173	Less than 2.0% of mass 174	0.4	(	0.3	)1
174	50.0 - 120.0% of mass 95	115.0			
175	4.0 - 9.0% of mass 174	8.5	(	9.7	)1
176	93.0 - 101.0% of mass 174	94.8	(	109.0	)1
177	5.0 - 9.0% of mass 176	6.8	(	7.4	)1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	CCAL 1	1.0ppb; air04q	0412_33.D	04/13/17	13:04	
02	CCAL 10	10ppb;04v	0412_34.D	04/13/17	13:40	
03	BY03107 LCS	BY03107 LCS	0412_35.D	04/13/17	14:19	
04	BY03107 BLANK	BY03107 BLANK	0412_38.D	04/13/17	16:05	
05	IA-1	BY03106	0412_41.D	04/13/17	19:14	
06	OA-1	BY03107	0412_42.D	04/13/17	19:55	
07	OA-1 DUP	BY03107 DUP	0412_43.D	04/13/17	20:35	
08	SS-1	BY03105	0412_45.D	04/13/17	21:57	
09	CCAL 1	1.0	0412_61.D	04/14/17	08:09	
10	CCAL 10	10	0412_62.D	04/14/17	08:46	
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(*) Outside 24 hr clock

FORM V AIR

tuner0412_32.txt
CLPBFB

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_32.D
Acq On : 13 Apr 2017 12:27 pm
Operator : CORTEX\ms
Sample : 0/0
Misc : istd;air05v
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p

Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Apr 06 08:58:57 2017

Spectrum Information: Average of 10.689 to 10.704 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	35.6	23403	PASS
75	95	30	66	64.0	42028	PASS
95	95	100	100	100.0	65686	PASS
96	95	5	9	7.8	5121	PASS
173	174	0.00	2	0.3	238	PASS
174	95	50	120	114.8	75410	PASS
175	174	4	9	8.5	6372	PASS
176	174	93	101	94.8	71521	PASS
177	176	5	9	6.8	4869	PASS

20_AIR_0405.M Fri Apr 14 13:32:33 2017

5B
AIR INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Lab File ID: 0411_02.D BFB Injection Date: 04/11/17

Instrument ID: CHEM24 BFB Injection Time: 19:13

GC Column: zb-1ms Heated Purge: (Y/N) Y

AutoFind: Scans 1246, 1247, 1248; Background Corrected with Scan 1241

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE			
50	8.0 - 40.0% of mass 95	19.6			
75	30.0 - 66.0% of mass 95	54.2			
95	Base Peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.5	(	0.6	)1
174	50.0 - 120.0% of mass 95	86.9			
175	4.0 - 9.0% of mass 174	7.0	(	6.1	)1
176	93.0 - 101.0% of mass 174	97.6	(	84.8	)1
177	5.0 - 9.0% of mass 176	6.5	(	5.5	)1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	ICAL 0.035	0.035 ppb	0411_03.D	04/11/17	19:43	
02	ICAL 0.05	0.05 ppb	0411_04.D	04/11/17	20:14	
03	ICAL 0.1	0.1 ppb	0411_05.D	04/11/17	20:45	
04	ICAL 0.25	0.2ppb	0411_06.D	04/11/17	21:16	
05	ICAL 0.5	0.5ppb	0411_07.D	04/11/17	21:51	
06	ICAL 1	1 ppb	0411_08.D	04/11/17	22:23	
07	ICAL 2.5	2.5ppb	0411_09.D	04/11/17	22:58	
08	ICAL 5	5ppb	0411_10.D	04/11/17	23:28	
09	ICAL 10	10ppb	0411_11.D	04/12/17	00:47	
10	ICAL 25	25ppb	0411_12.D	04/12/17	01:22	
11	ICAL 40	40ppb	0411_13.D	04/12/17	02:00	
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(*) Outside 24 hr clock

FORM V AIR

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_02.D
Acq On : 11 Apr 2017 7:13 pm
Operator : Keith
Sample : 0/0
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p

Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Apr 17 08:55:54 2017

AutoFind: Scans 1246, 1247, 1248; Background Corrected with Scan 1241

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.6	48715	PASS
75	95	30	66	54.2	134440	PASS
95	95	100	100	100.0	248235	PASS
96	95	5	9	6.6	16263	PASS
173	174	0.00	2	0.6	1224	PASS
174	95	50	120	86.9	215661	PASS
175	174	4	9	7.0	15076	PASS
176	174	93	101	97.6	210480	PASS
177	176	5	9	6.5	13754	PASS

24AIR_0411.M Tue Apr 25 14:30:25 2017

5B
AIR INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Lab File ID: 0417_02.D BFB Injection Date: 04/17/17

Instrument ID: CHEM24 BFB Injection Time: 10:01

GC Column: zb-1ms Heated Purge: (Y/N) Y

AutoFind: Scans 1247, 1248, 1249; Background Corrected with Scan 1242

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE			
50	8.0 - 40.0% of mass 95	19.5			
75	30.0 - 66.0% of mass 95	53.7			
95	Base Peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.5	(	0.5	)1
174	50.0 - 120.0% of mass 95	89.9			
175	4.0 - 9.0% of mass 174	6.8	(	6.1	)1
176	93.0 - 101.0% of mass 174	97.3	(	87.4	)1
177	5.0 - 9.0% of mass 176	6.4	(	5.6	)1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	CCAL 1	1.0 ppb 01B	0417_02.D	04/17/17	10:01	
02	CCAL 10	10ppb 01D	0417_03.D	04/17/17	10:33	
03	BY04726 LCS	BY04726 LCS	0417_04.D	04/17/17	11:08	
04	BY04726 BLANK	BY04726 BLANK	0417_06.D	04/17/17	12:11	
05	SS-1 DIL	BY03105 30X	0417_08.D	04/17/17	13:11	
06	BY04726 QC	BY04726	0417_21.D	04/17/17	20:26	
07	BY04726 DUP	BY04726 DUP	0417_22.D	04/17/17	21:19	
08	CCAL 1	1.0ppb;air4r	0417_31.D	04/18/17	03:01	
09	CCAL 10	10ppb;air4u	0417_32.D	04/18/17	03:33	
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(*) Outside 24 hr clock

FORM V AIR

tuner0417_02.txt
CLPBFB

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_02.D
Acq On : 17 Apr 2017 10:01 am
Operator : Keith
Sample : 1.0 ppb 01B
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p

Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Apr 17 08:55:54 2017

AutoFind: Scans 1247, 1248, 1249; Background Corrected with Scan 1242

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.5	36638	PASS
75	95	30	66	53.7	100781	PASS
95	95	100	100	100.0	187563	PASS
96	95	5	9	6.5	12204	PASS
173	174	0.00	2	0.5	891	PASS
174	95	50	120	89.9	168640	PASS
175	174	4	9	6.8	11475	PASS
176	174	93	101	97.3	164016	PASS
177	176	5	9	6.4	10482	PASS

24AIR_0411.M Mon Apr 17 15:04:16 2017

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0405_08.D Date Analyzed: 04/05/17

Instrument ID: CHEM20 Time Analyzed: 15:07

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

		IS1 (BCM) Area Avg #	RT Avg #	IS2 (DFB) Area Avg #	RT Avg #	IS3 (CBZ) Area Avg #	RT Avg #			FILE
	12 HOUR STD	201509	6.98	530019	7.88	246670	9.93			0405_08.D
	UPPER LIMIT	283120	7.31	744676	8.21	346571	10.26			0405_08.D
	LOWER LIMIT	119898	6.65	315361	7.55	146769	9.60			0405_08.D
	CLIENT ID									
01	ICAL 0.035	199549	6.98	513761	7.88	210400	9.93			0405_03.D
02	ICAL 0.05	207003	6.97	524688	7.88	210962	9.93			0405_04.D
03	ICAL 0.1	203473	6.98	515088	7.88	205850	9.93			0405_05.D
04	ICAL 0.25	205388	6.98	510786	7.88	209222	9.93			0405_06.D
05	ICAL 0.5	207360	6.98	528843	7.88	217835	9.93			0405_07.D
06	ICAL 1	200175	6.98	528433	7.88	216379	9.93			0405_08.D
07	ICAL 2.5	201555	6.98	536452	7.88	225639	9.93			0405_09.D
08	ICAL 5	198155	6.97	535009	7.88	234280	9.93			0405_10.D
09	ICAL 10	200144	6.99	538896	7.89	254110	9.93			0405_11.D
10	ICAL 25	203657	6.99	540629	7.89	308508	9.93			0405_12.D
11	ICAL 40	193676	6.99	536031	7.89	348206 *	9.93			0405_13.D
12										
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area
AREA LOWER LIMIT = - 60% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0405_08.D Date Analyzed: 04/05/17

Instrument ID: CHEM20 Time Analyzed: 15:07

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

		IS1 (BCM) Area Avg #	RT Avg #	IS2 (DFB) Area Avg #	RT Avg #	IS3 (CBZ) Area Avg #	RT Avg #			FILE
	12 HOUR STD	202534	6.98	625414	7.88	230903	9.92			0405_08.D
	UPPER LIMIT	284560	7.31	878707	8.21	324419	10.25			0405_08.D
	LOWER LIMIT	120507	6.65	372122	7.55	137387	9.59			0405_08.D
	CLIENT ID									
01	ICAL 0.035	199549	6.98	617727	7.88	216490	9.92			0405_03.D
02	ICAL 0.05	207003	6.97	624904	7.88	219171	9.92			0405_04.D
03	ICAL 0.1	203473	6.98	613305	7.88	216209	9.92			0405_05.D
04	ICAL 0.25	205388	6.98	607106	7.88	217763	9.92			0405_06.D
05	ICAL 0.5	207360	6.98	616005	7.88	223851	9.92			0405_07.D
06	ICAL 1	200175	6.98	622984	7.88	227743	9.92			0405_08.D
07	ICAL 2.5	201555	6.98	643757	7.88	237218	9.92			0405_09.D
08	ICAL 5	198155	6.97	638335	7.88	249158	9.92			0405_10.D
09	ICAL 10	200144	6.99	644606	7.88	270526	9.92			0405_11.D
10	ICAL 25	203657	6.99	653069	7.89	336052 *	9.93			0405_12.D
11	ICAL 40	193676	6.99	631752	7.89	382219 *	9.93			0405_13.D
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22										

IS1 (BCM) = Bromochloromethane
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AREA UPPER LIMIT = +140% of internal standard area
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RT LOWER LIMIT = -0.33 minutes of internal standard RT

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* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0412_33.D Date Analyzed: 04/13/17

Instrument ID: CHEM20 Time Analyzed: 13:04

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			FILE
12 HOUR STD	130807	6.98	421645	7.88	150312	9.92			0412_33.D
UPPER LIMIT	183784	7.31	592411	8.21	211188	10.25			0412_33.D
LOWER LIMIT	77830	6.65	250879	7.55	89436	9.59			0412_33.D
CLIENT ID									
01 BY03107 LCS	126006	6.99	428403	7.88	190983	9.92			0412_35.D
02 BY03107 BLANK	131929	6.98	426141	7.88	145597	9.92			0412_38.D
03 IA-1	124045	6.98	389164	7.88	138332	9.92			0412_41.D
04 OA-1	119785	6.98	400626	7.88	143807	9.92			0412_42.D
05 OA-1 DUP	115779	6.98	375960	7.88	135181	9.92			0412_43.D
06 SS-1	120476	6.99	409724	7.89	159173	9.92			0412_45.D
07 CCAL 1	109178	6.98	365325	7.88	128710	9.92			0412_61.D
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22									

IS1 (BCM) = Bromochloromethane
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AREA UPPER LIMIT = +140% of internal standard area
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* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0412_34.D Date Analyzed: 04/13/17

Instrument ID: CHEM20 Time Analyzed: 13:40

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			FILE
12 HOUR STD	129499	6.99	357009	7.89	179723	9.93			0412_34.D
UPPER LIMIT	181946	7.32	501598	8.22	252511	10.26			0412_34.D
LOWER LIMIT	77052	6.66	212420	7.56	106935	9.60			0412_34.D
CLIENT ID									
01 BY03107 LCS	126006	6.99	355051	7.89	176655	9.93			0412_35.D
02 BY03107 BLANK	131929	6.98	350857	7.88	138439	9.93			0412_38.D
03 IA-1	124045	6.98	322993	7.88	128810	9.92			0412_41.D
04 OA-1	119785	6.98	329445	7.88	135849	9.93			0412_42.D
05 OA-1 DUP	115779	6.98	316602	7.88	124809	9.93			0412_43.D
06 SS-1	120476	6.99	338244	7.89	153181	9.93			0412_45.D
07 CCAL 10	108021	6.99	304589	7.89	148237	9.93			0412_62.D
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22									

IS1 (BCM) = Bromochloromethane
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IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area
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RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0411_08.D Date Analyzed: 04/11/17

Instrument ID: CHEM24 Time Analyzed: 22:23

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) Area Avg	#	RT Avg	#	IS2 (DFB) Area Avg	#	RT Avg	#	IS3 (CBZ) Area Avg	#	RT Avg	#			FILE
12 HOUR STD	140394		3.95		473741		5.94		270113		9.21				0411_08.D
UPPER LIMIT	197253		4.28		665606		6.27		379509		9.54				0411_08.D
LOWER LIMIT	83534		3.62		281876		5.61		160717		8.88				0411_08.D
CLIENT ID															
01 ICAL 0.035	141908		3.94		472460		5.93		250623		9.21				0411_03.D
02 ICAL 0.05	138493		3.94		452106		5.93		232943		9.21				0411_04.D
03 ICAL 0.1	141705		3.94		467226		5.93		242942		9.21				0411_05.D
04 ICAL 0.25	138185		3.94		465366		5.93		238171		9.21				0411_06.D
05 ICAL 0.5	141334		3.94		471478		5.93		230861		9.21				0411_07.D
06 ICAL 1	138131		3.94		461008		5.93		247752		9.21				0411_08.D
07 ICAL 2.5	135568		3.94		463739		5.94		248307		9.21				0411_09.D
08 ICAL 5	138356		3.96		457295		5.95		241623		9.21				0411_10.D
09 ICAL 10	134790		3.95		453905		5.94		272442		9.21				0411_11.D
10 ICAL 25	141752		3.96		492956		5.95		329667		9.21				0411_12.D
11 ICAL 40	153721		3.96		530695		5.96		379251		9.22				0411_13.D
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area
AREA LOWER LIMIT = - 60% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0411_08.D Date Analyzed: 04/11/17

Instrument ID: CHEM24 Time Analyzed: 22:23

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

		IS1 (BCM) Area Avg	#	RT Avg	#	IS2 (DFB) Area Avg	#	RT Avg	#	IS3 (CBZ) Area Avg	#	RT Avg	#			FILE
	12 HOUR STD	138719		3.95		507317		5.94		260468		9.21				0411_08.D
	UPPER LIMIT	194900		4.28		712780		6.27		365957		9.54				0411_08.D
	LOWER LIMIT	82538		3.62		301854		5.61		154978		8.88				0411_08.D
	CLIENT ID															
01	ICAL 0.035	141908		3.94		519889		5.94		267966		9.21				0411_03.D
02	ICAL 0.05	138493		3.94		497953		5.94		247463		9.21				0411_04.D
03	ICAL 0.1	141705		3.94		511706		5.94		258435		9.21				0411_05.D
04	ICAL 0.25	138185		3.94		509686		5.94		251602		9.21				0411_06.D
05	ICAL 0.5	141334		3.94		513886		5.94		250506		9.21				0411_07.D
06	ICAL 1	138131		3.94		505840		5.94		263421		9.21				0411_08.D
07	ICAL 2.5	135568		3.94		507633		5.94		261360		9.21				0411_09.D
08	ICAL 5	138356		3.96		501722		5.94		255346		9.21				0411_10.D
09	ICAL 10	134790		3.95		497538		5.94		288112		9.22				0411_11.D
10	ICAL 25	141752		3.96		539838		5.95		347762		9.22				0411_12.D
11	ICAL 40	153721		3.96		581146		5.95		397958	*	9.22				0411_13.D
12																
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area
AREA LOWER LIMIT = - 60% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0417_02.D Date Analyzed: 04/17/17

Instrument ID: CHEM24 Time Analyzed: 10:01

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (CBZ) AREA	#	RT	#			FILE
12 HOUR STD	120814		3.95		441158		5.94		218007		9.22				0417_02.D
UPPER LIMIT	169744		4.28		619827		6.27		306300		9.55				0417_02.D
LOWER LIMIT	71884		3.62		262489		5.61		129714		8.89				0417_02.D
CLIENT ID															
01 BY04726 LCS	112224		3.96		415606		5.95		228277		9.22				0417_04.D
02 BY04726 BLANK	103133		3.95		359028		5.94		160418		9.22				0417_06.D
03 SS-1 DIL	110806		3.95		418167		5.94		202729		9.22				0417_08.D
04 BY04726 QC	117626		3.94		431018		5.94		211336		9.21				0417_21.D
05 BY04726 DUP	135120		3.94		505866		5.94		242653		9.21				0417_22.D
06 CCAL 1	107311		3.93		404870		5.93		201719		9.20				0417_31.D
07															
08															
09															
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21															
22															

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Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A
AIR INTERNAL STANDARD AREA AND RT SUMMARY
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: _____ SAS No.: _____ SDG No.: GBY03105

Lab File Id: 0417_03.D Date Analyzed: 04/17/17

Instrument ID: CHEM24 Time Analyzed: 10:33

GC Column: zb-1ms ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			FILE
12 HOUR STD	109740	3.96	369318	5.95	203867	9.22			0417_03.D
UPPER LIMIT	154185	4.29	518892	6.28	286433	9.55			0417_03.D
LOWER LIMIT	65295	3.63	219744	5.62	121301	8.89			0417_03.D
CLIENT ID									
01 BY04726 LCS	112224	3.96	383897	5.95	214466	9.22			0417_04.D
02 BY04726 BLANK	103133	3.95	331020	5.94	152139	9.21			0417_06.D
03 SS-1 DIL	110806	3.95	383039	5.94	190849	9.21			0417_08.D
04 BY04726 QC	117626	3.94	396939	5.93	203638	9.21			0417_21.D
05 BY04726 DUP	135120	3.94	468748	5.93	235083	9.21			0417_22.D
06 CCAL 10	99665	3.94	331449	5.93	190545	9.21			0417_32.D
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area
AREA LOWER LIMIT = - 60% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

1

AIR ANALYSIS DATA SHEET

CLIENT ID: SS-1

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03105

Canister: 12864 Lab File ID: 0412_45.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	48.0	E	0.581	0.581	
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	41.8	ES	0.531	0.531	r
67-64-1	Acetone	490	ES	0.421	0.421	
75-69-4	Trichlorofluoromethane	0.250		0.178	0.178	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
75-15-0	Carbon Disulfide	0.699		0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.824		0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	89.0	E	0.339	0.339	
110-54-3	Hexane	0.284	U	0.284	0.284	r
67-66-3	Chloroform	1.50		0.205	0.205	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	65.0	E	0.339	0.339	
71-43-2	Benzene	2.23		0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
79-01-6	Trichloroethene	87.0	E	0.047	0.047	
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	2.38		0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	120	E	0.266	0.266	
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	4.59		0.037	0.037	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
100-41-4	Ethylbenzene	5.21		0.230	0.230	r
179601-23-1	m,p-Xylene	23.3		0.230	0.230	r
95-47-6	o-Xylene	4.11		0.230	0.230	r
108-67-8	1,3,5-Trimethylbenzene	0.237		0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.720		0.204	0.204	r
135-98-8	sec-Butylbenzene	0.182	U	0.182	0.182	r
75-71-8	Dichlorodifluoromethane(sim)	0.202	U	0.202	0.202	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

AIR ANALYSIS DATA SHEET

CLIENT ID: SS-1

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03105

Canister: 12864 Lab File ID: 0412_45.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.192		0.040	0.040	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.221	U	0.221	0.221	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.118	U	0.118	0.118	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
108-90-7	Chlorobenzene(sim)	0.217	U	0.217	0.217	r
100-42-5	Styrene(sim)	0.235	U	0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
98-82-8	Isopropylbenzene(sim)	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene(sim)	0.204	U	0.204	0.204	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_45.D
Acq On : 13 Apr 2017 09:57 pm
Operator : CORTEX\ms
Client ID : SS-1
Lab ID : BY03105
ALS Vial : 1 Sample Multiplier: 1

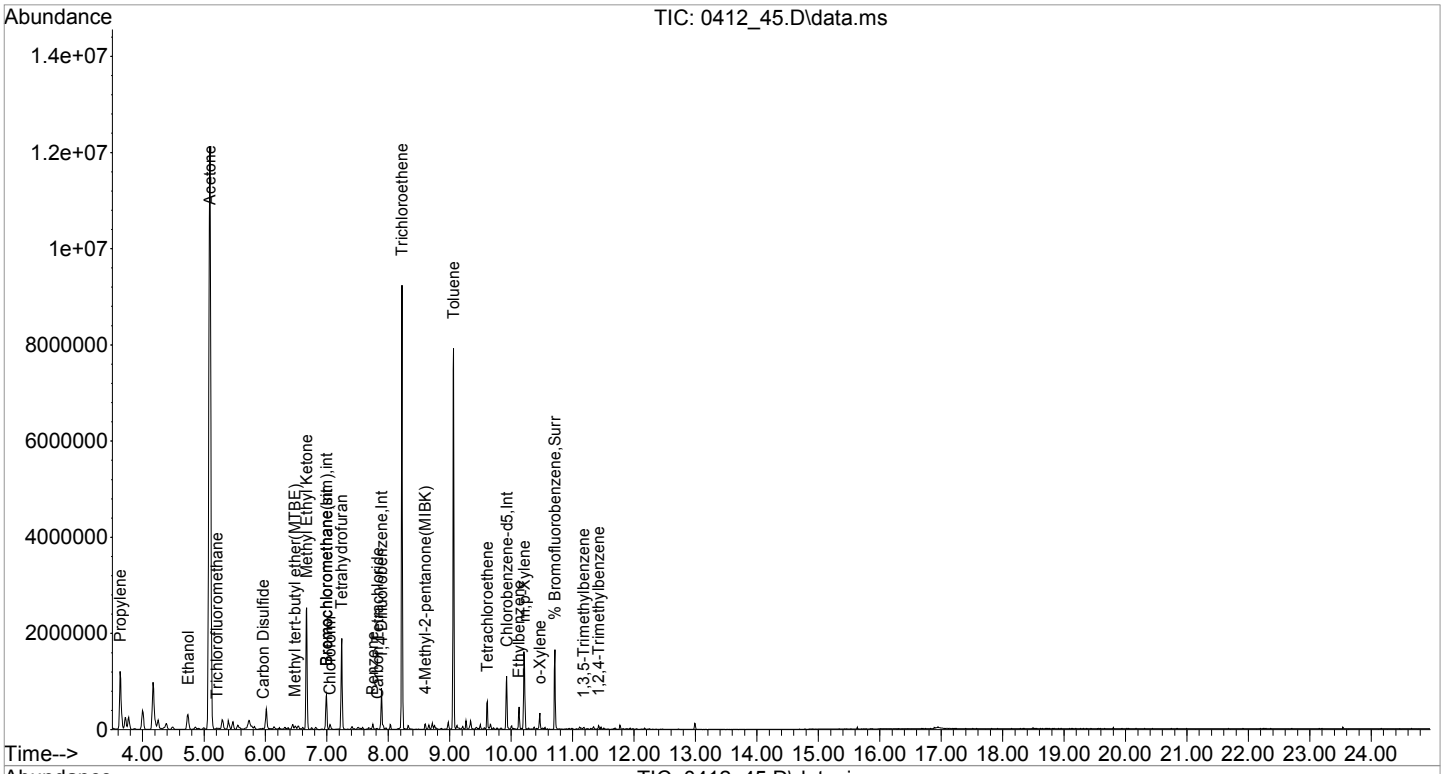
Quant Time: Apr 14 14:18:52 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

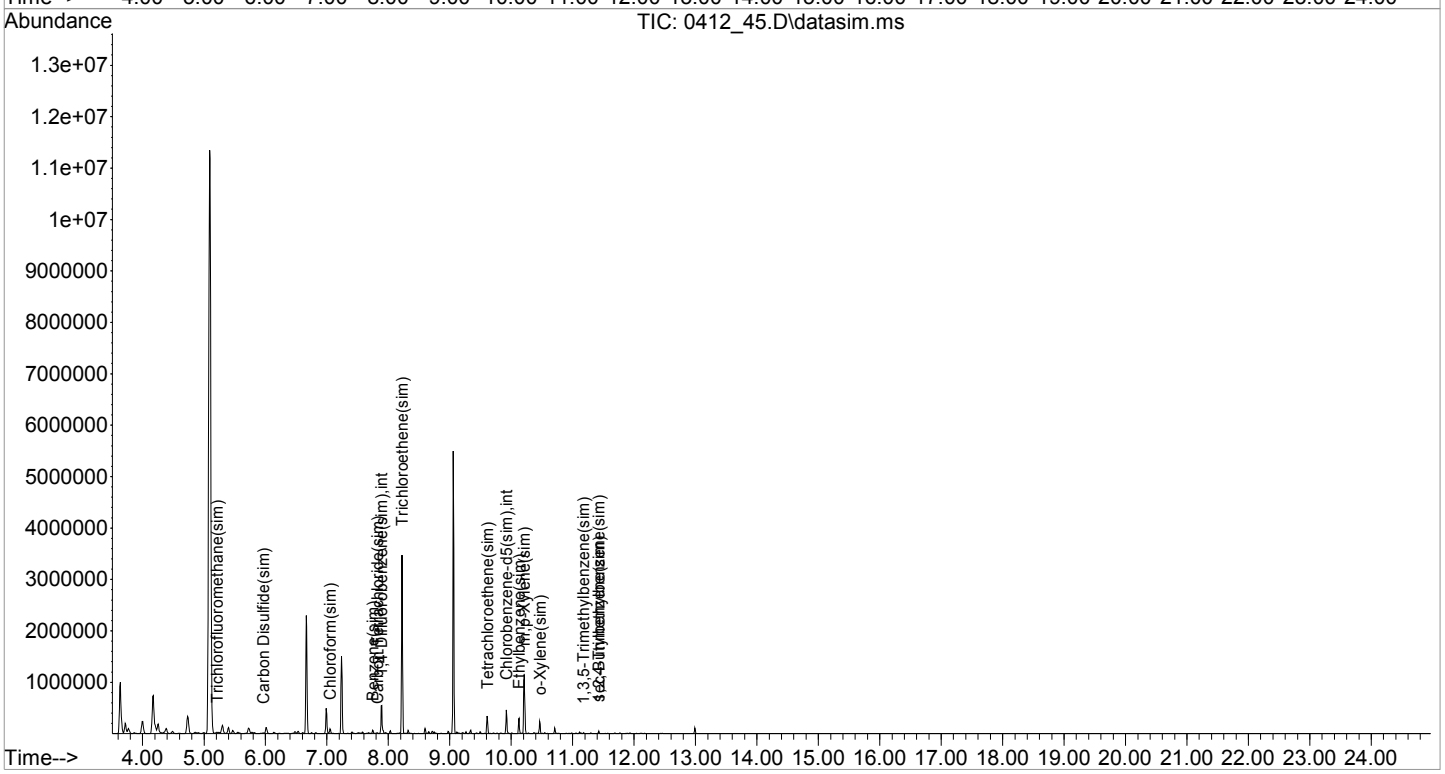
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.995	130	120476	10.000	ng		0.02
36) 1,4-Difluorobenzene	7.890	114	338244	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	153181	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.995	130	120476	10.000	ng		0.02
97) 1,4-Difluorobenzene(sim)	7.892	114	409724	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	159173	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	234453	11.254	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 112.50%				
Target Compounds							Qvalue
2) Propylene	3.635	41	599360	47.737	ppbv	#	85
11) Ethanol	4.738	45	340321	41.823	ppbv	#	92
12) Acetone	5.095	43	18139374	485.853	ppbv	#	69
13) Trichlorofluoromethane	5.208	101	12827	0.250	ppbv	#	97
20) Carbon Disulfide	5.965	76	18955	0.699	ppbv		96
24) Methyl tert-butyl ethe...	6.480	73	20530	0.824	ppbv	#	12
25) Methyl Ethyl Ketone	6.668	43	2313580m	89.024	ppbv		
28) Chloroform	7.049	83	38055	1.503	ppbv	#	83
30) Tetrahydrofuran	7.243	42	668224	65.206	ppbv	#	77
33) Benzene	7.749	78	49871	2.228	ppbv	#	82
34) Carbon Tetrachloride	7.823	117	7280	0.194	ppbv		95
39) Trichloroethene	8.221	130	1256748	87.292	ppbv		96
45) 4-Methyl-2-pentanone(M...	8.603	43	47904	2.383	ppbv	#	85
48) Toluene	9.062	91	2758324	116.628	ppbv	#	97
52) Tetrachloroethene	9.611	166	87889	4.587	ppbv		99
56) Ethylbenzene	10.127	91	165582	5.210	ppbv		98
57) m,p-Xylene	10.208	91	604862	23.320	ppbv		99
61) o-Xylene	10.467	91	109815	4.109	ppbv		99
67) 1,3,5-Trimethylbenzene	11.178	105	7773	0.237	ppbv	#	93
68) 1,2,4-Trimethylbenzene	11.423	105	23933	0.720	ppbv	#	89
85] Trichlorofluoromethane...	5.211	101	17243	0.258	ppbv		100
88] Carbon Tetrachloride(sim)	7.823	117	7280	0.192	ppbv		94
90] Carbon Disulfide(sim)	5.965	76	18955	0.665	ppbv		96
95] Chloroform(sim)	7.052	83	49012	1.510	ppbv	#	87
96] Benzene(sim)	7.749	78	49871	2.084	ppbv	#	82
100] Trichloroethene(sim)	8.221	130	1256688	84.280	ppbv		98
106] Tetrachloroethene(sim)	9.611	166	87719	4.666	ppbv		99
110] Ethylbenzene(sim)	10.127	91	165582	5.066	ppbv	#	97
111] m,p-Xylene(sim)	10.211	91	681895	23.932	ppbv		97
114] o-Xylene(sim)	10.467	91	109815	4.306	ppbv		98
118] 1,3,5-Trimethylbenzene...	11.178	105	7773	0.240	ppbv	#	91
119] 1,2,4-Trimethylbenzene...	11.426	105	24753	0.775	ppbv	#	84
124] sec-Butylbenzene(sim)	11.423	105	23938	0.843	ppbv		80

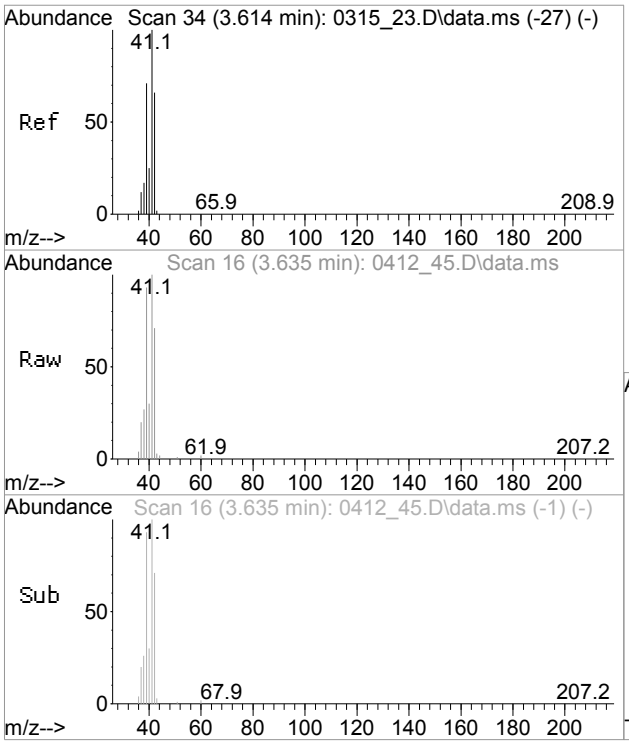
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_45.D
Acq On : 13 Apr 2017 09:57 pm
Operator : CORTEX\ms
Client ID : SS-1
Lab ID : BY03105
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:18:52 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration



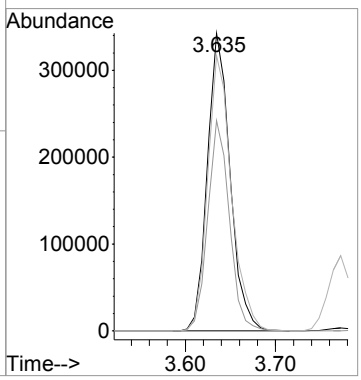


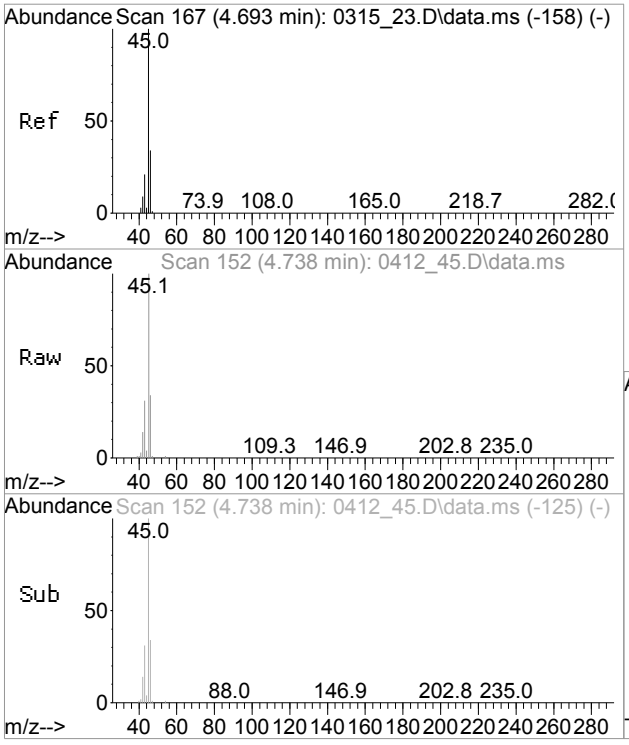


#2
Propylene
Concen: 47.74 ppbv
RT: 3.635 min Scan# 16
Delta R.T. -0.016 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 41 Resp: 599360

Ion	Ratio	Lower	Upper
41	100		
42	67.3	52.7	79.1
39	97.0	59.1	88.7#

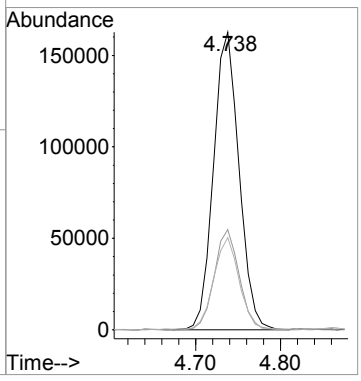


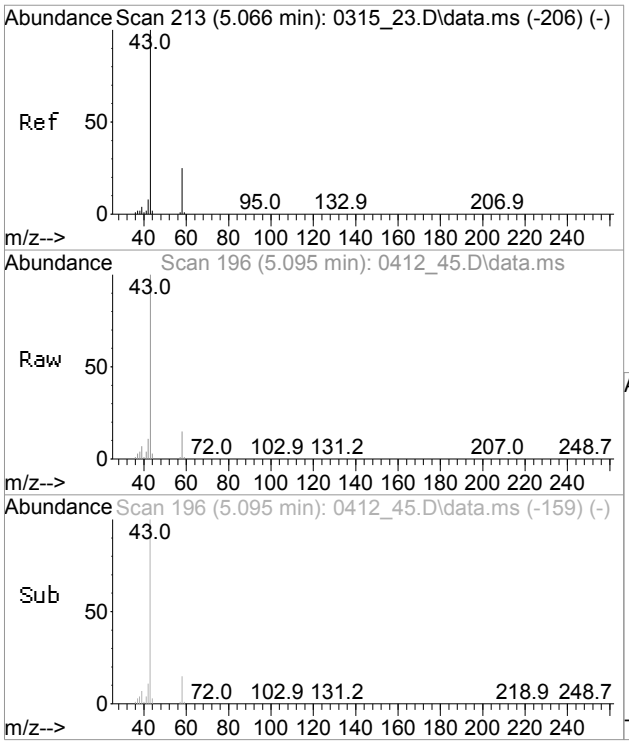


#11
Ethanol
Concen: 41.82 ppbv
RT: 4.738 min Scan# 152
Delta R.T. 0.016 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 45 Resp: 340321

Ion	Ratio	Lower	Upper
45	100		
46	32.9	28.5	42.7
43	31.6	19.7	29.5#

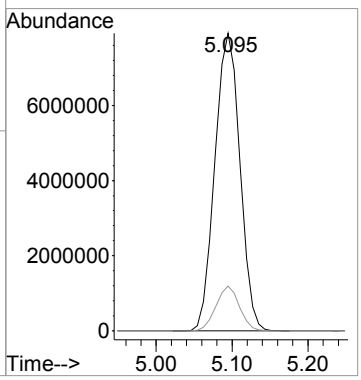


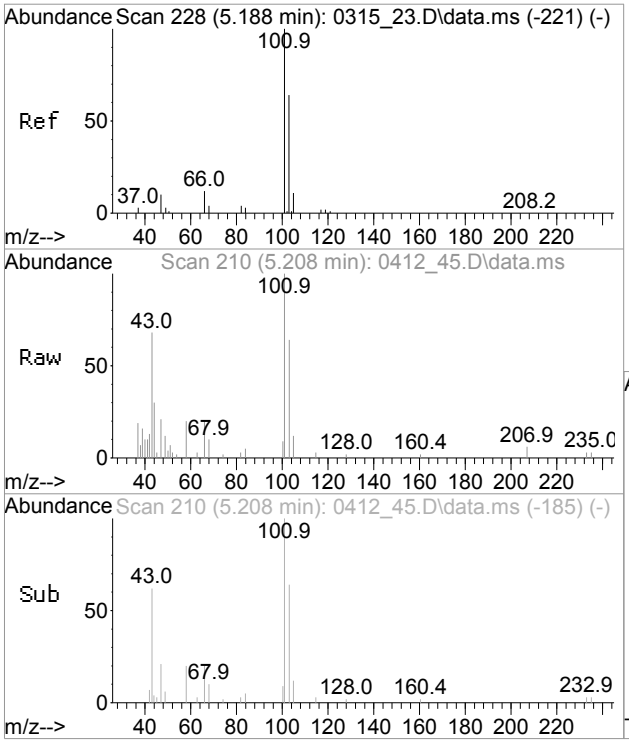


#12
Acetone
Concen: 485.85 ppbv
RT: 5.095 min Scan# 196
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 43 Resp:18139374

Ion	Ratio	Lower	Upper
43	100		
58	14.1	24.8	37.2#

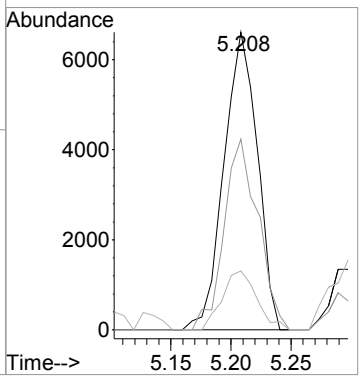


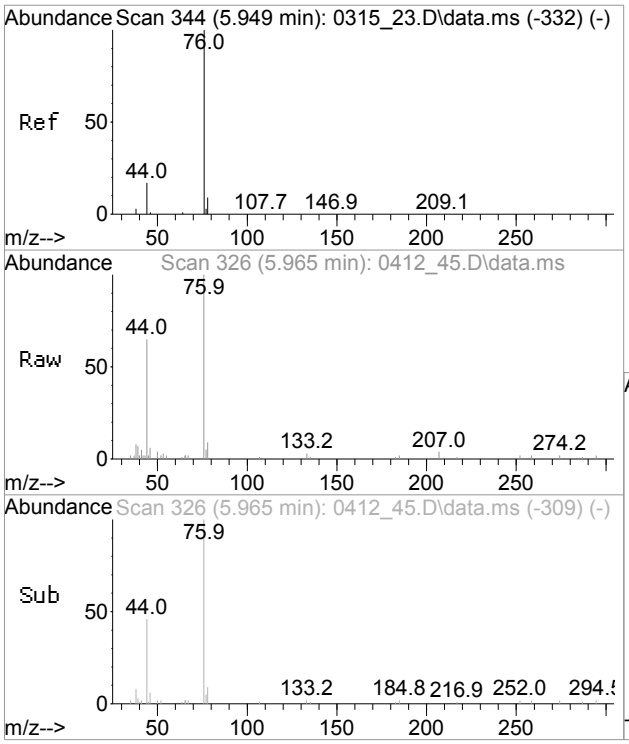


#13
Trichlorofluoromethane
Concen: 0.25 ppbv
RT: 5.208 min Scan# 210
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:101 Resp: 12827

Ion	Ratio	Lower	Upper
101	100		
103	65.3	51.8	77.8
66	20.5	11.1	16.7#

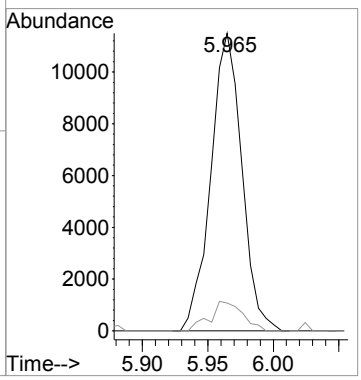


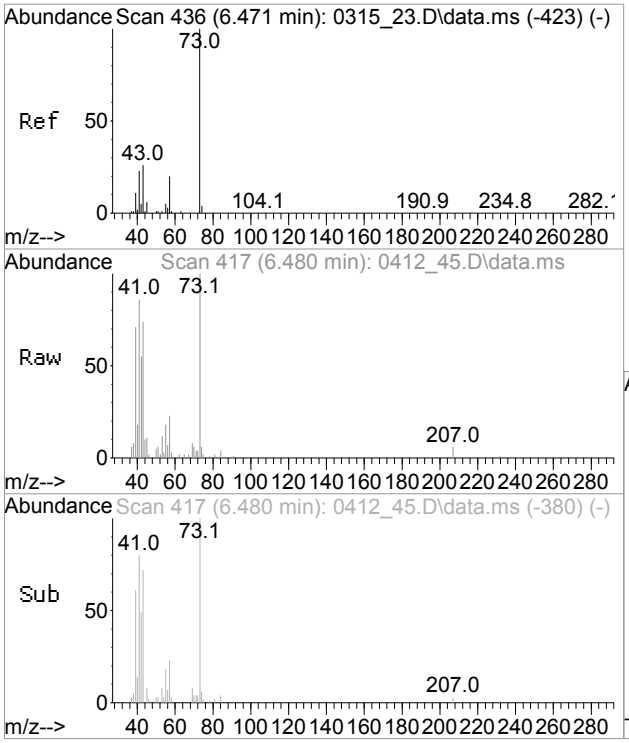


#20
Carbon Disulfide
Concen: 0.70 ppbv
RT: 5.965 min Scan# 326
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 76 Resp: 18955

Ion	Ratio	Lower	Upper
76	100		
78	10.4	7.3	10.9

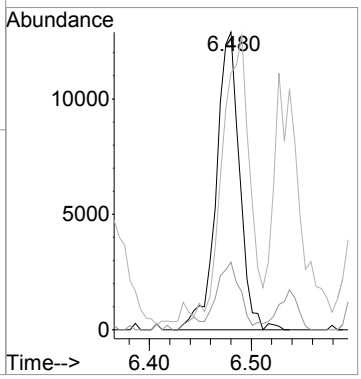


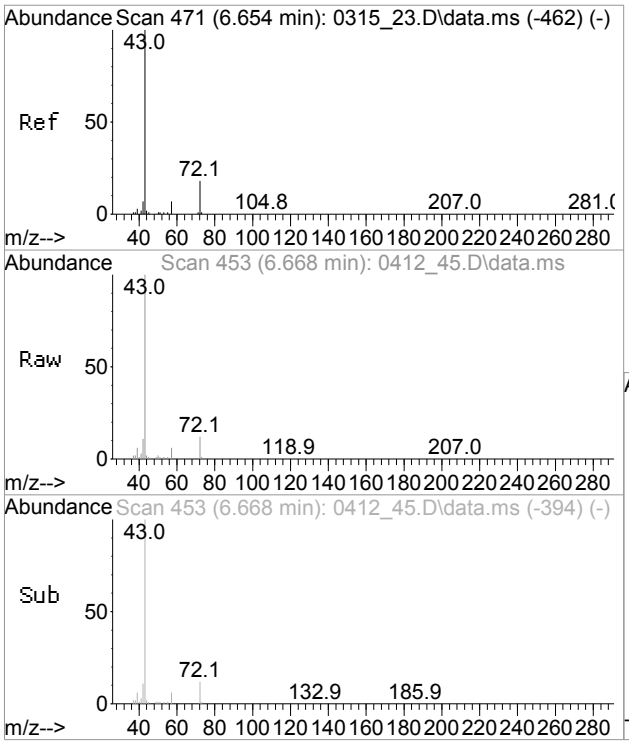


#24
Methyl tert-butyl ether(MTBE)
Concen: 0.82 ppbv
RT: 6.480 min Scan# 417
Delta R.T. -0.005 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 73 Resp: 20530

Ion	Ratio	Lower	Upper
73	100		
57	18.9	18.8	28.2
41	106.0	19.8	29.6#

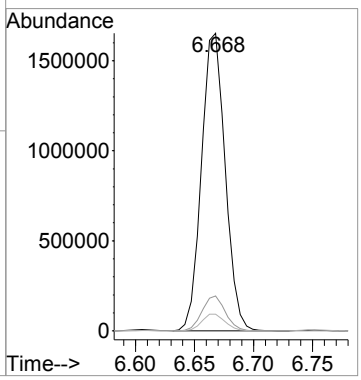


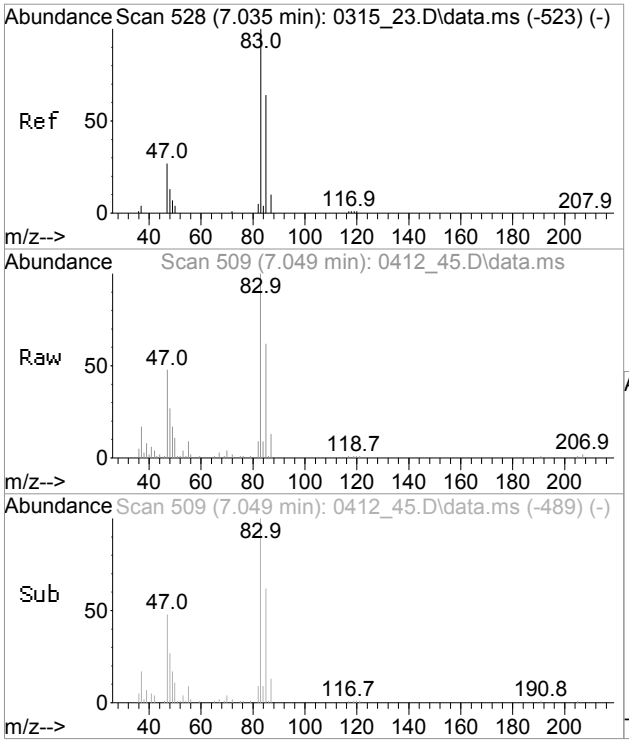


#25
Methyl Ethyl Ketone
Concen: 89.02 ppbv m
RT: 6.668 min Scan# 453
Delta R.T. 0.005 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 43 Resp: 2313580

Ion	Ratio	Lower	Upper
43	100		
72	11.5	15.9	23.9#
57	5.6	5.6	8.4#

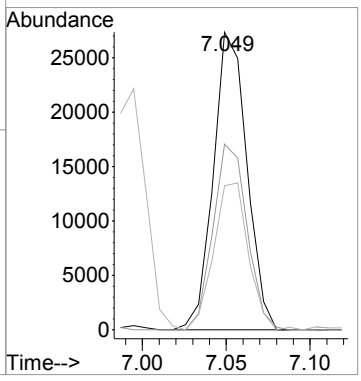


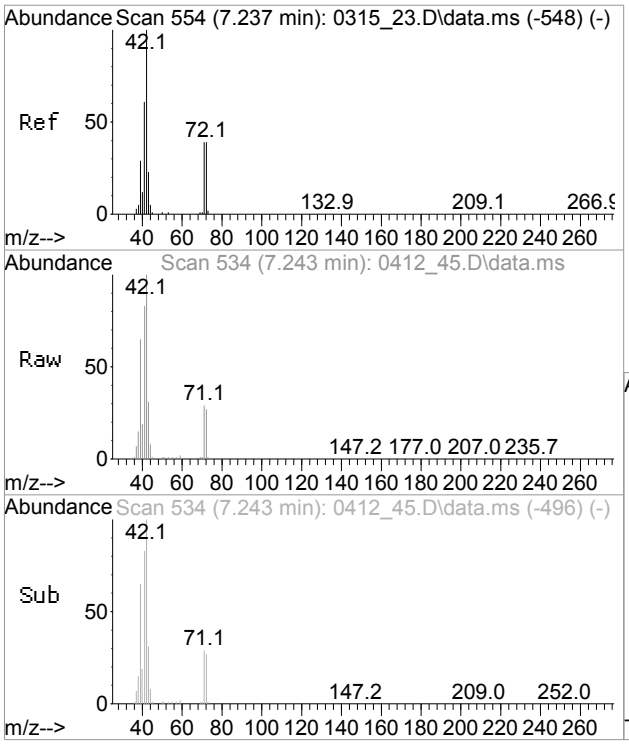


#28
Chloroform
Concen: 1.50 ppbv
RT: 7.049 min Scan# 509
Delta R.T. 0.008 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 83 Resp: 38055

Ion	Ratio	Lower	Upper
83	100		
85	63.4	46.0	86.0
47	51.2	4.6	44.6#

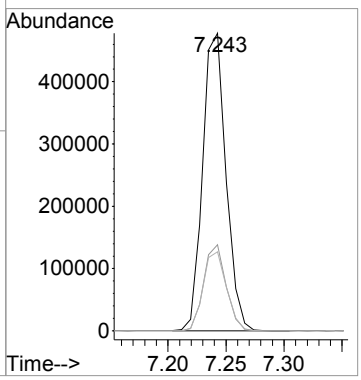


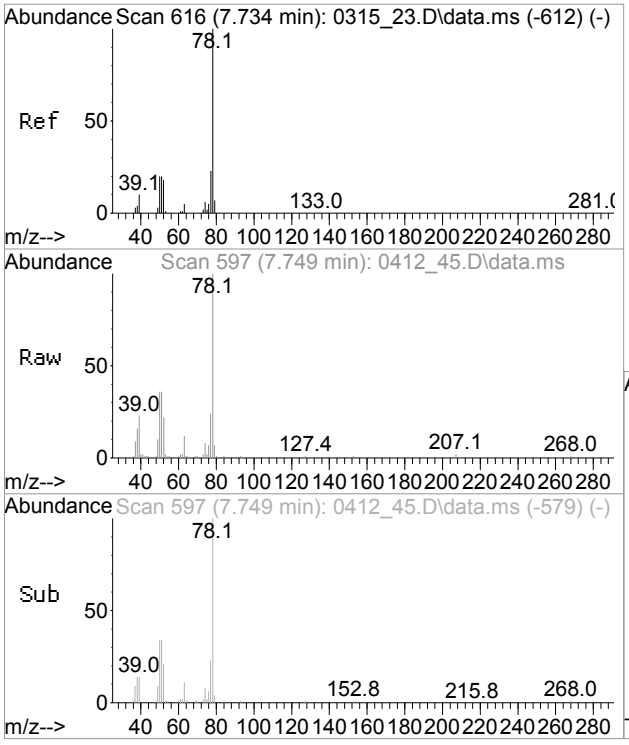


#30
Tetrahydrofuran
Concen: 65.21 ppbv
RT: 7.243 min Scan# 534
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 42 Resp: 668224

Ion	Ratio	Lower	Upper
42	100		
71	27.8	33.8	50.6#
72	26.7	33.1	49.7#

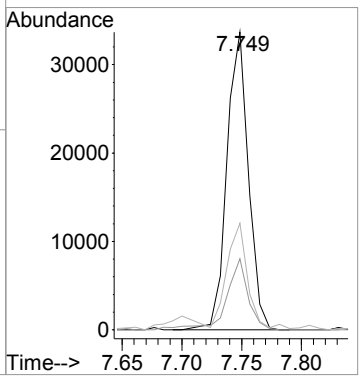


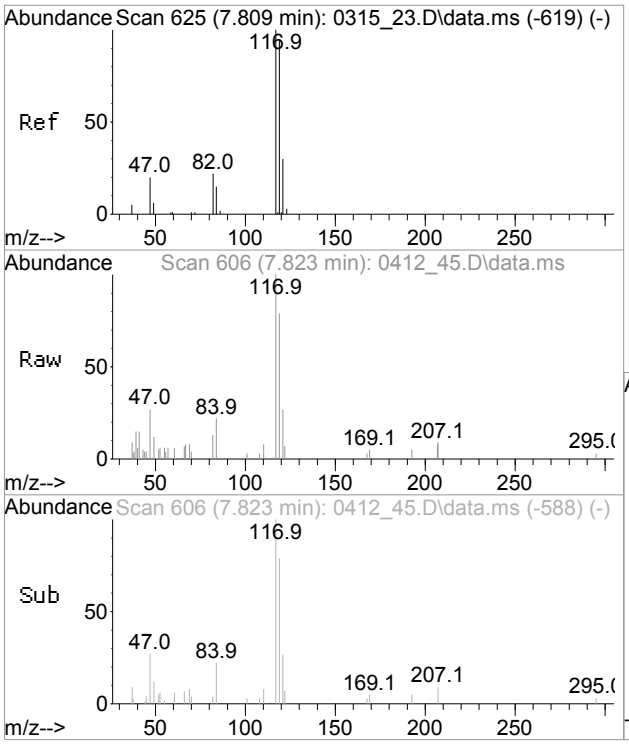


#33
Benzene
Concen: 2.23 ppbv
RT: 7.749 min Scan# 597
Delta R.T. 0.009 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 78 Resp: 49871

Ion	Ratio	Lower	Upper
78	100		
77	22.3	18.6	27.8
51	35.9	14.9	22.3#

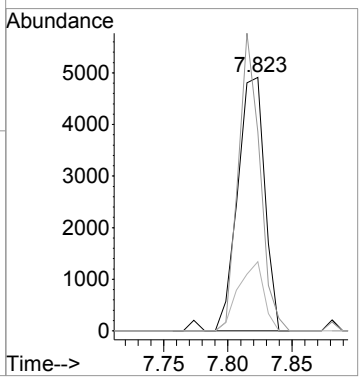


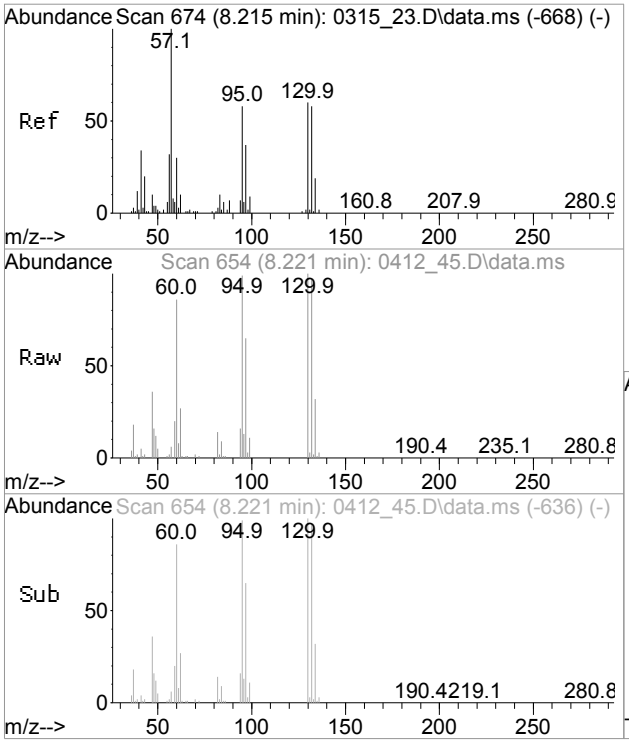


#34
Carbon Tetrachloride
Concen: 0.19 ppbv
RT: 7.823 min Scan# 606
Delta R.T. 0.009 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:117 Resp: 7280

Ion	Ratio	Lower	Upper
117	100		
119	92.4	75.9	115.9
121	25.5	10.8	50.8

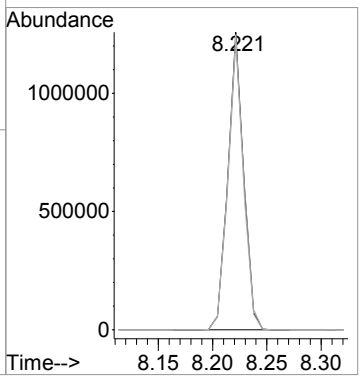


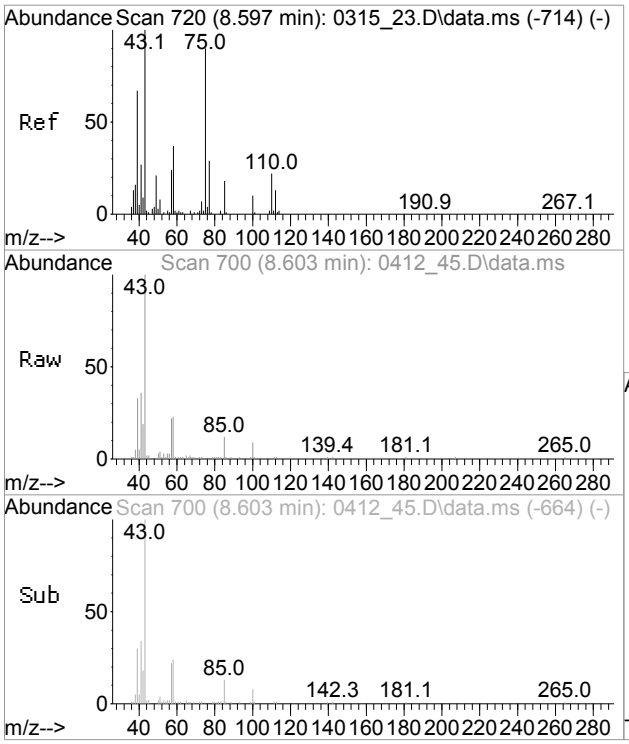


#39
Trichloroethene
Concen: 87.29 ppbv
RT: 8.221 min Scan# 654
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:130 Resp: 1256748

Ion	Ratio	Lower	Upper
130	100		
132	98.1	77.2	115.8
95	97.3	82.7	124.1

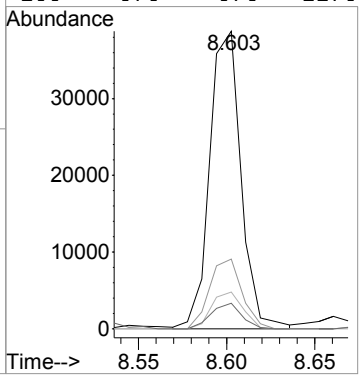


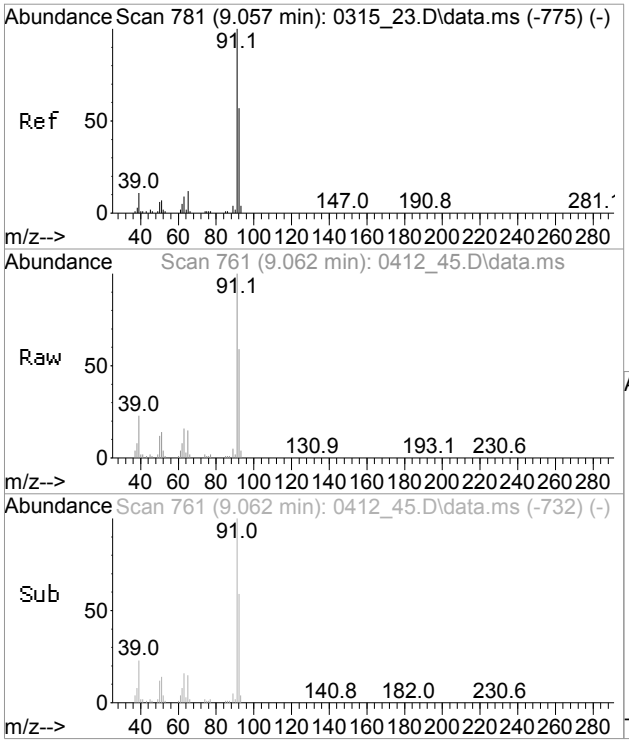


#45
4-Methyl-2-pentanone(MIBK)
Concen: 2.38 ppbv
RT: 8.603 min Scan# 700
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 43 Resp: 47904

Ion	Ratio	Lower	Upper
43	100		
58	24.4	29.4	44.2#
85	12.5	13.4	20.0#
100	8.5	8.0	12.0

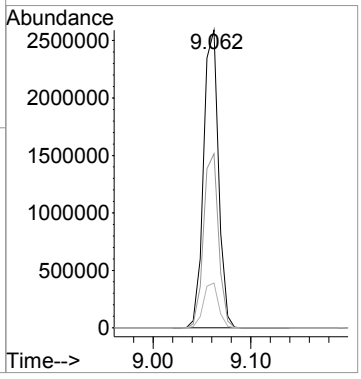


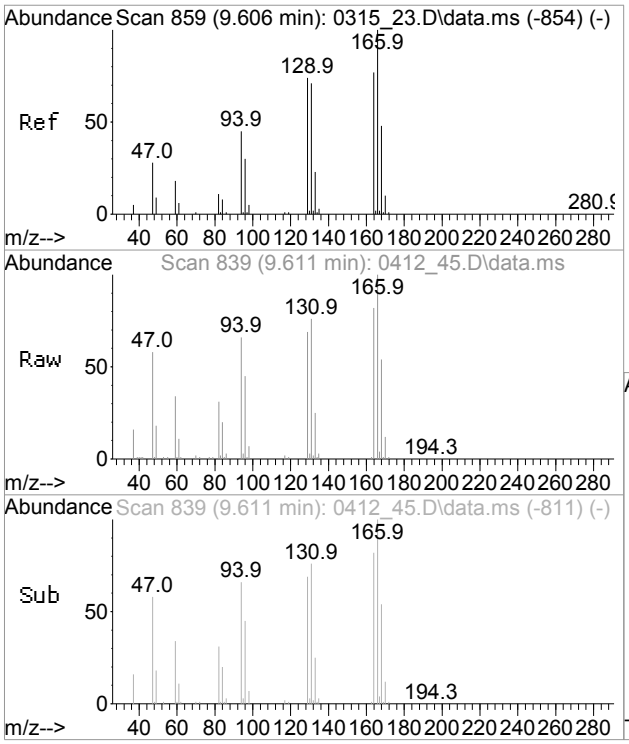


#48
Toluene
Concen: 116.63 ppbv
RT: 9.062 min Scan# 761
Delta R.T. 0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 2758324

Ion	Ratio	Lower	Upper
91	100		
92	58.7	47.7	71.5
65	15.3	9.5	14.3#

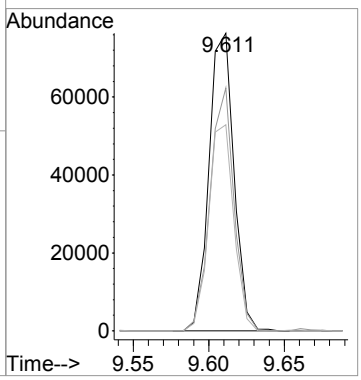


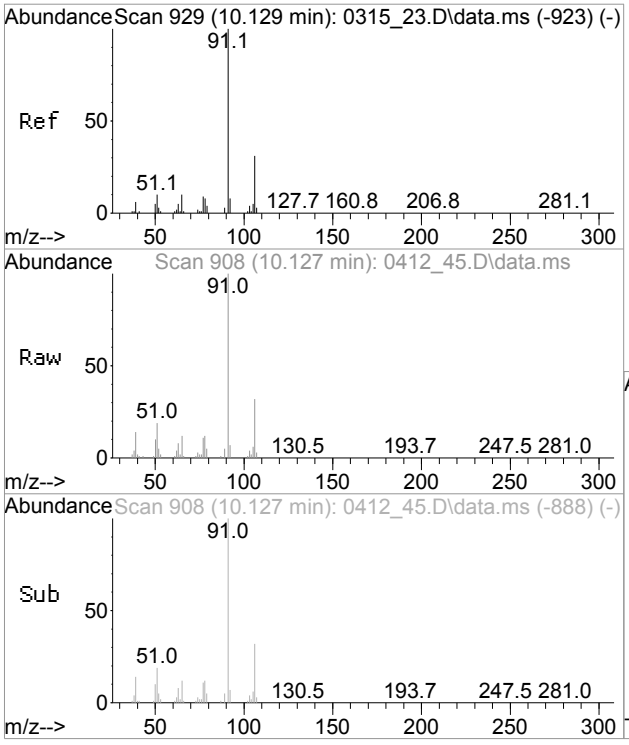


#52
Tetrachloroethene
Concen: 4.59 ppbv
RT: 9.611 min Scan# 839
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:166 Resp: 87889

Ion	Ratio	Lower	Upper
166	100		
164	78.1	62.2	93.4
129	69.8	56.6	84.8

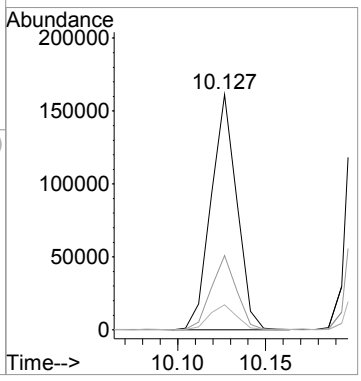


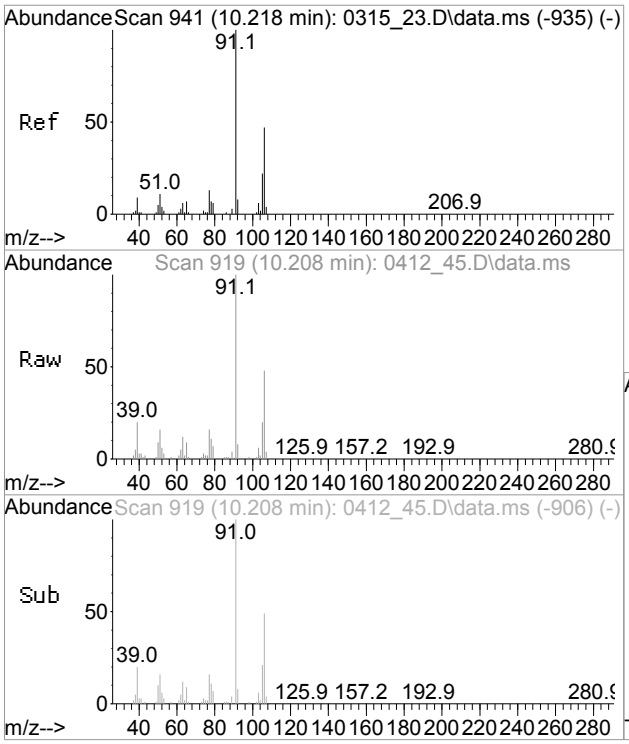


#56
Ethylbenzene
Concen: 5.21 ppbv
RT: 10.127 min Scan# 908
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 165582

Ion	Ratio	Lower	Upper
91	100		
106	31.0	10.8	50.8
77	11.5	0.0	28.9

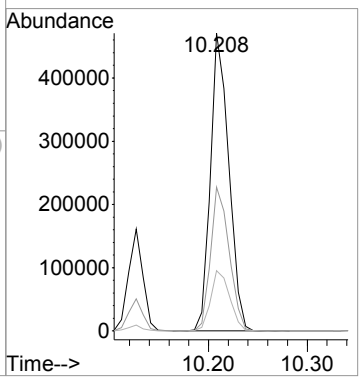


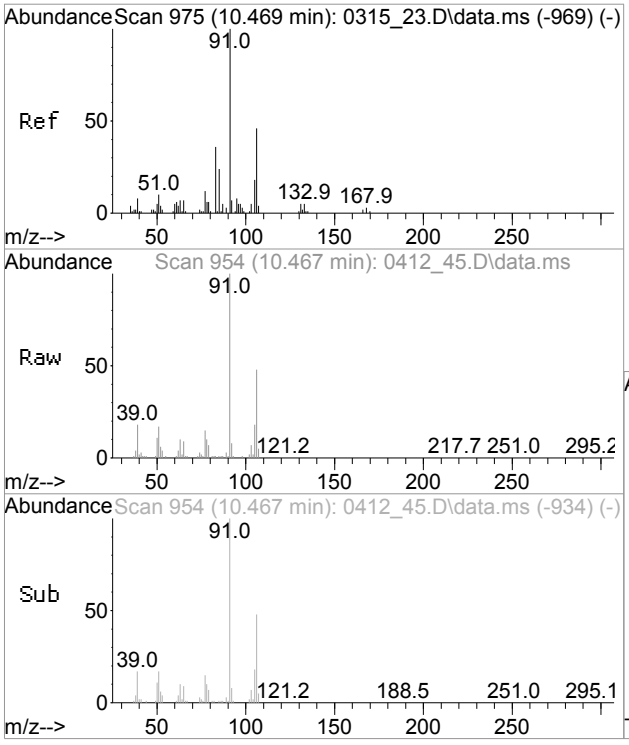


#57
m,p-Xylene
Concen: 23.32 ppbv
RT: 10.208 min Scan# 919
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 604862

Ion	Ratio	Lower	Upper
91	100		
106	49.1	38.7	58.1
105	21.0	16.6	25.0

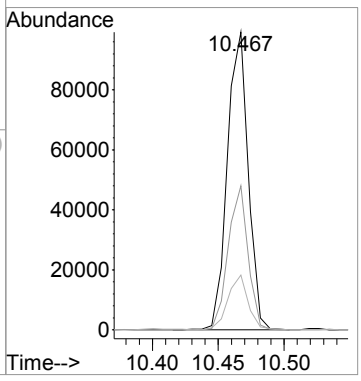


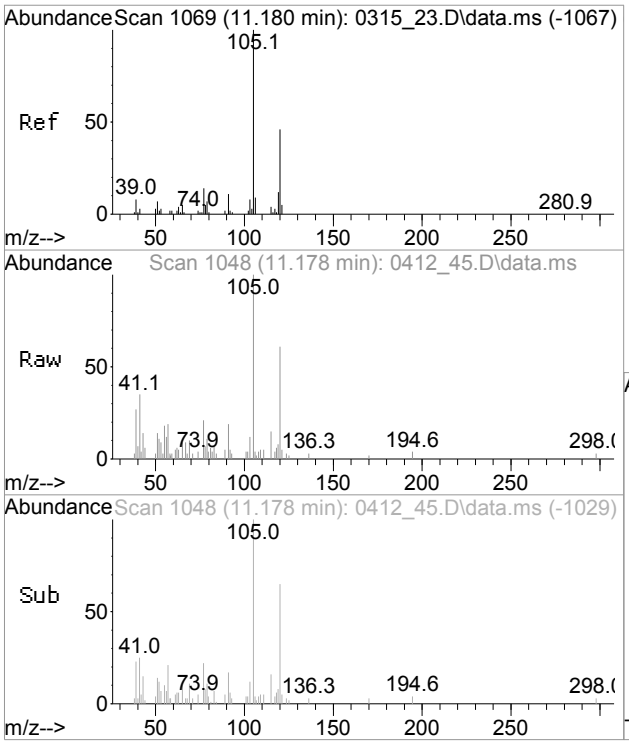


#61
o-Xylene
Concen: 4.11 ppbv
RT: 10.467 min Scan# 954
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 109815

Ion	Ratio	Lower	Upper
91	100		
106	46.1	37.4	56.2
105	18.0	14.1	21.1

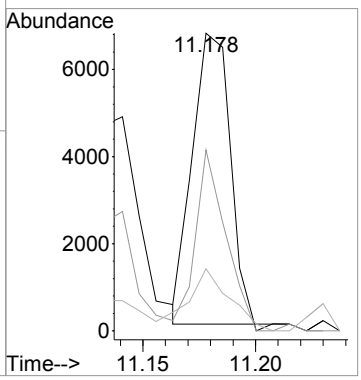


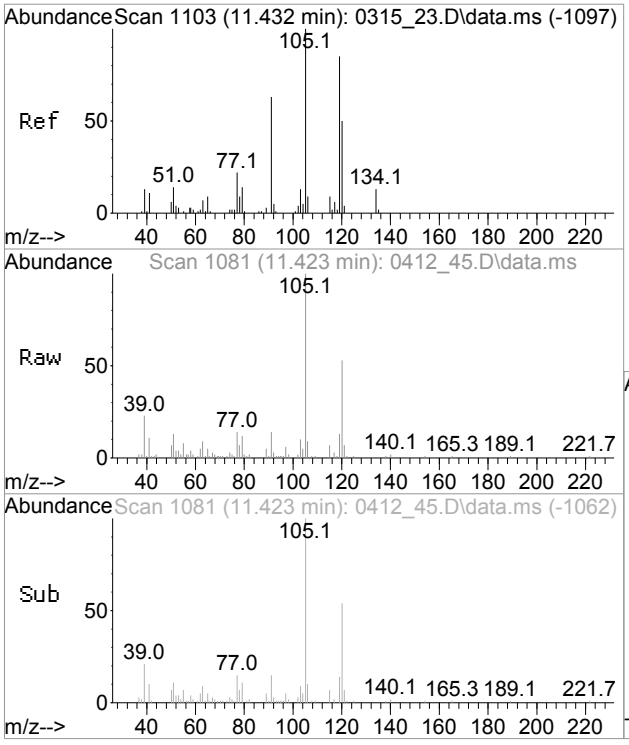


#67
1,3,5-Trimethylbenzene
Concen: 0.24 ppbv
RT: 11.178 min Scan# 1048
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:105 Resp: 7773

Ion	Ratio	Lower	Upper
105	100		
120	49.8	38.6	57.8
77	23.5	11.3	16.9#

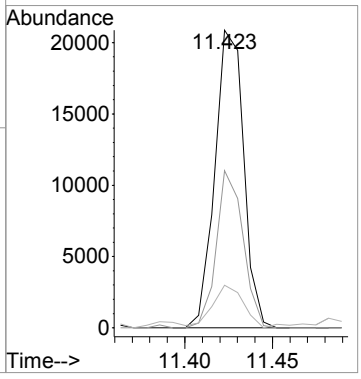


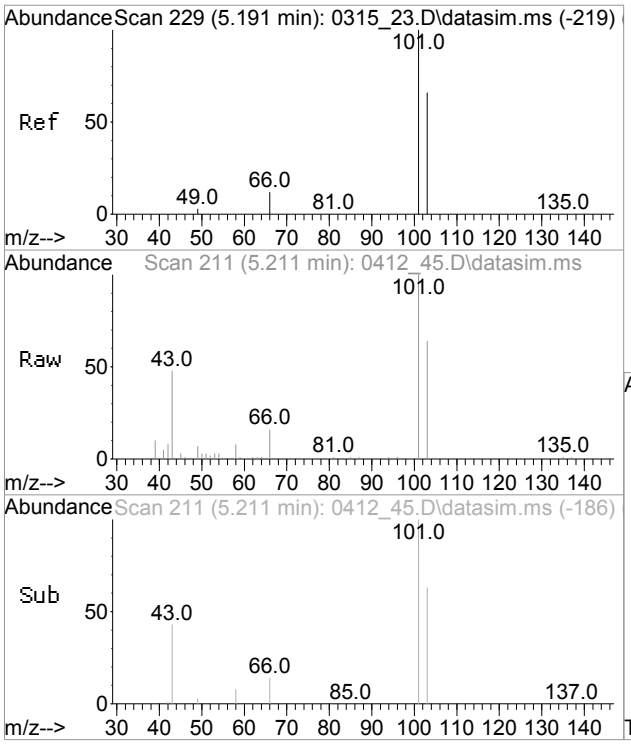


#68
1,2,4-Trimethylbenzene
Concen: 0.72 ppbv
RT: 11.423 min Scan# 1081
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:105 Resp: 23933

Ion	Ratio	Lower	Upper
105	100		
120	48.8	43.5	65.3
77	16.0	20.2	30.4#

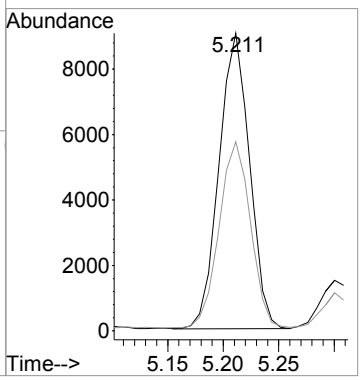


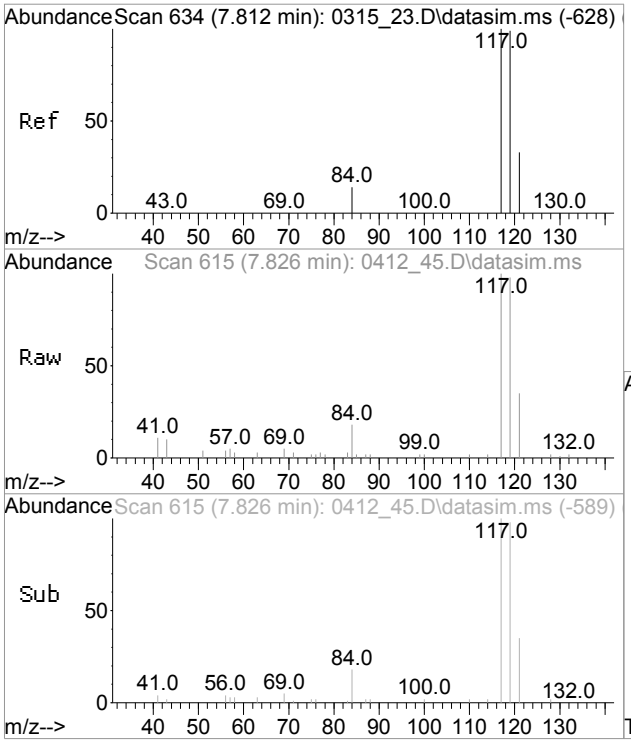


#85
Trichlorofluoromethane(sim)
Concen: 0.26 ppbv
RT: 5.211 min Scan# 211
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:101 Resp: 17243

Ion	Ratio	Lower	Upper
101	100		
103	64.8	52.0	78.0

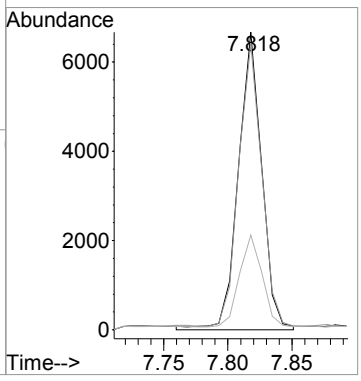


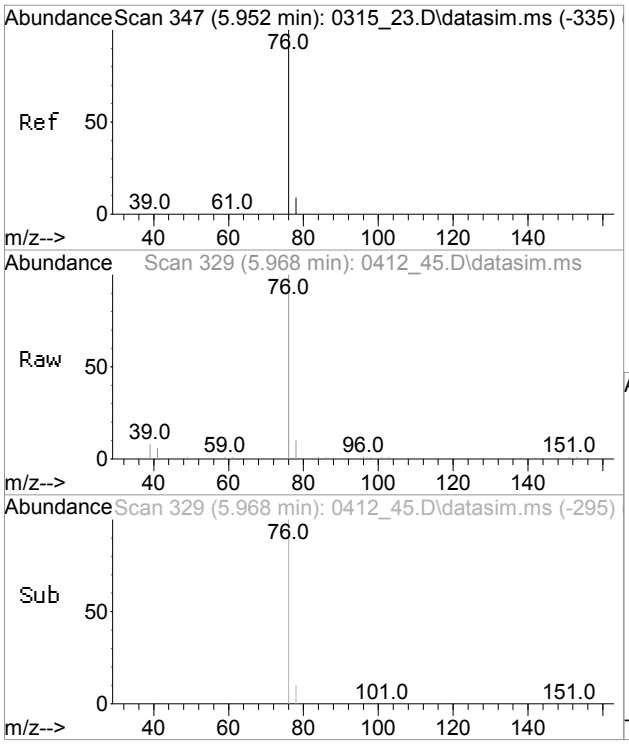


#88
Carbon Tetrachloride(sim)
Concen: 0.19 ppbv
RT: 7.823 min Scan# 615
Delta R.T. 0.009 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:117 Resp: 7280

Ion	Ratio	Lower	Upper
117	100		
119	91.3	76.7	115.1
121	25.5	24.6	37.0

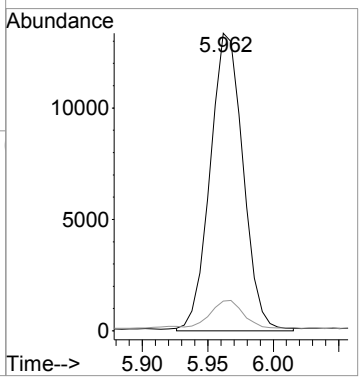


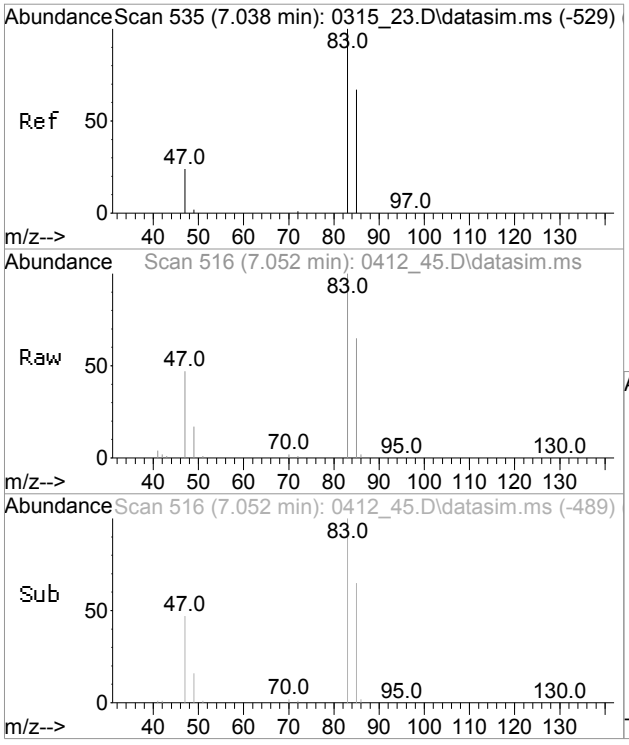


#90
Carbon Disulfide(sim)
Concen: 0.67 ppbv
RT: 5.965 min Scan# 329
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 76 Resp: 18955

Ion	Ratio	Lower	Upper
76	100		
78	10.4	7.3	10.9

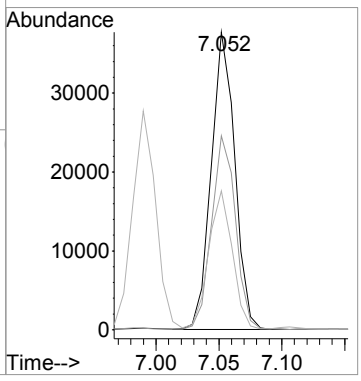


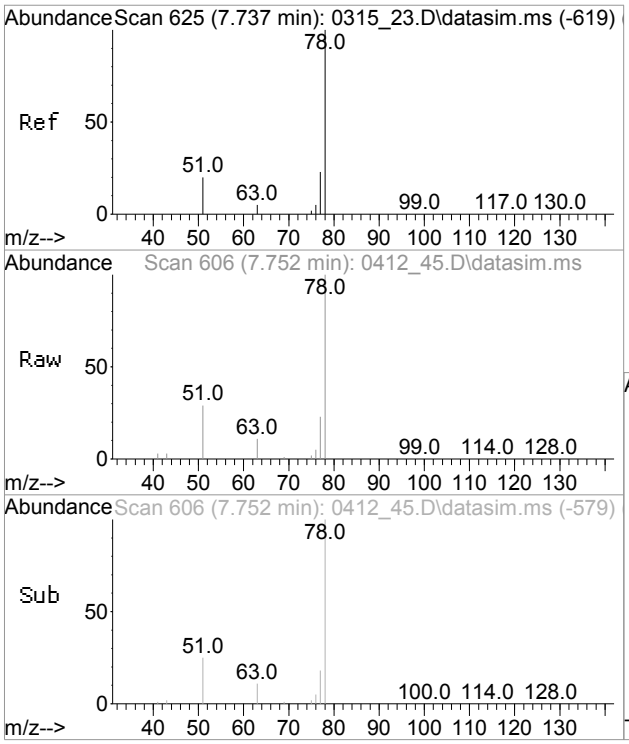


#95
Chloroform(sim)
Concen: 1.51 ppbv
RT: 7.052 min Scan# 516
Delta R.T. 0.008 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 83 Resp: 49012

Ion	Ratio	Lower	Upper
83	100		
85	66.2	62.7	67.9
47	46.8	19.4	29.0#

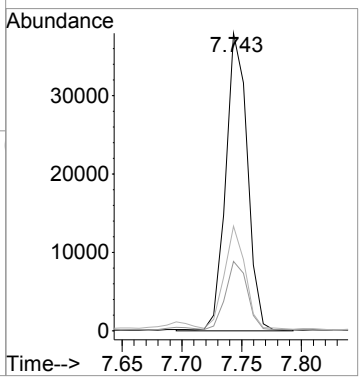


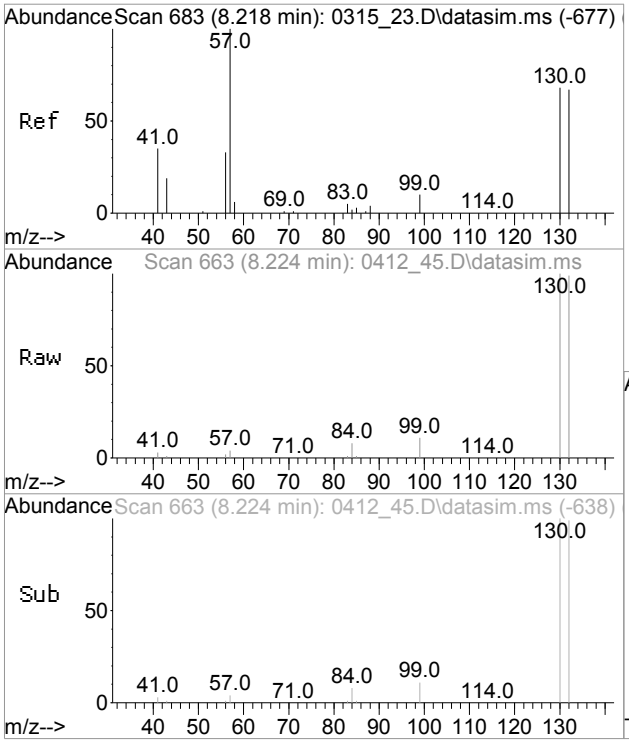


#96
Benzene(sim)
Concen: 2.08 ppbv
RT: 7.749 min Scan# 606
Delta R.T. 0.009 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 78 Resp: 49871

Ion	Ratio	Lower	Upper
78	100		
77	22.3	22.0	24.4
51	35.7	14.9	22.3#

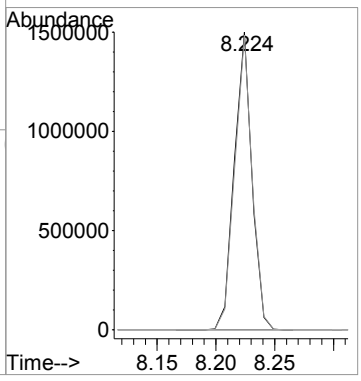


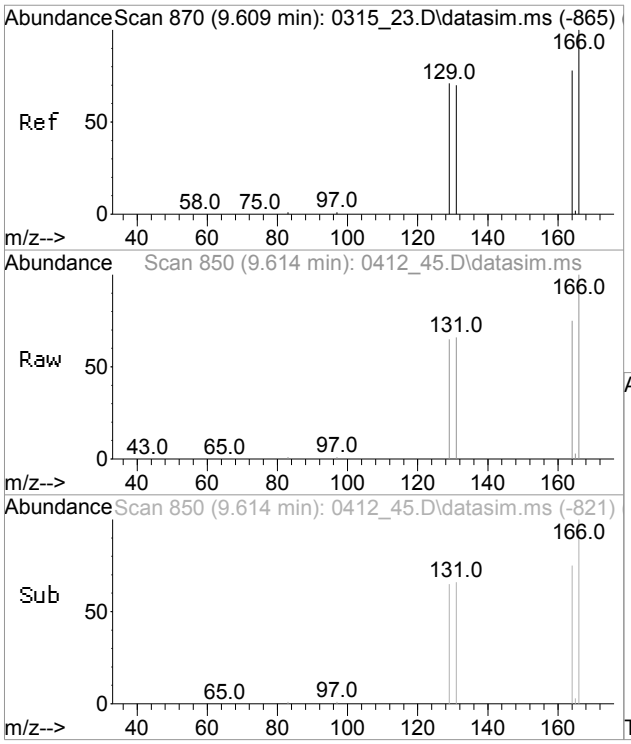


#100
Trichloroethene(sim)
Concen: 84.28 ppbv
RT: 8.221 min Scan# 663
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:130 Resp: 1256688

Ion	Ratio	Lower	Upper
130	100		
132	98.1	77.2	115.8
97	64.1	53.5	80.3

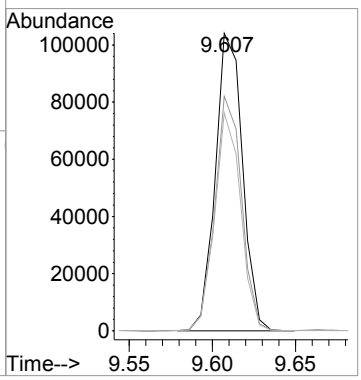


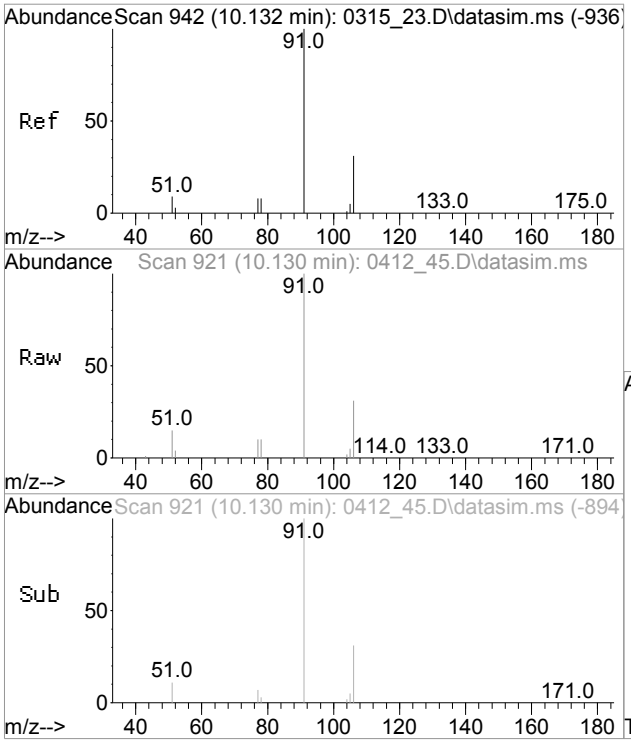


#106
Tetrachloroethene(sim)
Concen: 4.67 ppbv
RT: 9.611 min Scan# 850
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:166 Resp: 87719

Ion	Ratio	Lower	Upper
166	100		
164	78.3	57.8	97.8
129	70.0	50.7	90.7

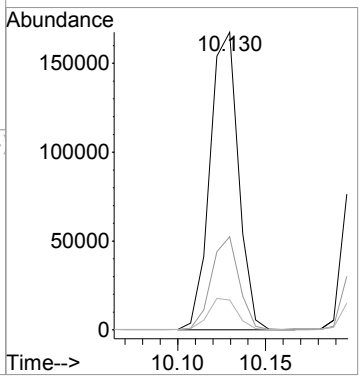


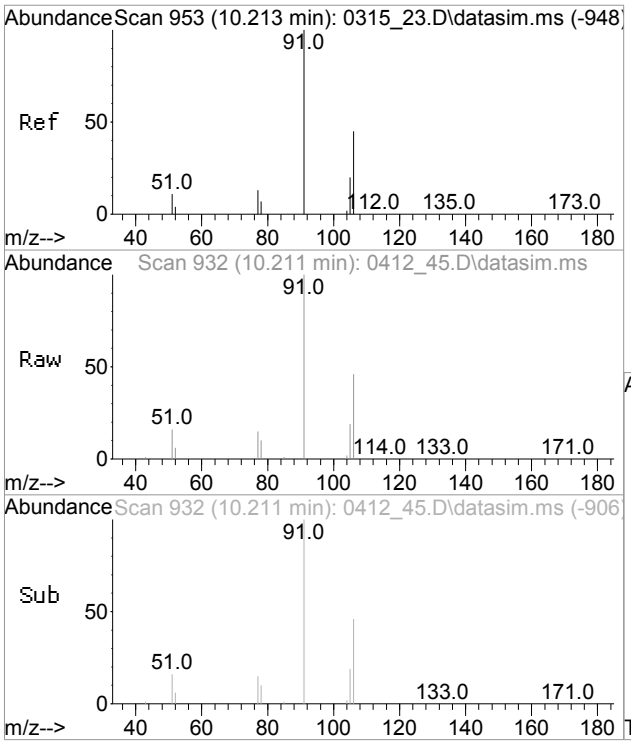


#110
Ethylbenzene(sim)
Concen: 5.07 ppbv
RT: 10.127 min Scan# 921
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 165582

Ion	Ratio	Lower	Upper
91	100		
106	31.0	24.0	36.0
77	11.5	7.3	10.9#

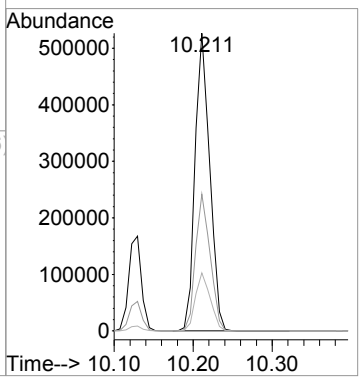


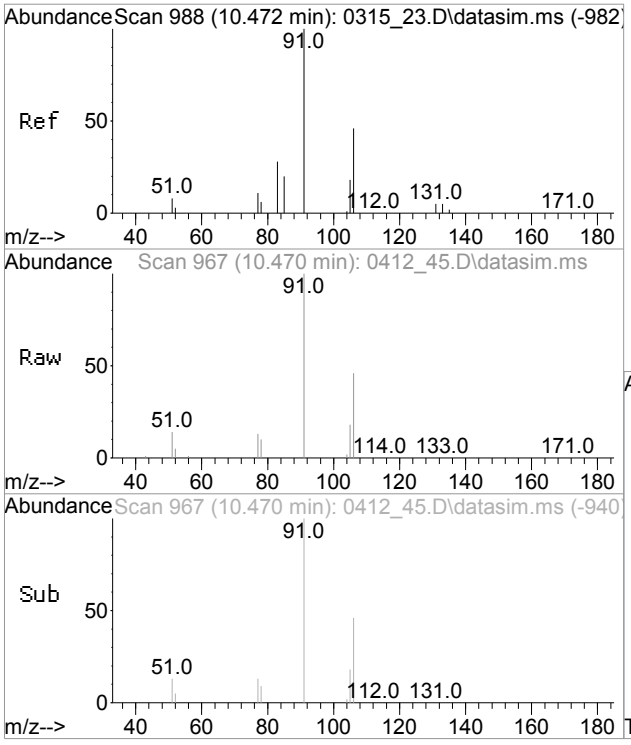


#111
m,p-Xylene(sim)
Concen: 23.93 ppbv
RT: 10.211 min Scan# 932
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 681895

Ion	Ratio	Lower	Upper
91	100		
106	45.7	43.6	53.2
105	19.7	16.6	25.0

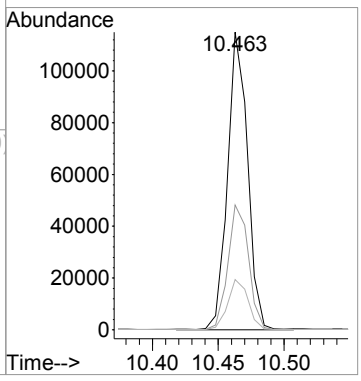


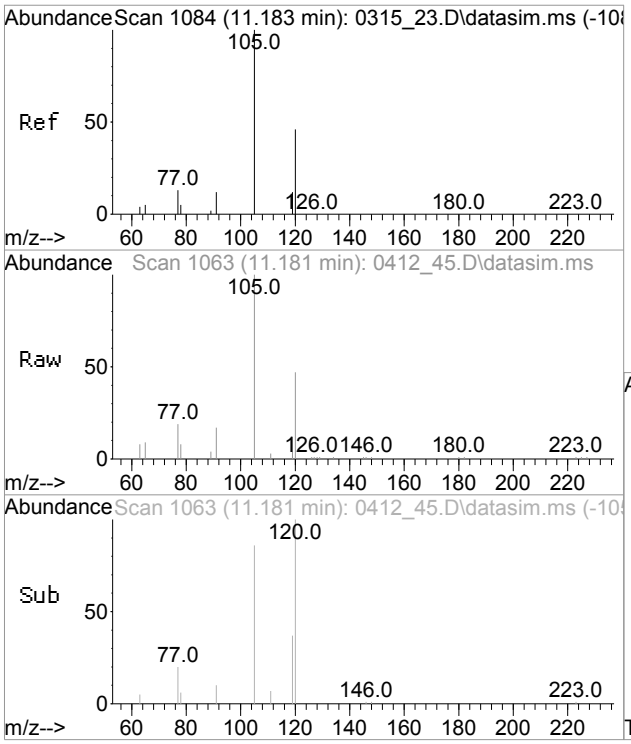


#114
o-Xylene(sim)
Concen: 4.31 ppbv
RT: 10.467 min Scan# 967
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion: 91 Resp: 109815

Ion	Ratio	Lower	Upper
91	100		
106	46.1	36.0	54.0
105	18.0	13.8	20.8

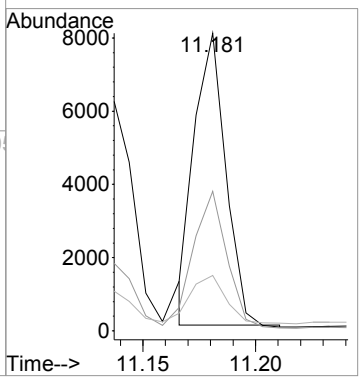


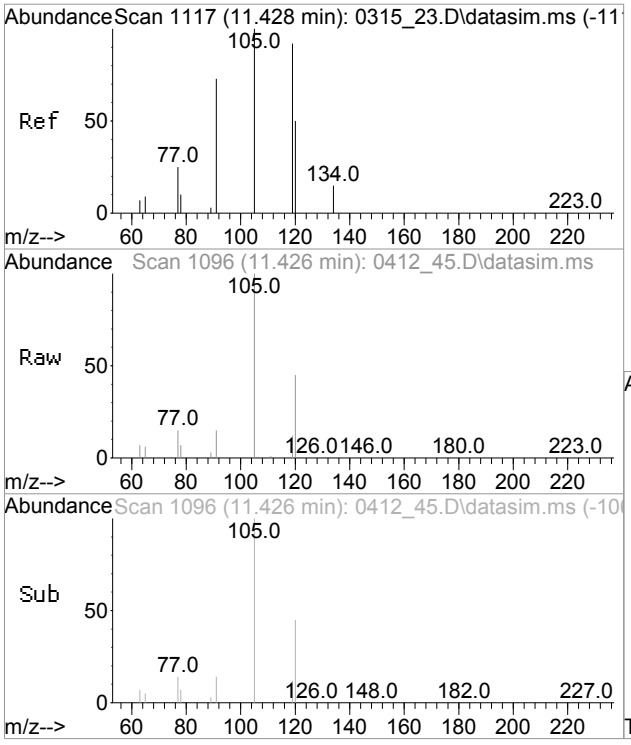


#118
1,3,5-Trimethylbenzene(sim)
Concen: 0.24 ppbv
RT: 11.178 min Scan# 1063
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:105 Resp: 7773

Ion	Ratio	Lower	Upper
105	100		
120	49.8	10.6	82.0
77	23.5	11.4	17.2#

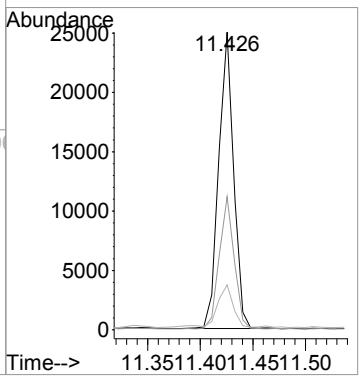


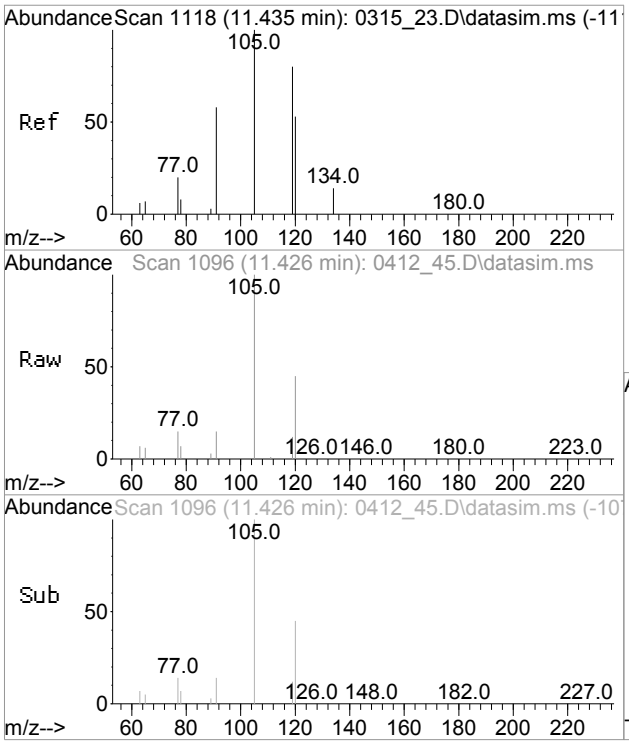


#119
1,2,4-Trimethylbenzene(sim)
Concen: 0.78 ppbv
RT: 11.426 min Scan# 1096
Delta R.T. 0.000 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:105 Resp: 24753

Ion	Ratio	Lower	Upper
105	100		
120	44.4	43.5	65.3
77	15.6	20.2	30.4#

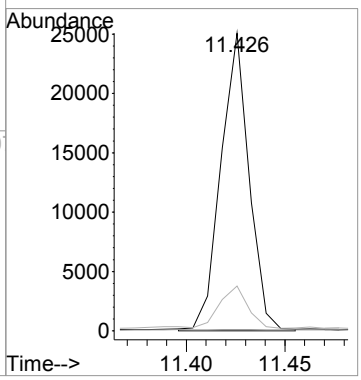




#124
sec-Butylbenzene(sim)
Concen: 0.84 ppbv
RT: 11.423 min Scan# 1096
Delta R.T. -0.007 min
Lab File: 0412_45.D
Acq: 13 Apr 2017 09:57 pm

Tgt Ion:105 Resp: 23938

Ion	Ratio	Lower	Upper
105	100		
134	0.7	0.0	35.9
77	15.2	0.0	34.1



1

CLIENT ID

AIR ANALYSIS DATA SHEET

SS-1 DIL

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03105 30X

Canister: 12864 Lab File ID: 0417_08.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 30

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	46.4	D	17.4	17.4	r
64-17-5	Ethanol	15.9	U	15.9	15.9	
67-64-1	Acetone	293	DS	12.6	12.6	r
75-15-0	Carbon Disulfide	9.64	U	9.64	9.64	
1634-04-4	Methyl tert-butyl ether(MTBE)	8.33	U	8.33	8.33	
78-93-3	Methyl Ethyl Ketone	54.5	D	10.2	10.2	r
67-66-3	Chloroform	6.15	U	6.15	6.15	
109-99-9	Tetrahydrofuran	29.5	D	10.2	10.2	r
71-43-2	Benzene	9.40	U	9.40	9.40	
79-01-6	Trichloroethene	59.2	D	1.40	1.40	r
108-10-1	4-Methyl-2-pentanone(MIBK)	7.33	U	7.33	7.33	
108-88-3	Toluene	64.5	D	7.97	7.97	r
100-41-4	Ethylbenzene	6.91	U	6.91	6.91	
179601-23-1	m,p-Xylene	14.0	X	6.91	6.91	
95-47-6	o-Xylene	6.91	U	6.91	6.91	
108-67-8	1,3,5-Trimethylbenzene	6.11	U	6.11	6.11	
95-63-6	1,2,4-Trimethylbenzene	6.11	U	6.11	6.11	

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

This form 1 and the associated quantitation report are filtered for detected compounds in the undiluted analysis.

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_08.D
Acq On : 17 Apr 2017 1:11 pm
Operator : Keith
Client ID : SS-1 DIL
Lab ID : BY03105 30X
ALS Vial : 12 Sample Multiplier: 1

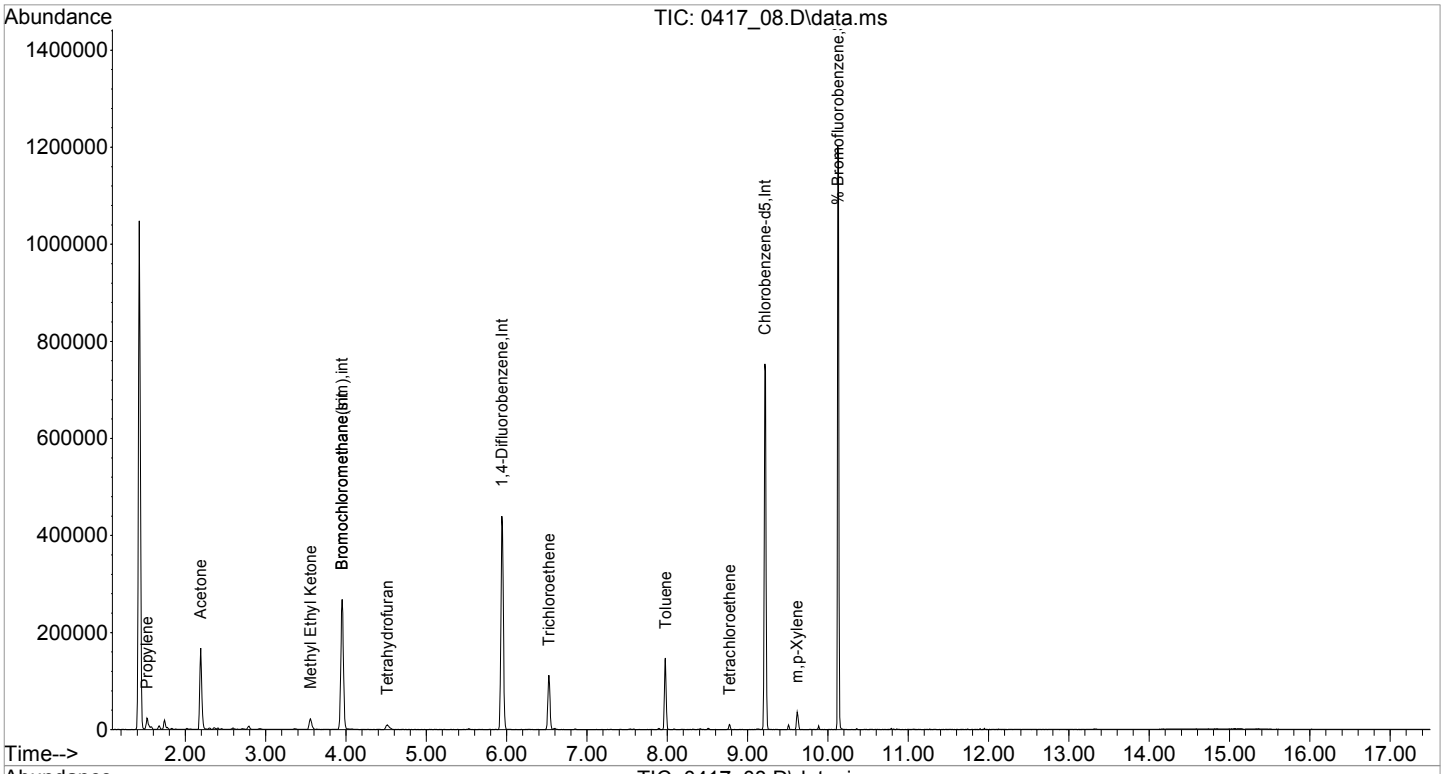
Quant Time: Apr 17 15:03:43 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

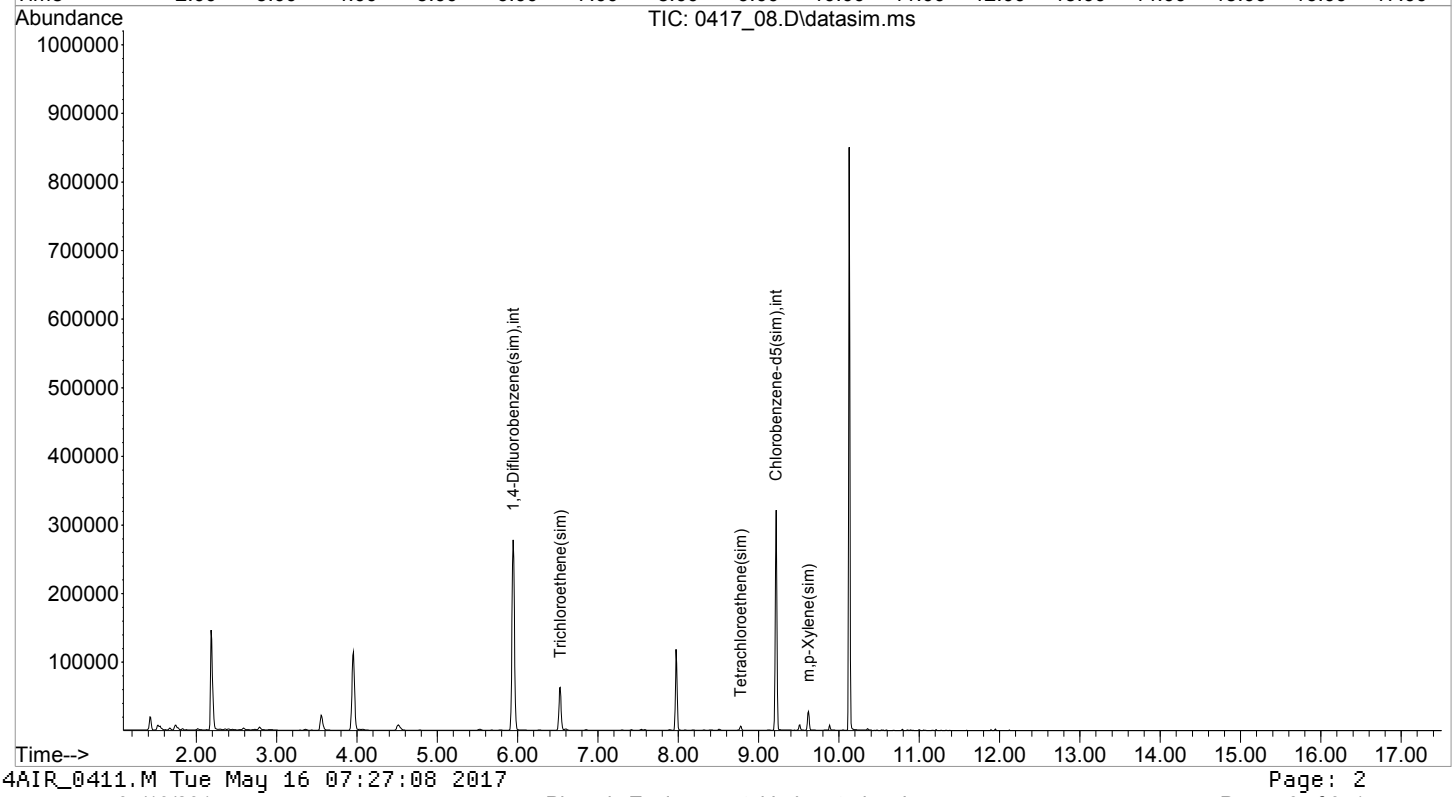
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.951	130	110806	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.941	114	383039	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	190849	10.000	ng		0.00
80) Bromochloromethane(sim)	3.951	130	110806	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.944	114	418167	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.218	82	202729	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	265612	10.590	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.90%				
Target Compounds							Qvalue
2) Propylene	1.520	41	9395	1.545	ppbv#		87
12) Acetone	2.189	43	186129	9.783	ppbv		96
25) Methyl Ethyl Ketone	3.558	43	32593	1.818	ppbv		96
30) Tetrahydrofuran	4.511	42	7714	0.982	ppbv		88
39) Trichloroethene	6.527	130	34712	1.973	ppbv#		87
48) Toluene	7.977	91	88837	2.149	ppbv		98
52) Tetrachloroethene	8.773	166	2248	0.091	ppbv#		88
57) m,p-Xylene	9.617	91	20054	0.466	ppbv		95
96] Trichloroethene(sim)	6.527	130	34712	2.371	ppbv#		90
102] Tetrachloroethene(sim)	8.773	166	2248	0.113	ppbv#		88
106] m,p-Xylene(sim)	9.617	91	20054	0.489	ppbv		95

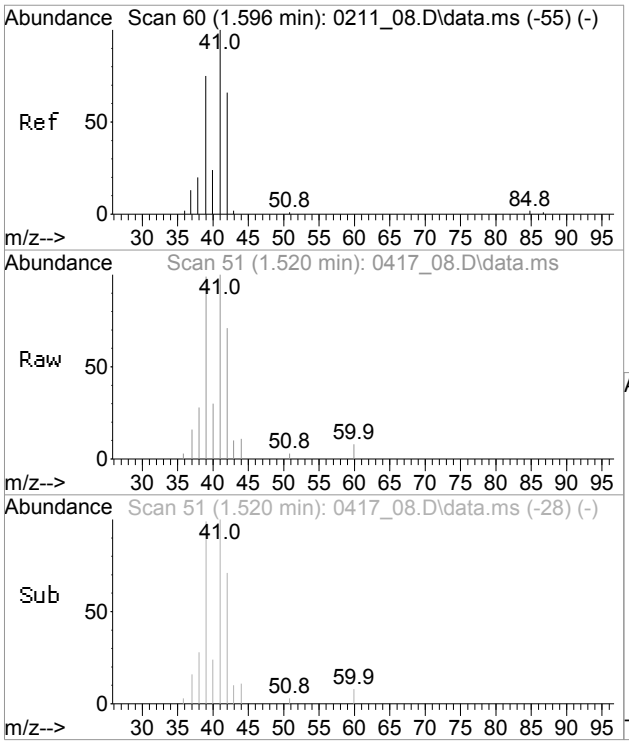
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_08.D
Acq On : 17 Apr 2017 1:11 pm
Operator : Keith
Client ID : SS-1 DIL
Lab ID : BY03105 30X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 17 15:03:43 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration



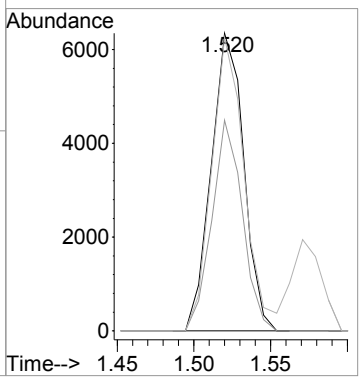


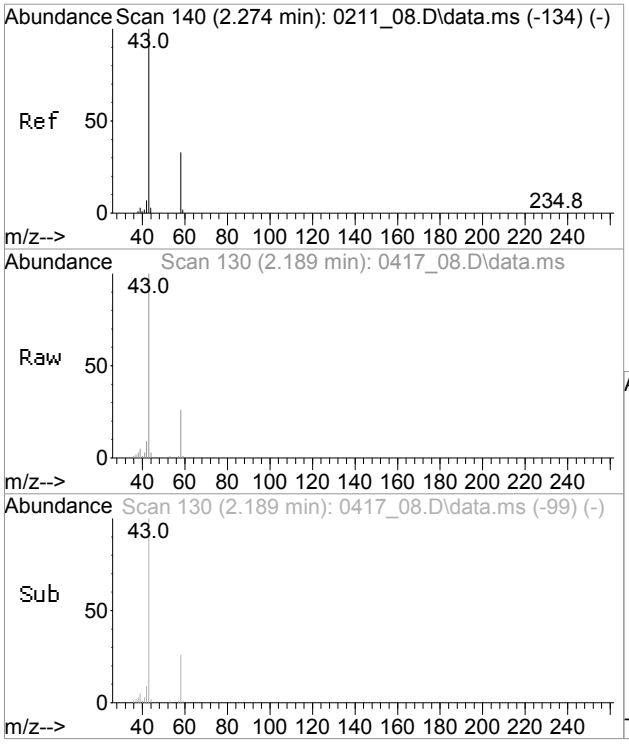


#2
Propylene
Concen: 1.55 ppbv
RT: 1.520 min Scan# 51
Delta R.T. -0.008 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 41 Resp: 9395

Ion	Ratio	Lower	Upper
41	100		
42	66.3	53.0	79.6
39	98.8	62.8	94.2#

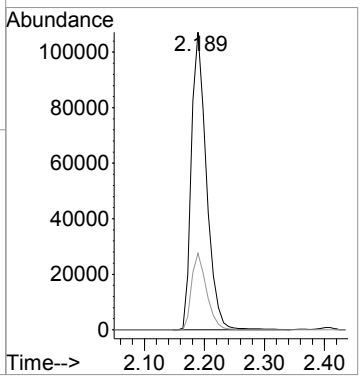


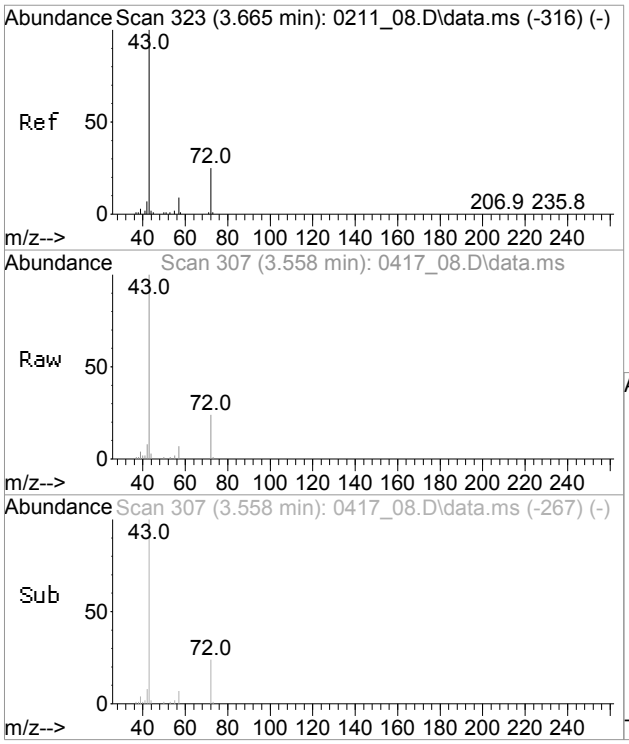


#12
Acetone
Concen: 9.78 ppbv
RT: 2.189 min Scan# 130
Delta R.T. -0.034 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 43 Resp: 186129

Ion	Ratio	Lower	Upper
43	100		
58	25.4	21.8	32.8

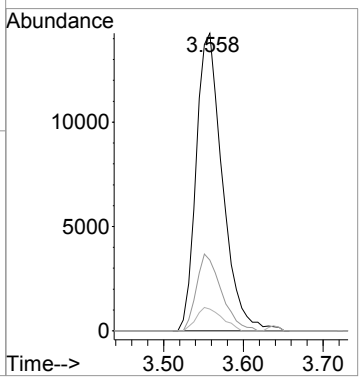


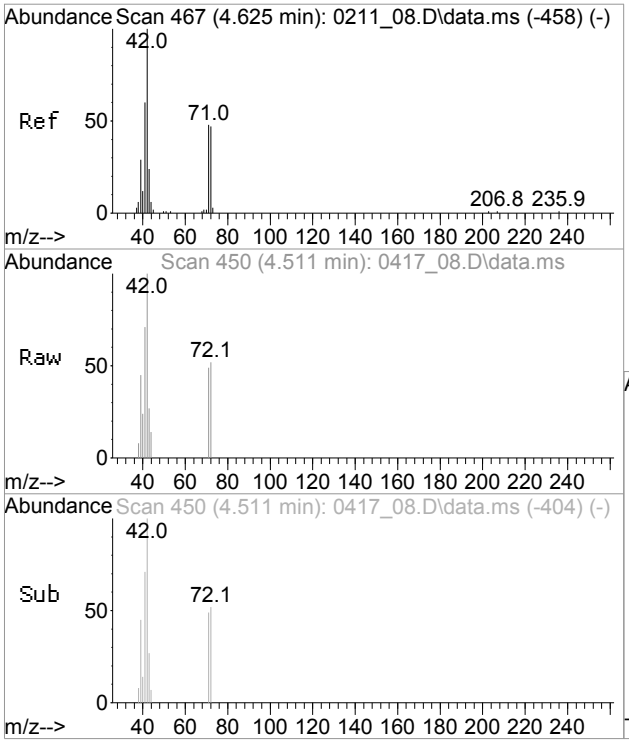


#25
Methyl Ethyl Ketone
Concen: 1.82 ppbv
RT: 3.558 min Scan# 307
Delta R.T. -0.033 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 43 Resp: 32593

Ion	Ratio	Lower	Upper
43	100		
72	24.5	17.7	26.5
57	7.7	5.9	8.9

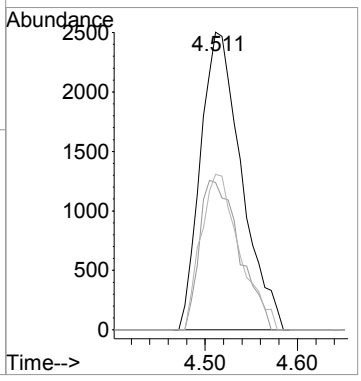


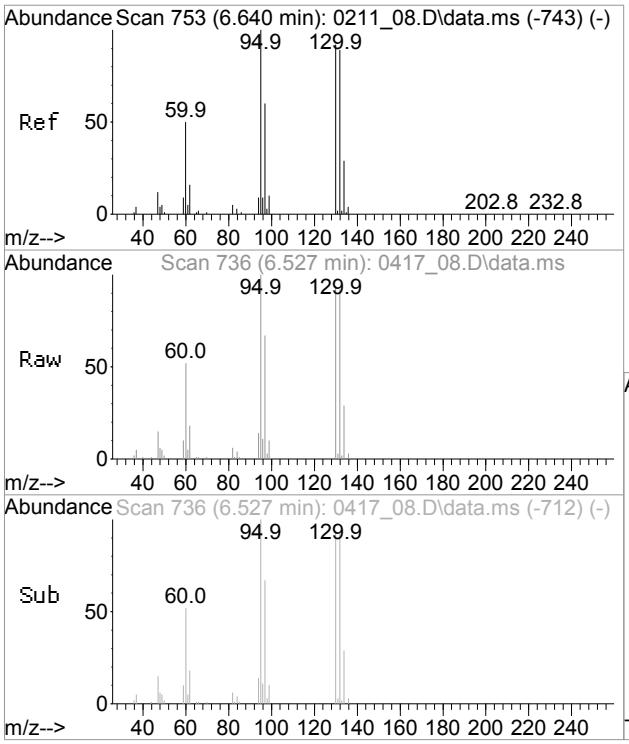


#30
Tetrahydrofuran
Concen: 0.98 ppbv
RT: 4.511 min Scan# 450
Delta R.T. 0.007 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 42 Resp: 7714

Ion	Ratio	Lower	Upper
42	100		
71	48.9	33.8	50.8
72	49.9	33.4	50.0

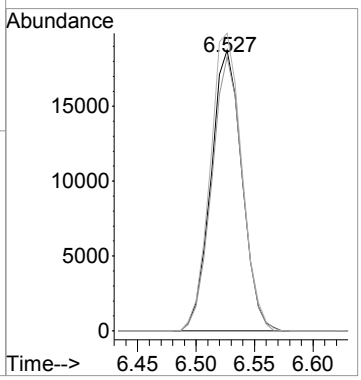


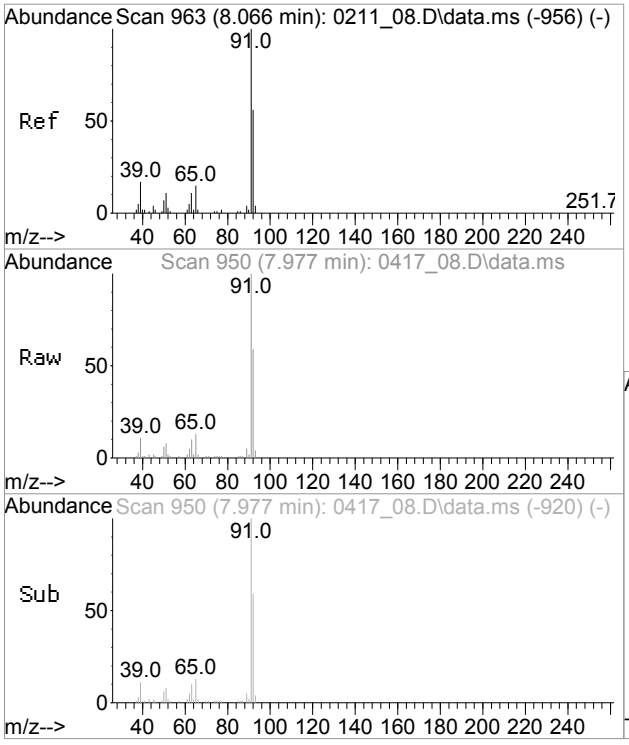


#39
Trichloroethene
Concen: 1.97 ppbv
RT: 6.527 min Scan# 736
Delta R.T. 0.013 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion:130 Resp: 34712

Ion	Ratio	Lower	Upper
130	100		
132	95.8	80.7	121.1
95	108.3	69.5	104.3#

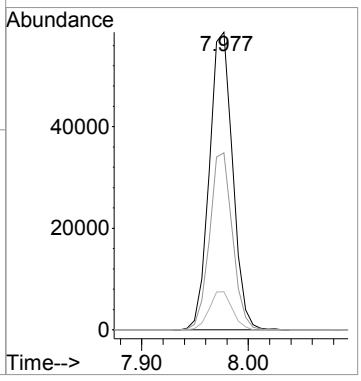


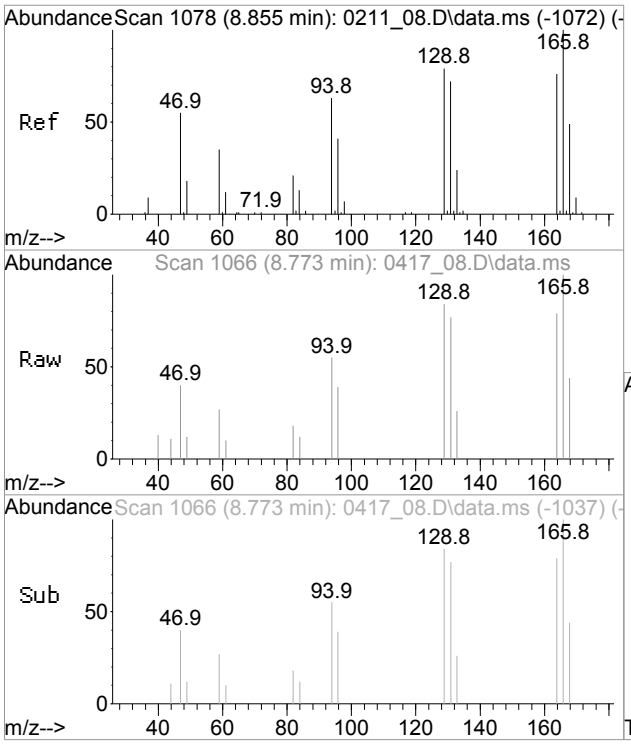


#48
Toluene
Concen: 2.15 ppbv
RT: 7.977 min Scan# 950
Delta R.T. 0.007 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 91 Resp: 88837

Ion	Ratio	Lower	Upper
91	100		
92	58.4	48.5	72.7
65	12.7	10.1	15.1

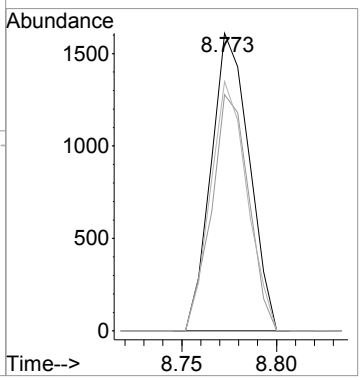


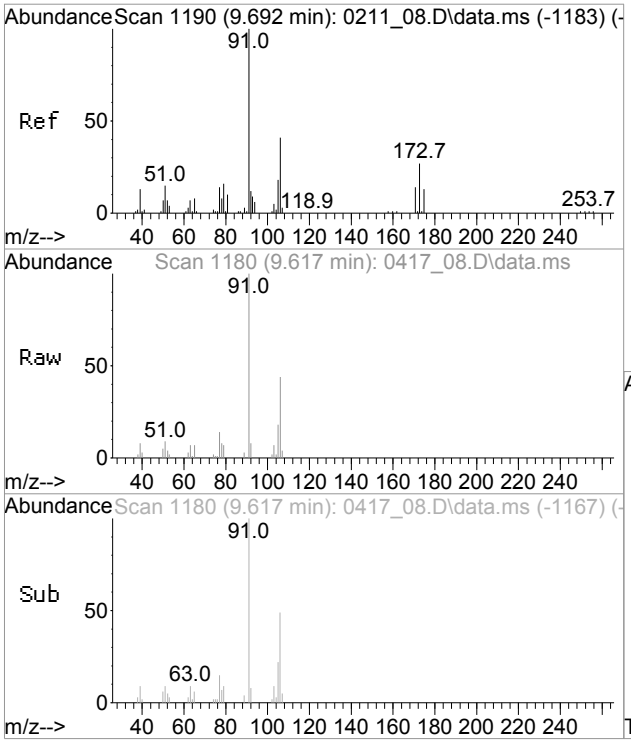


#52
Tetrachloroethene
Concen: Below Cal
RT: 8.773 min Scan# 1066
Delta R.T. 0.000 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion:166 Resp: 2248

Ion	Ratio	Lower	Upper
166	100		
164	77.5	63.1	94.7
129	81.0	48.7	73.1#

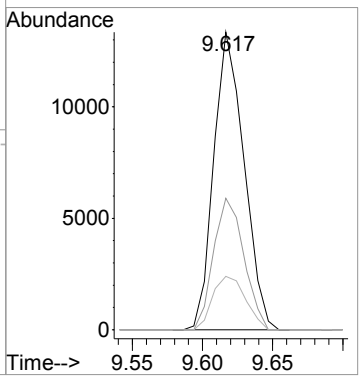


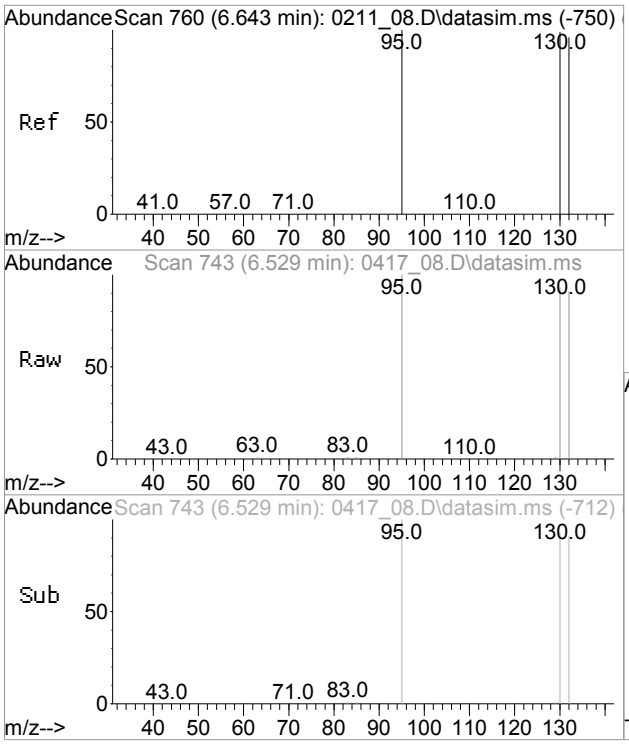


#57
m,p-Xylene
Concen: 0.47 ppbv
RT: 9.617 min Scan# 1180
Delta R.T. 0.000 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 91 Resp: 20054

Ion	Ratio	Lower	Upper
91	100		
106	44.3	38.8	58.2
105	19.5	17.0	25.6

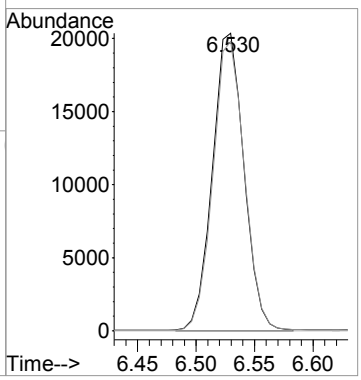


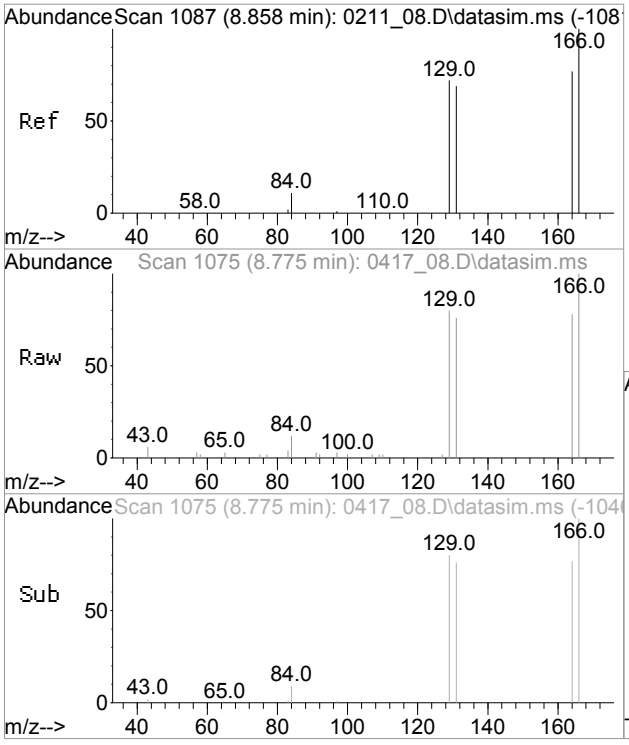


#96
Trichloroethene(sim)
Concen: 2.37 ppbv
RT: 6.527 min Scan# 743
Delta R.T. 0.004 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion:130 Resp: 34712

Ion	Ratio	Lower	Upper
130	100		
132	95.8	80.7	121.1
97	70.3	44.8	67.2#

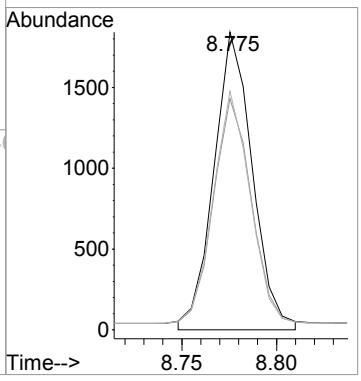


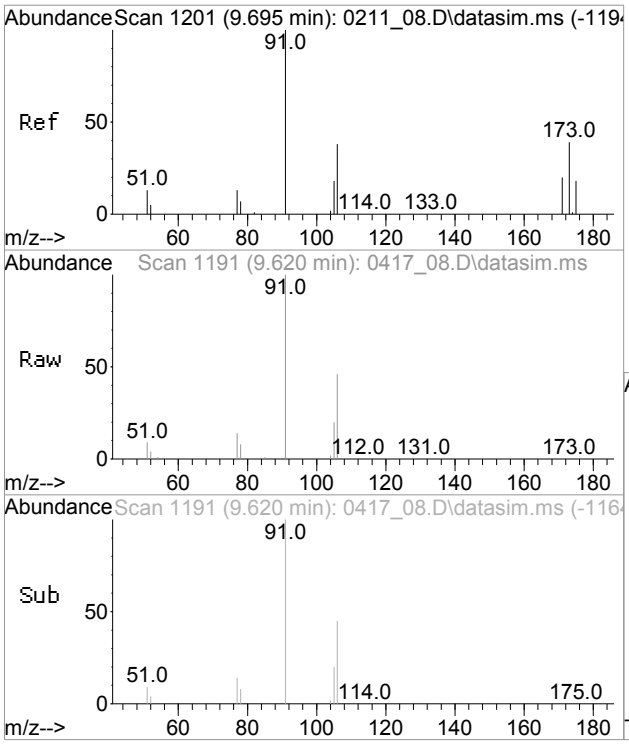


#102
Tetrachloroethene(sim)
Concen: 0.11 ppbv
RT: 8.773 min Scan# 1075
Delta R.T. -0.003 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion:166 Resp: 2248

Ion	Ratio	Lower	Upper
166	100		
164	77.5	58.9	98.9
129	81.0	40.9	80.9#

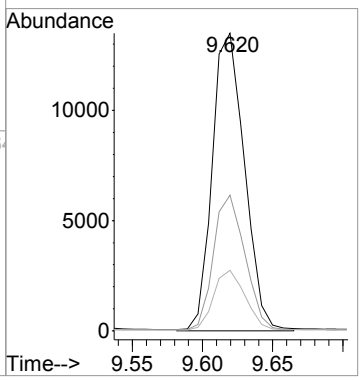




#106
m,p-Xylene(sim)
Concen: 0.49 ppbv
RT: 9.617 min Scan# 1191
Delta R.T. 0.000 min
Lab File: 0417_08.D
Acq: 17 Apr 2017 1:11 pm

Tgt Ion: 91 Resp: 20054

Ion	Ratio	Lower	Upper
91	100		
106	44.3	43.6	53.3
105	19.5	17.0	25.6



AIR ANALYSIS DATA SHEET

CLIENT ID: IA-1

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03106

Canister: 21323 Lab File ID: 0412_41.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	1.62		0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.554		0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	179	ES	0.531	0.531	r
67-64-1	Acetone	11.7	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.266		0.178	0.178	r
67-63-0	Isopropylalcohol	2.17	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	2.16	S	0.288	0.288	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.659		0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	0.329		0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.320		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	1.77		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	0.352		0.037	0.037	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
100-41-4	Ethylbenzene	0.230	U	0.230	0.230	r
179601-23-1	m,p-Xylene	0.747		0.230	0.230	r
95-47-6	o-Xylene	0.291		0.230	0.230	r
95-63-6	1,2,4-Trimethylbenzene	0.329		0.204	0.204	r
135-98-8	sec-Butylbenzene	0.182	U	0.182	0.182	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.109		0.040	0.040	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

CLIENT ID

AIR ANALYSIS DATA SHEET

IA-1

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03106

Canister: 21323 Lab File ID: 0412_41.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-15-0	Carbon Disulfide(sim)	0.321	U	0.321	0.321	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
67-66-3	Chloroform(sim)	0.205	U	0.205	0.205	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.221	U	0.221	0.221	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.118	U	0.118	0.118	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
108-90-7	Chlorobenzene(sim)	0.217	U	0.217	0.217	r
100-42-5	Styrene(sim)	0.235	U	0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
98-82-8	Isopropylbenzene(sim)	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene(sim)	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_41.D
Acq On : 13 Apr 2017 07:14 pm
Operator : CORTEX\ms
Client ID : IA-1
Lab ID : BY03106
ALS Vial : 1 Sample Multiplier: 1

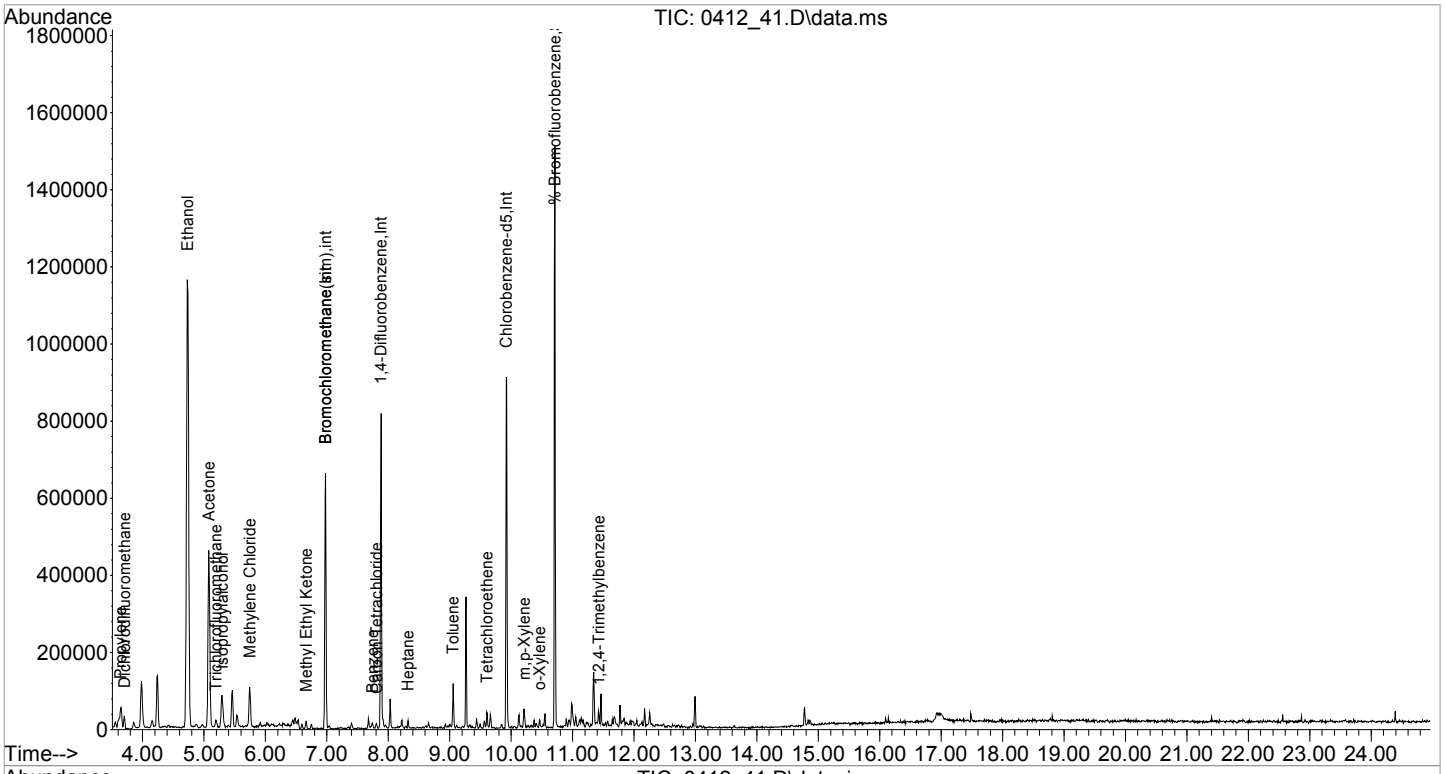
Quant Time: Apr 14 14:07:10 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

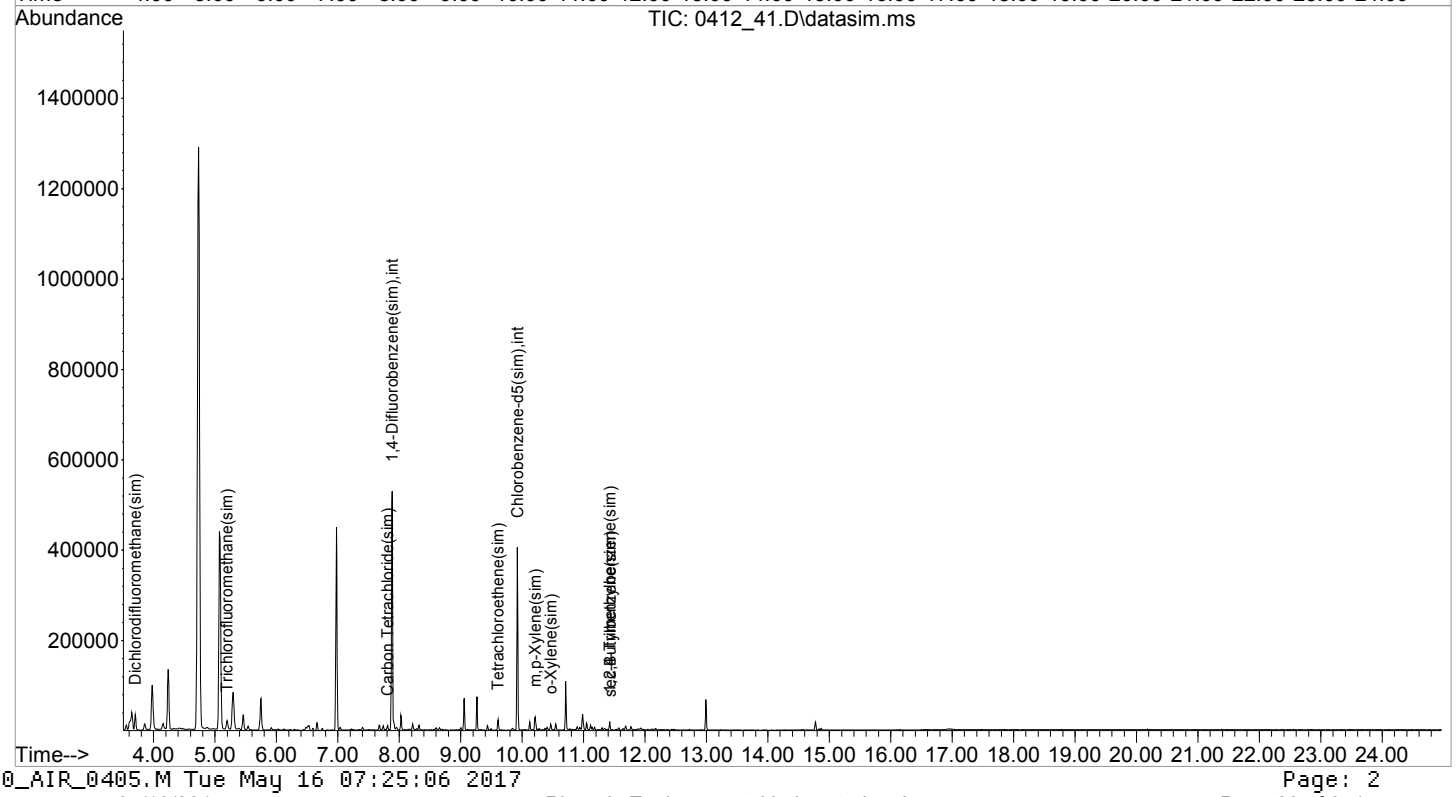
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	124045	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	322993	10.000	ng		0.00
53) Chlorobenzene-d5	9.920	82	128810	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	124045	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	389164	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	138332	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.712	95	206592	11.793	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 117.90%				
Target Compounds							Qvalue
2) Propylene	3.643	41	20936	1.619	ppbv#		59
3) Dichlorodifluoromethane	3.708	85	24718	0.554	ppbv#		95
11) Ethanol	4.730	45	1498947	178.910	ppbv		94
12) Acetone	5.079	43	451619	11.748	ppbv#		69
13) Trichlorofluoromethane	5.192	101	14009	0.266	ppbv#		94
14) Isopropylalcohol	5.298	45	82243	2.172	ppbv#		77
17) Methylene Chloride	5.745	49	59063	2.157	ppbv#		69
25) Methyl Ethyl Ketone	6.663	43	17629	0.659	ppbv#		84
33) Benzene	7.740	78	7579	0.329	ppbv#		80
34) Carbon Tetrachloride	7.807	117	4234	0.110	ppbv		99
43) Heptane	8.321	43	3822m	0.319	ppbv#		
48) Toluene	9.055	91	39936	1.768	ppbv#		95
52) Tetrachloroethene	9.604	166	6440	0.352	ppbv		96
56) Ethylbenzene	10.127	91	6124	0.229	ppbv		82
57) m,p-Xylene	10.208	91	16297	0.747	ppbv		99
61) o-Xylene	10.460	91	6533	0.291	ppbv		91
68) 1,2,4-Trimethylbenzene	11.430	105	9183	0.329	ppbv#		82
81] Dichlorodifluoromethan...	3.702	85	29115	0.523	ppbv		95
85] Trichlorofluoromethane...	5.195	101	17509	0.255	ppbv		100
88] Carbon Tetrachloride(sim)	7.807	117	4234	0.108	ppbv		99
96] Benzene(sim)	7.740	78	7579	0.308	ppbv#		80
106] Tetrachloroethene(sim)	9.604	166	6184	0.346	ppbv		97
111] m,p-Xylene(sim)	10.211	91	18349	0.741	ppbv		99
114] o-Xylene(sim)	10.460	91	6533	0.295	ppbv		89
119] 1,2,4-Trimethylbenzene...	11.426	105	8536	0.308	ppbv#		87
124] sec-Butylbenzene(sim)	11.430	105	9182	0.372	ppbv		74

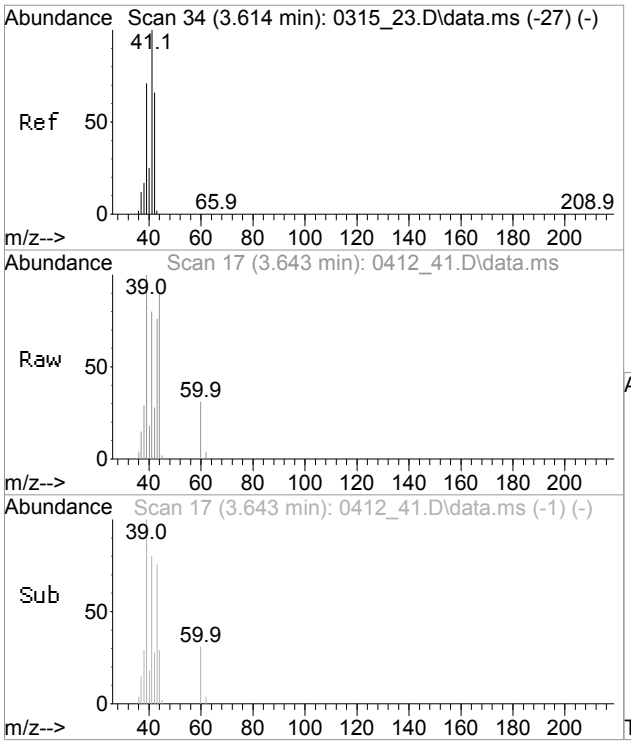
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_41.D
Acq On : 13 Apr 2017 07:14 pm
Operator : CORTEX\ms
Client ID : IA-1
Lab ID : BY03106
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:07:10 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration



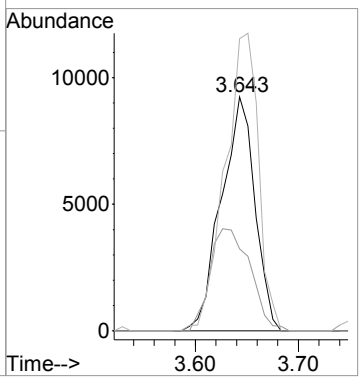


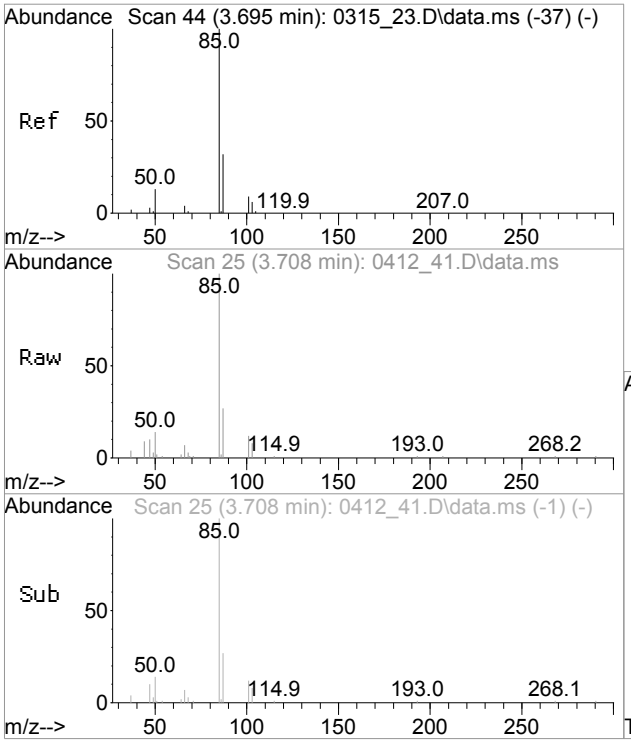


#2
Propylene
Concen: 1.62 ppbv
RT: 3.643 min Scan# 17
Delta R.T. -0.008 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 41 Resp: 20936

Ion	Ratio	Lower	Upper
41	100		
42	52.1	52.7	79.1#
39	126.3	59.1	88.7#

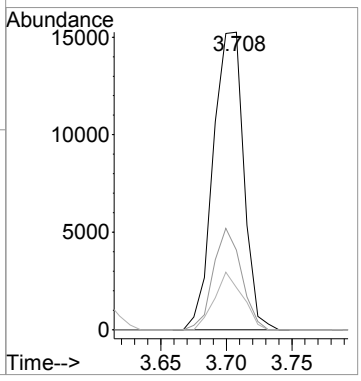


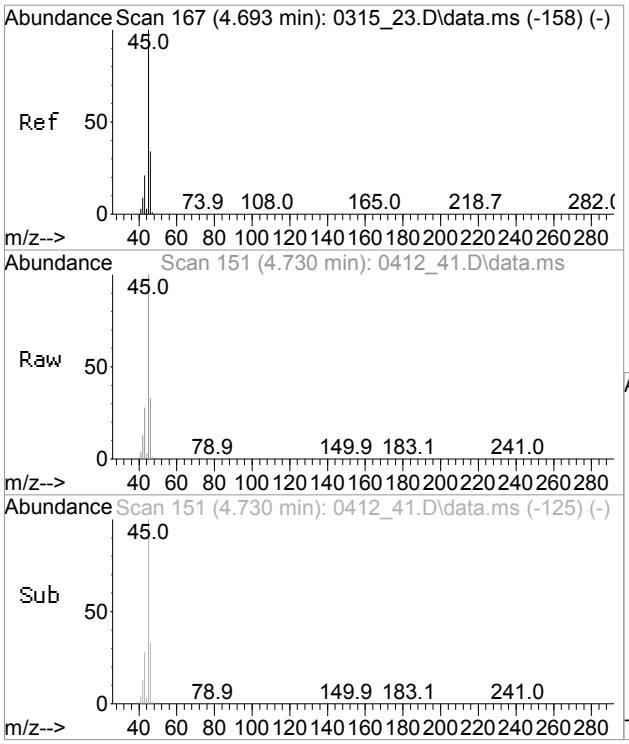


#3
Dichlorodifluoromethane
Concen: 0.55 ppbv
RT: 3.708 min Scan# 25
Delta R.T. -0.008 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 85 Resp: 24718

Ion	Ratio	Lower	Upper
85	100		
87	31.5	26.1	39.1
50	17.9	10.5	15.7#

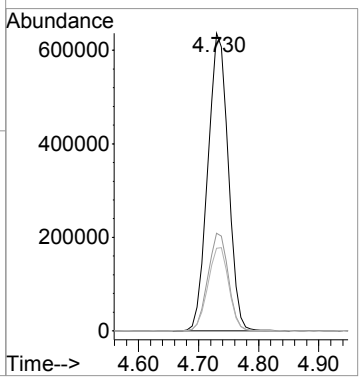


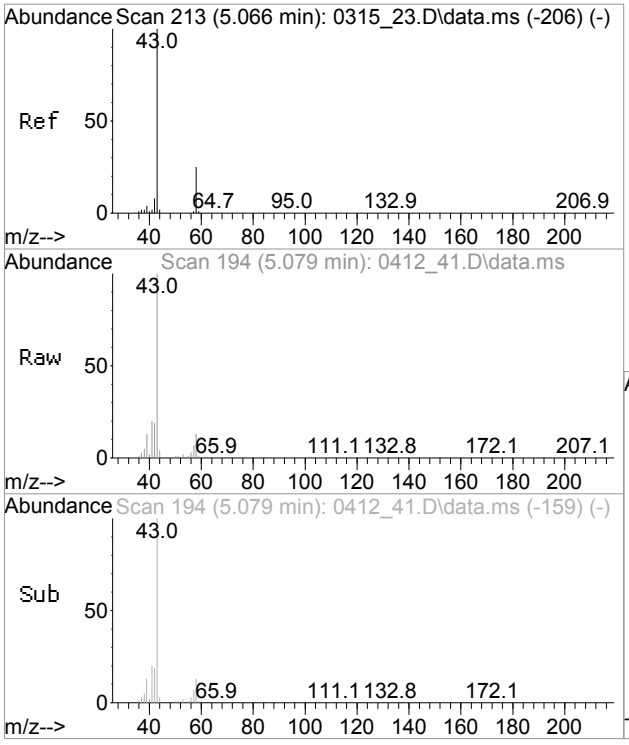


#11
Ethanol
Concen: 178.91 ppbv
RT: 4.730 min Scan# 151
Delta R.T. 0.009 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 45 Resp: 1498947

Ion	Ratio	Lower	Upper
45	100		
46	32.9	28.5	42.7
43	28.6	19.7	29.5

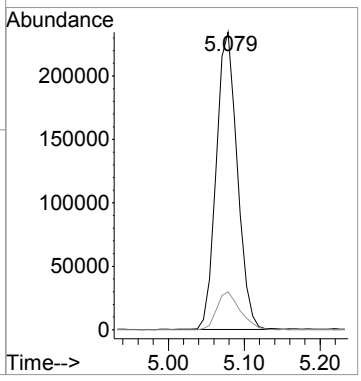


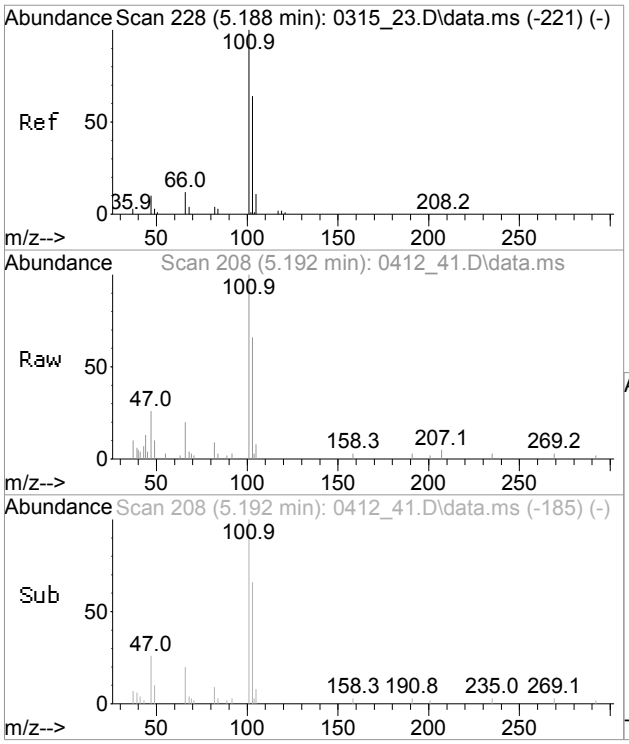


#12
Acetone
Concen: 11.75 ppbv
RT: 5.079 min Scan# 194
Delta R.T. -0.016 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 43 Resp: 451619

Ion	Ratio	Lower	Upper
43	100		
58	14.2	24.8	37.2#

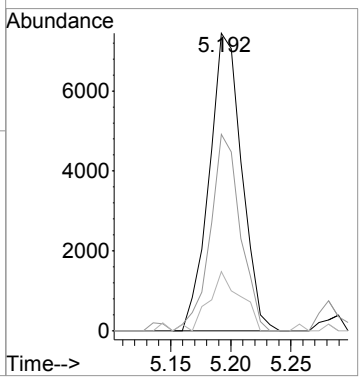


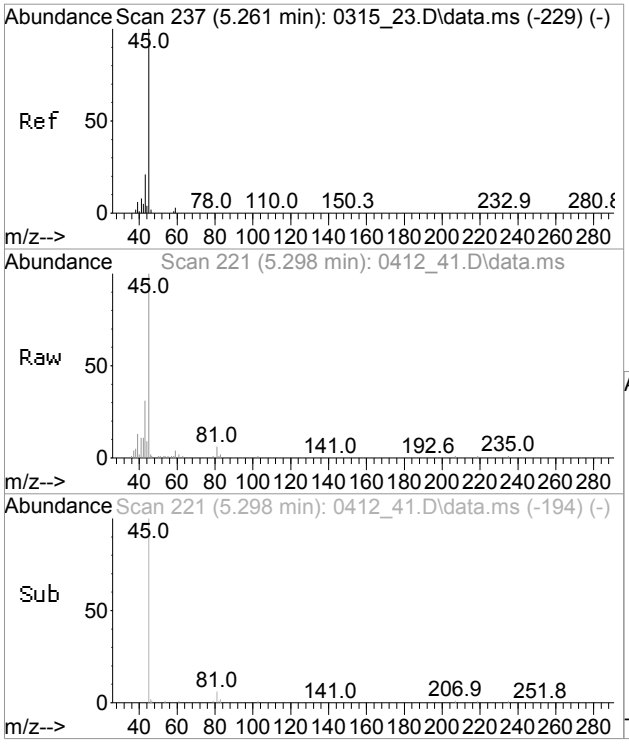


#13
Trichlorofluoromethane
Concen: 0.27 ppbv
RT: 5.192 min Scan# 208
Delta R.T. -0.016 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:101 Resp: 14009

Ion	Ratio	Lower	Upper
101	100		
103	61.2	51.8	77.8
66	19.5	11.1	16.7#

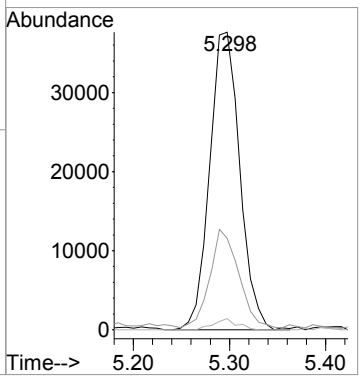


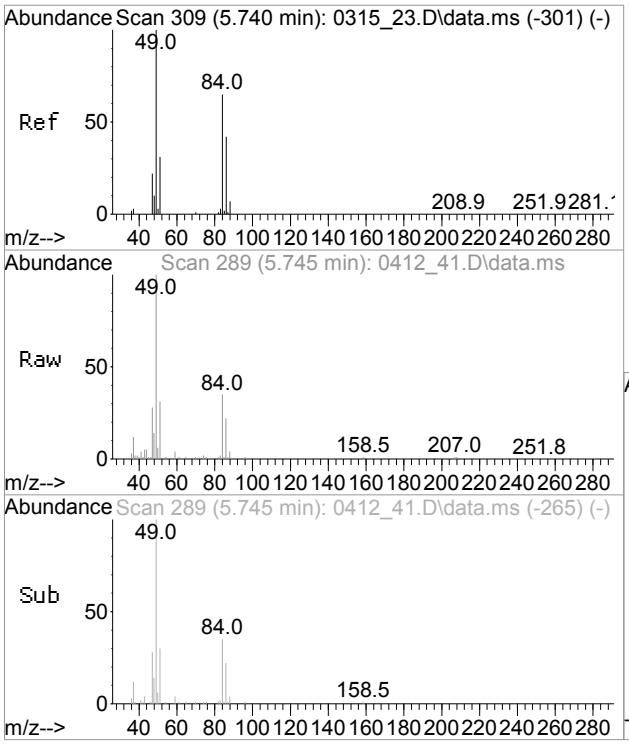


#14
Isopropylalcohol
Concen: 2.17 ppbv
RT: 5.298 min Scan# 221
Delta R.T. 0.017 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 45 Resp: 82243

Ion	Ratio	Lower	Upper
45	100		
43	31.5	15.4	23.0#
59	2.9	3.0	4.4#

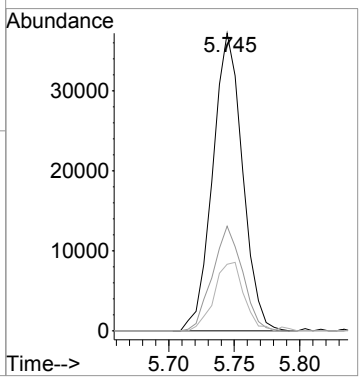


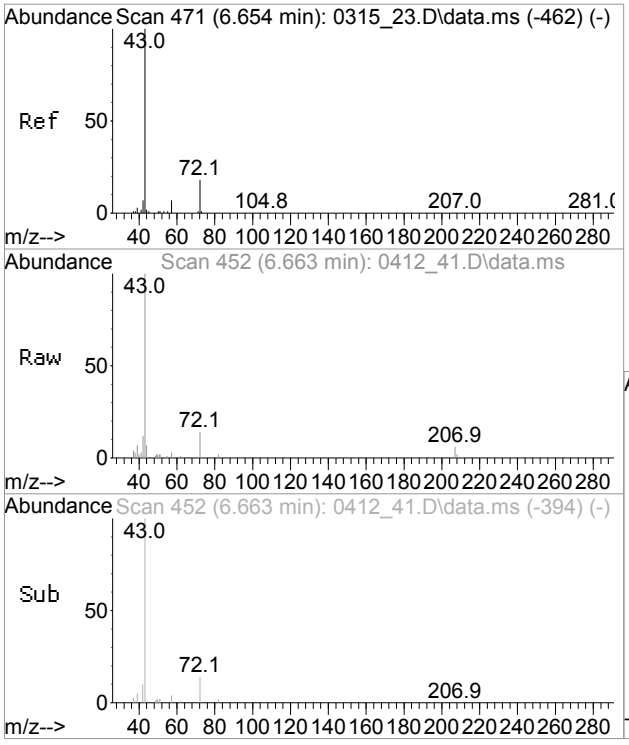


#17
Methylene Chloride
Concen: 2.16 ppbv
RT: 5.745 min Scan# 289
Delta R.T. -0.006 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 49 Resp: 59063

Ion	Ratio	Lower	Upper
49	100		
84	35.2	49.2	73.8#
86	22.9	31.5	47.3#

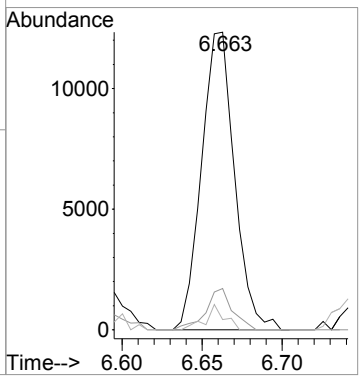


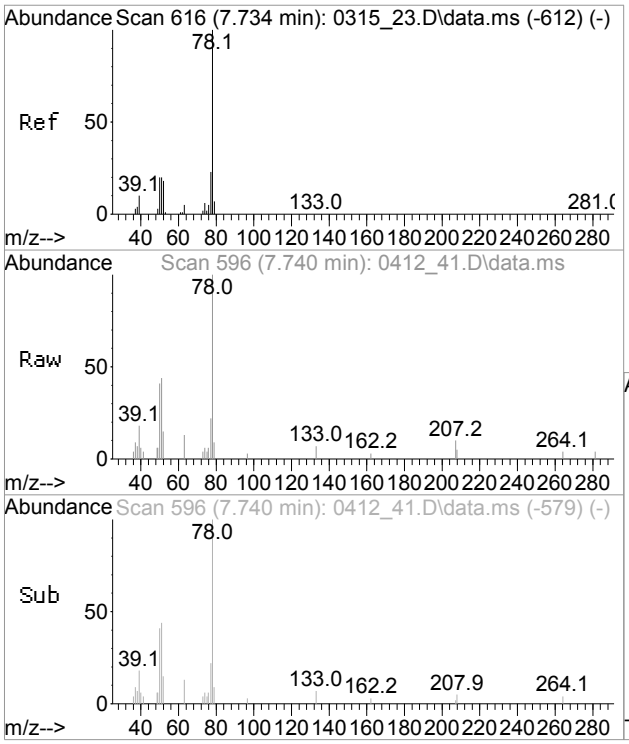


#25
Methyl Ethyl Ketone
Concen: 0.66 ppbv
RT: 6.663 min Scan# 452
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 43 Resp: 17629

Ion	Ratio	Lower	Upper
43	100		
72	11.3	15.9	23.9#
57	4.8	5.6	8.4#

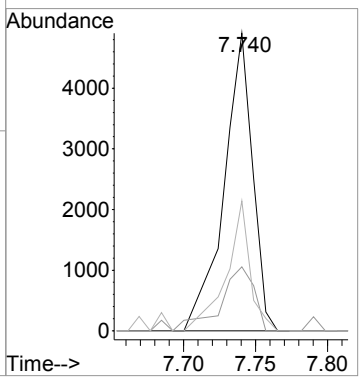


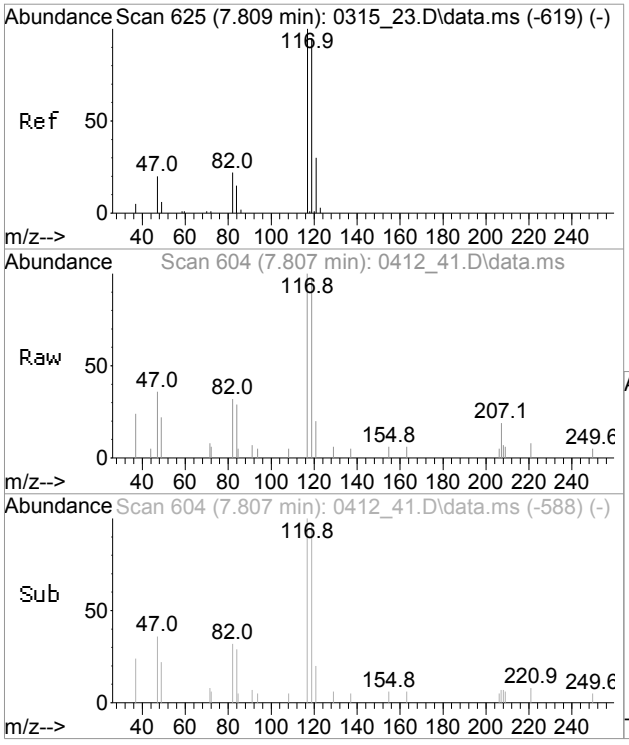


#33
Benzene
Concen: 0.33 ppbv
RT: 7.740 min Scan# 596
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 78 Resp: 7579

Ion	Ratio	Lower	Upper
78	100		
77	24.8	18.6	27.8
51	36.9	14.9	22.3#

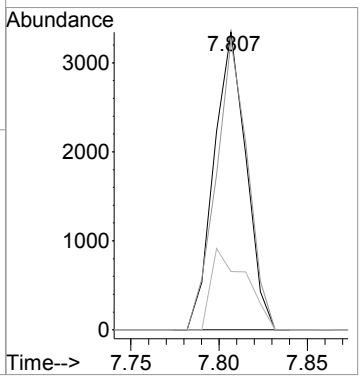


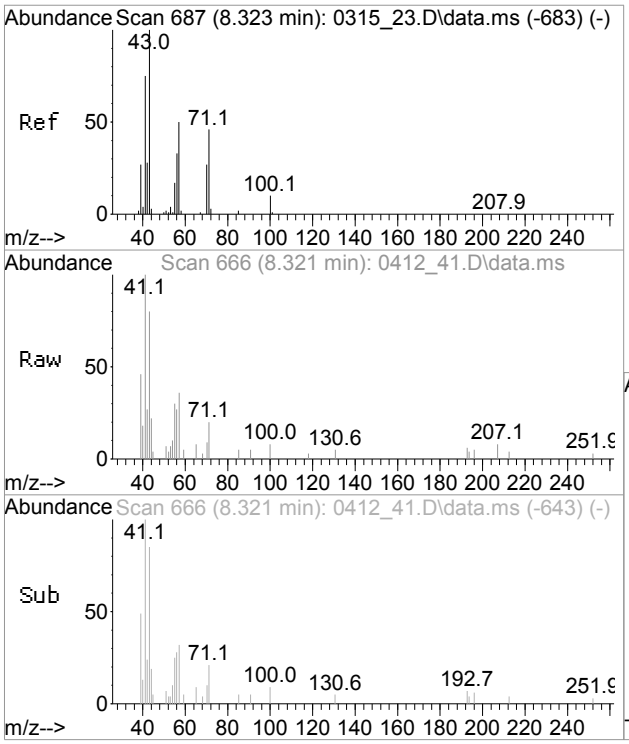


#34
Carbon Tetrachloride
Concen: Below Cal
RT: 7.807 min Scan# 604
Delta R.T. -0.008 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:117 Resp: 4234

Ion	Ratio	Lower	Upper
117	100		
119	96.6	75.9	115.9
121	29.6	10.8	50.8

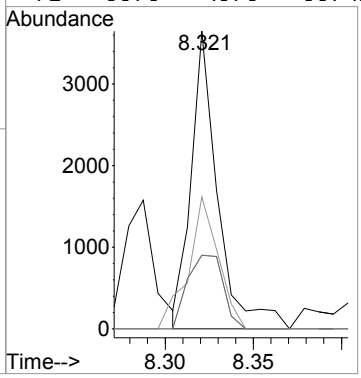


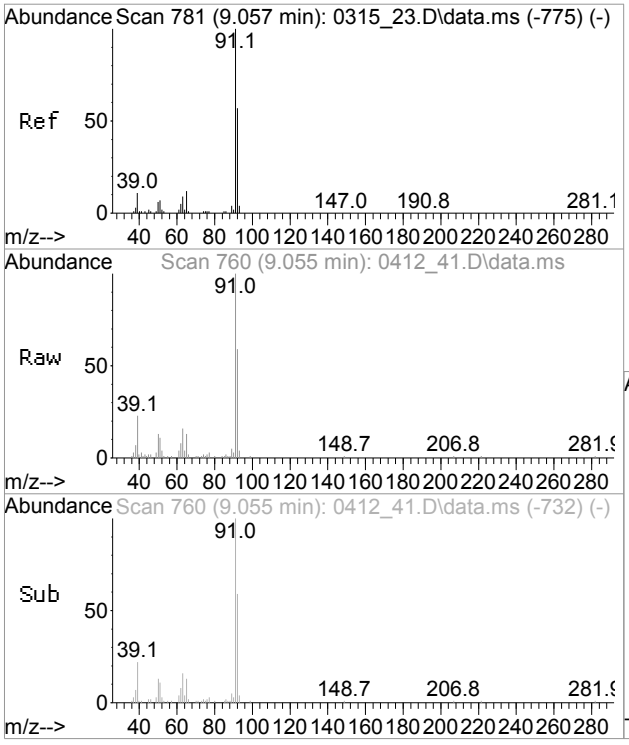


#43
Heptane
Concen: 0.32 ppbv m
RT: 8.321 min Scan# 666
Delta R.T. -0.008 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 43 Resp: 3822

Ion	Ratio	Lower	Upper
43	100		
57	50.2	43.0	64.4
71	33.3	43.6	65.4#
71	33.3	43.6	65.4#

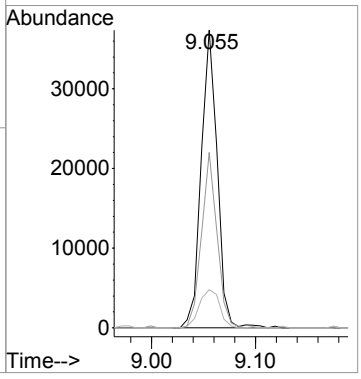


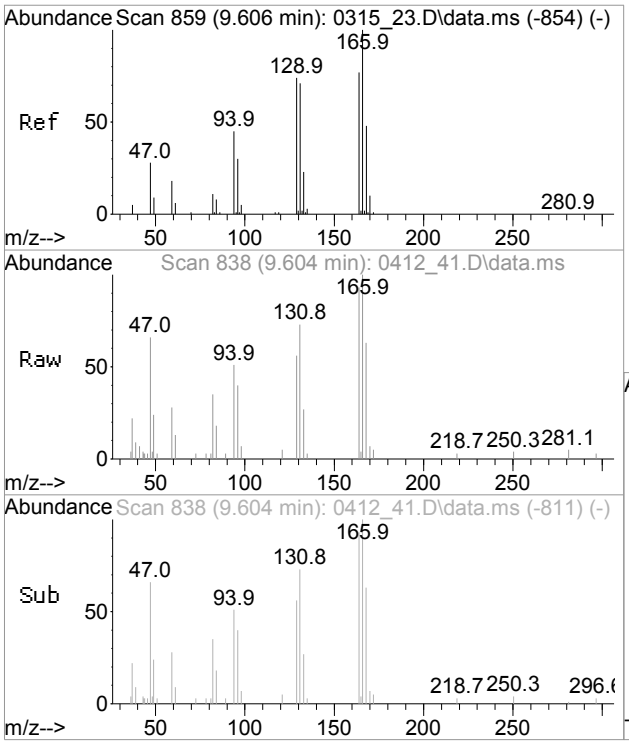


#48
Toluene
Concen: 1.77 ppbv
RT: 9.055 min Scan# 760
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 91 Resp: 39936

Ion	Ratio	Lower	Upper
91	100		
92	57.0	47.7	71.5
65	16.3	9.5	14.3#

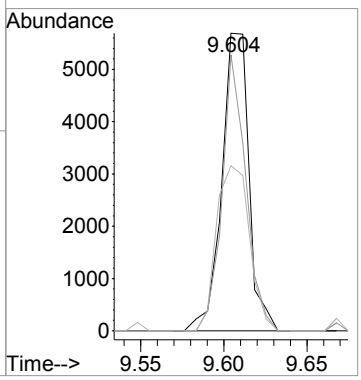


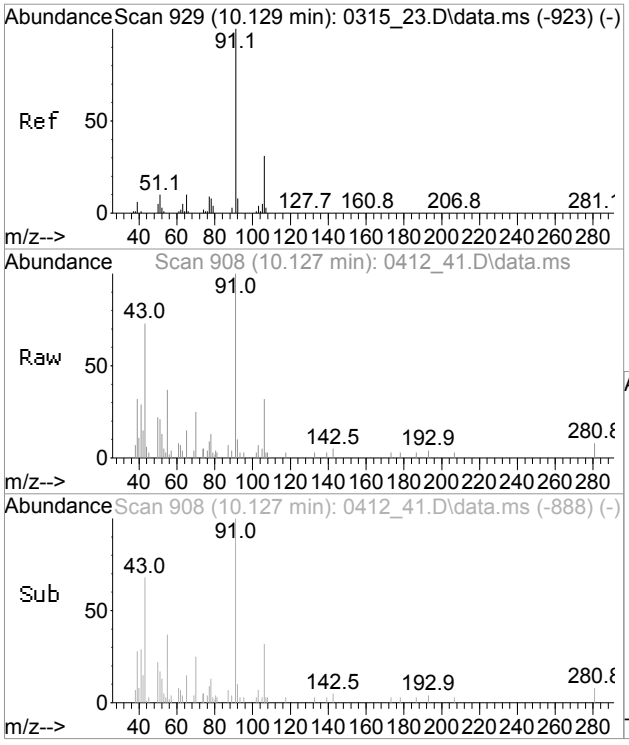


#52
Tetrachloroethene
Concen: 0.35 ppbv
RT: 9.604 min Scan# 838
Delta R.T. -0.007 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:166 Resp: 6440

Ion	Ratio	Lower	Upper
166	100		
164	81.3	62.2	93.4
129	67.7	56.6	84.8

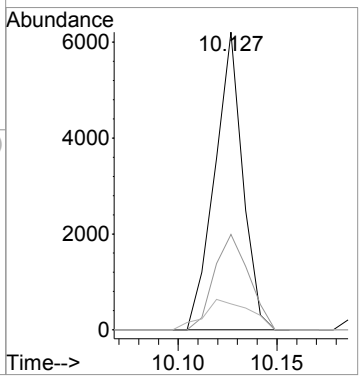


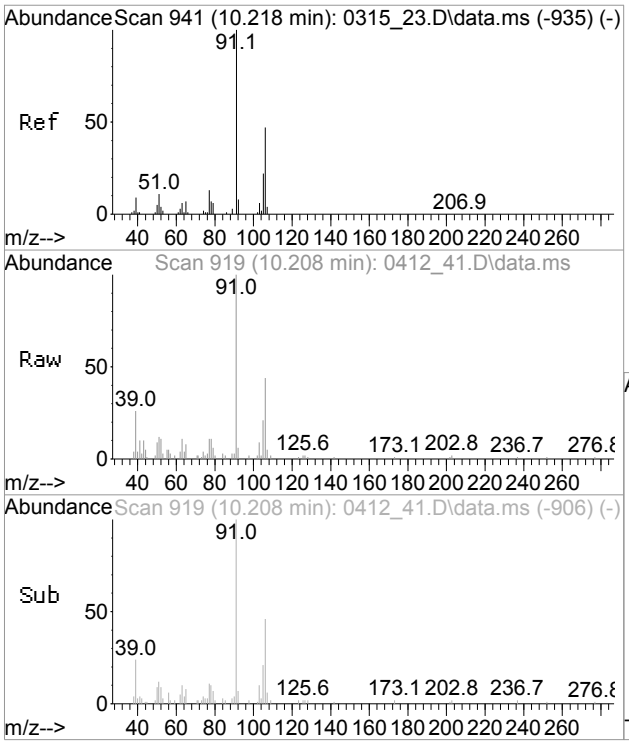


#56
Ethylbenzene
Concen: 0.23 ppbv
RT: 10.127 min Scan# 908
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 91 Resp: 6124

Ion	Ratio	Lower	Upper
91	100		
106	39.8	10.8	50.8
77	16.8	0.0	28.9

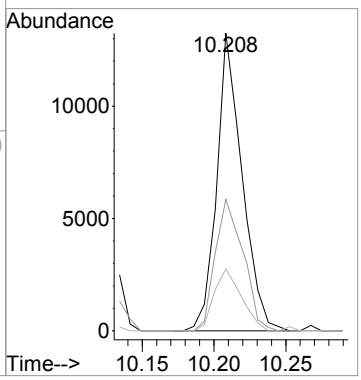


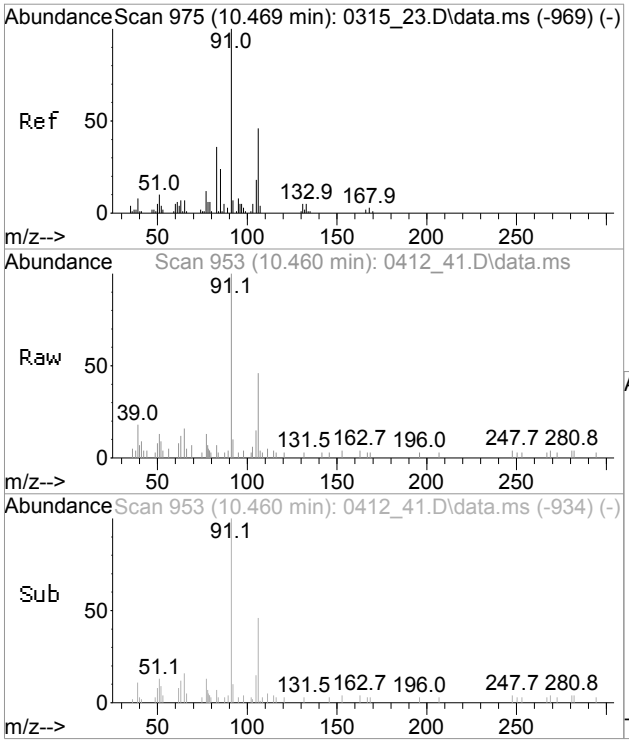


#57
m,p-Xylene
Concen: 0.75 ppbv
RT: 10.208 min Scan# 919
Delta R.T. -0.007 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 91 Resp: 16297

Ion	Ratio	Lower	Upper
91	100		
106	48.6	38.7	58.1
105	22.5	16.6	25.0

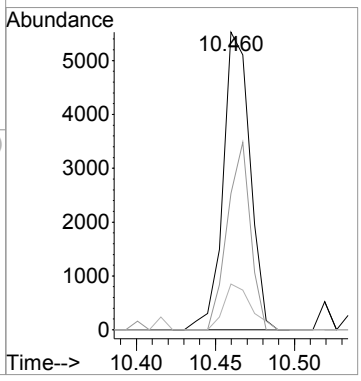


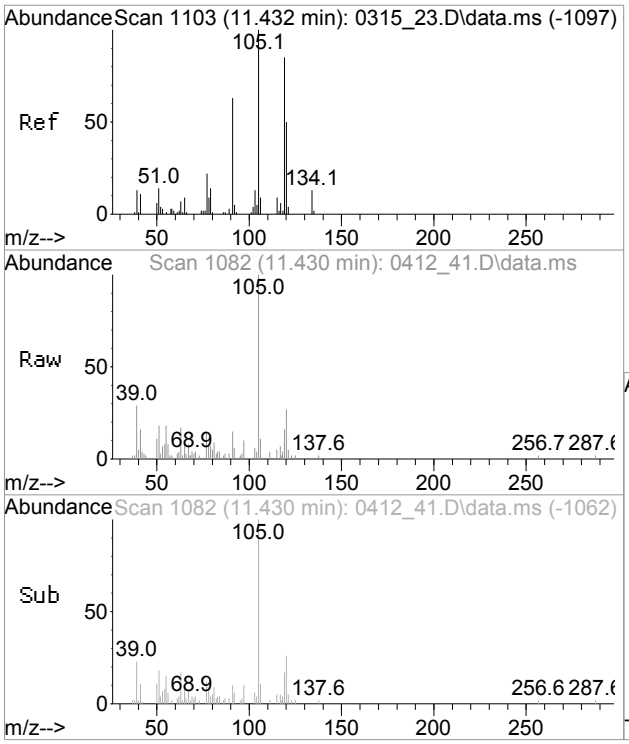


#61
o-Xylene
Concen: 0.29 ppbv
RT: 10.460 min Scan# 953
Delta R.T. -0.007 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 91 Resp: 6533

Ion	Ratio	Lower	Upper
91	100		
106	53.8	37.4	56.2
105	15.6	14.1	21.1

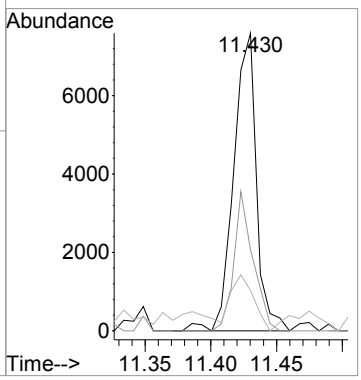


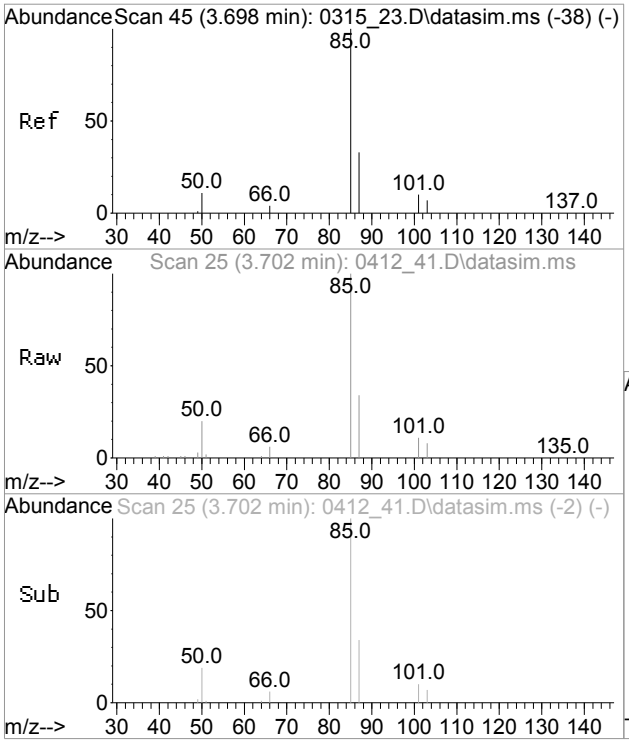


#68
1,2,4-Trimethylbenzene
Concen: 0.33 ppbv
RT: 11.430 min Scan# 1082
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:105 Resp: 9183

Ion	Ratio	Lower	Upper
105	100		
120	39.6	43.5	65.3#
77	19.1	20.2	30.4#

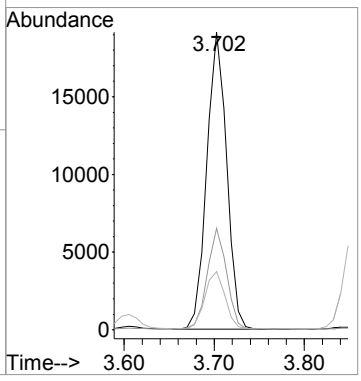


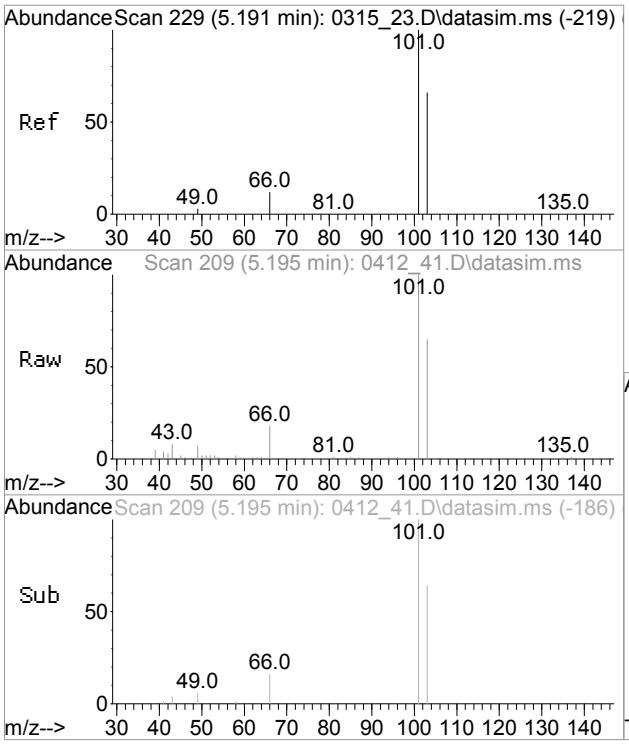


#81
Dichlorodifluoromethane(sim)
Concen: 0.52 ppbv
RT: 3.702 min Scan# 25
Delta R.T. -0.016 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 85 Resp: 29115

Ion	Ratio	Lower	Upper
85	100		
87	33.0	12.7	52.7
50	19.6	0.0	32.3

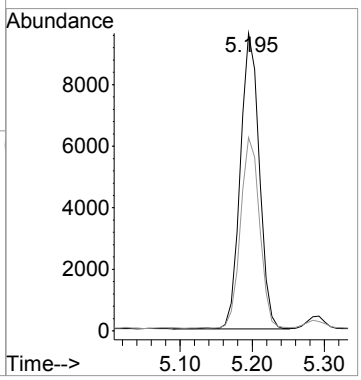


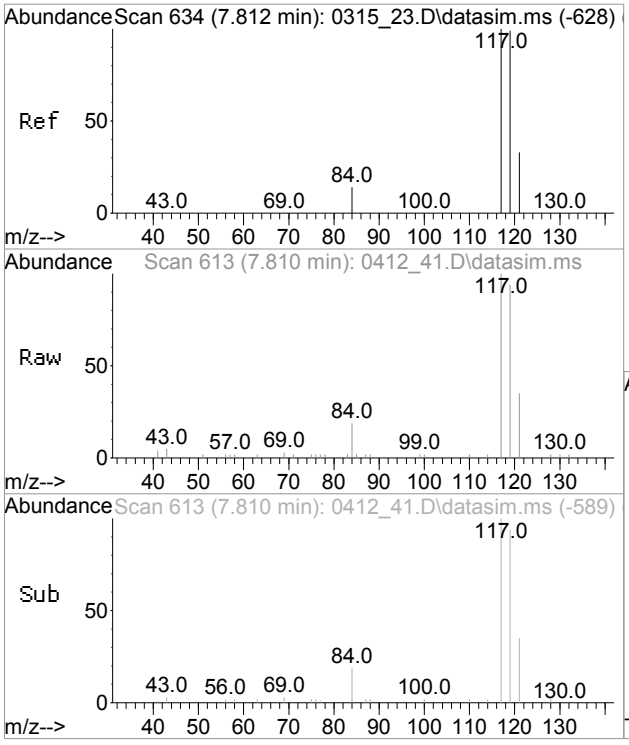


#85
Trichlorofluoromethane(sim)
Concen: 0.25 ppbv
RT: 5.195 min Scan# 209
Delta R.T. -0.016 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:101 Resp: 17509

Ion	Ratio	Lower	Upper
101	100		
103	65.0	52.0	78.0

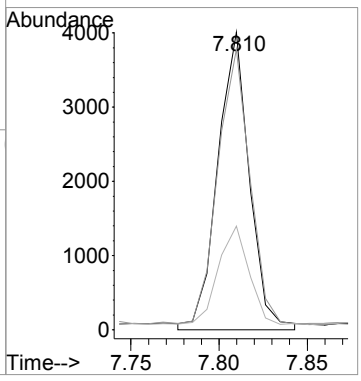


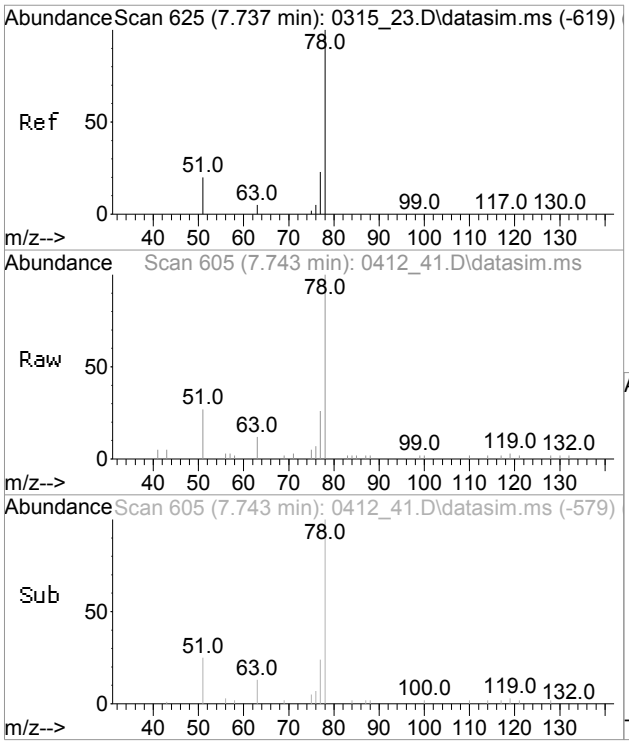


#88
Carbon Tetrachloride(sim)
Concen: 0.11 ppbv
RT: 7.807 min Scan# 613
Delta R.T. -0.008 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:117 Resp: 4234

Ion	Ratio	Lower	Upper
117	100		
119	96.6	76.7	115.1
121	29.6	24.6	37.0

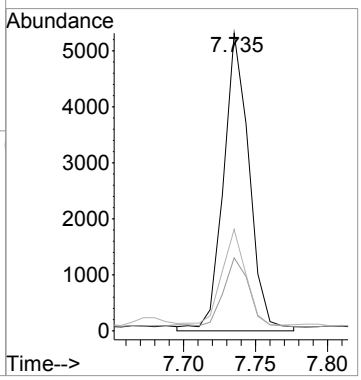


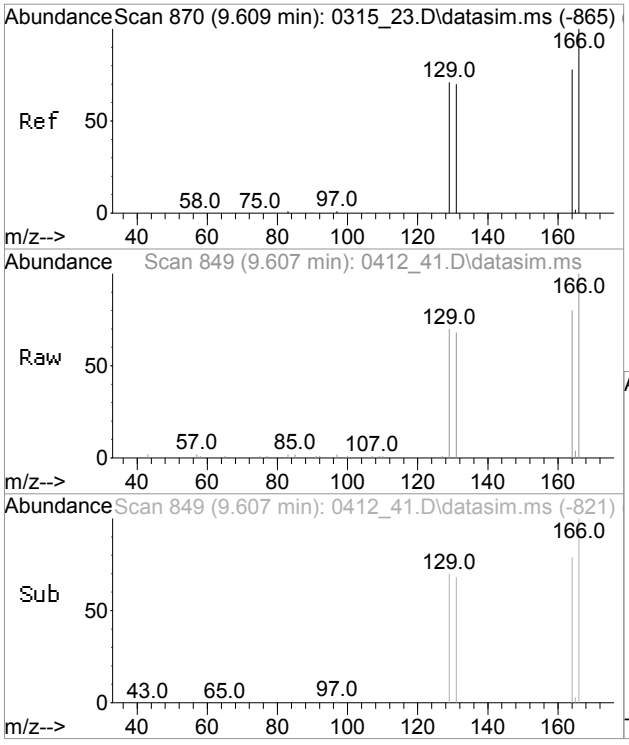


#96
Benzene(sim)
Concen: 0.31 ppbv
RT: 7.740 min Scan# 605
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 78 Resp: 7579

Ion	Ratio	Lower	Upper
78	100		
77	24.8	22.0	24.4#
51	36.9	14.9	22.3#

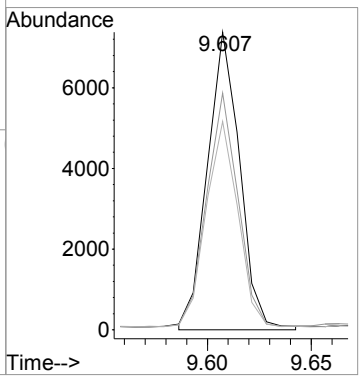


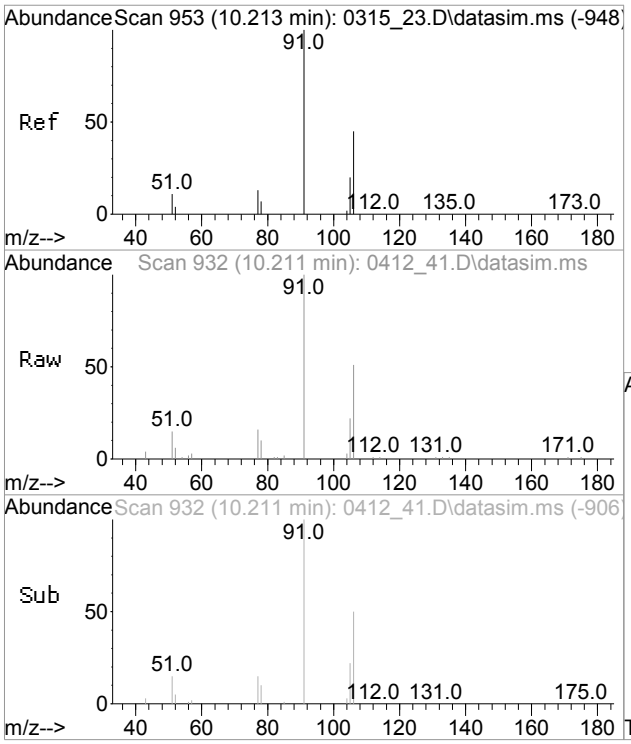


#106
Tetrachloroethene(sim)
Concen: 0.35 ppbv
RT: 9.604 min Scan# 849
Delta R.T. -0.007 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:166 Resp: 6184

Ion	Ratio	Lower	Upper
166	100		
164	82.7	57.8	97.8
129	70.5	50.7	90.7

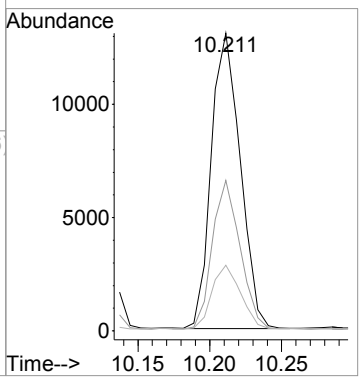


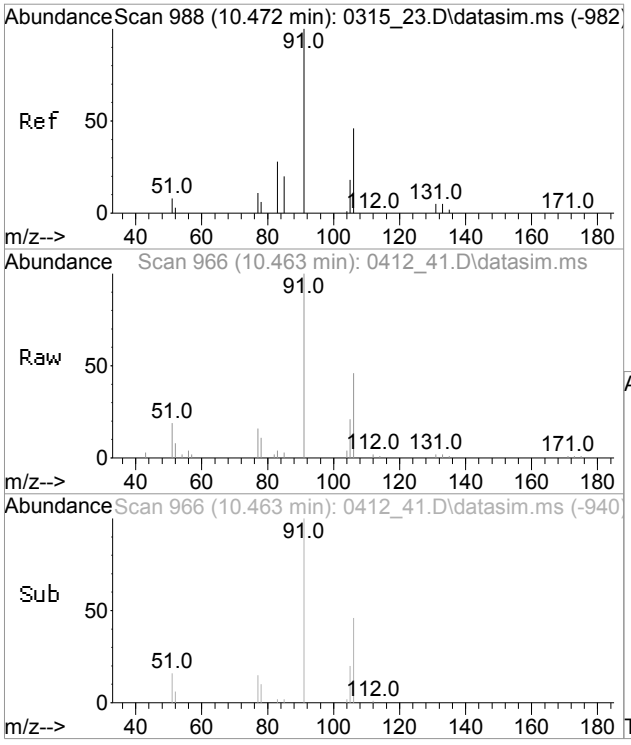


#111
m,p-Xylene(sim)
Concen: 0.74 ppbv
RT: 10.211 min Scan# 932
Delta R.T. -0.007 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 91 Resp: 18349

Ion	Ratio	Lower	Upper
91	100		
106	48.3	43.6	53.2
105	21.5	16.6	25.0

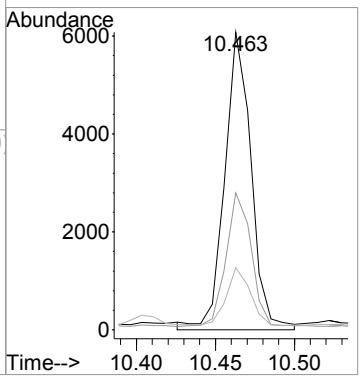


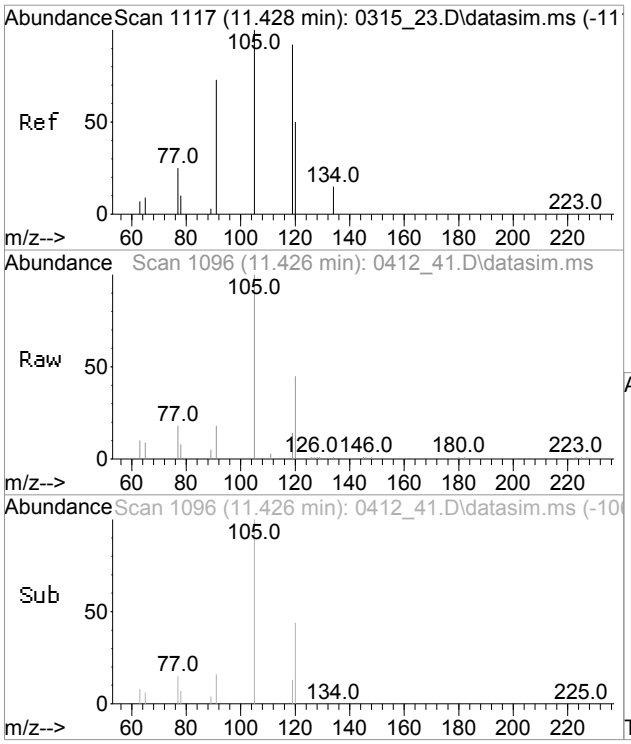


#114
o-Xylene(sim)
Concen: 0.29 ppbv
RT: 10.460 min Scan# 966
Delta R.T. -0.007 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion: 91 Resp: 6533

Ion	Ratio	Lower	Upper
91	100		
106	53.8	36.0	54.0
105	15.6	13.8	20.8

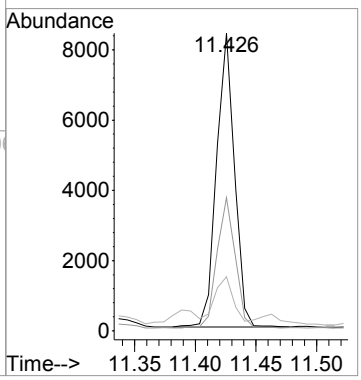


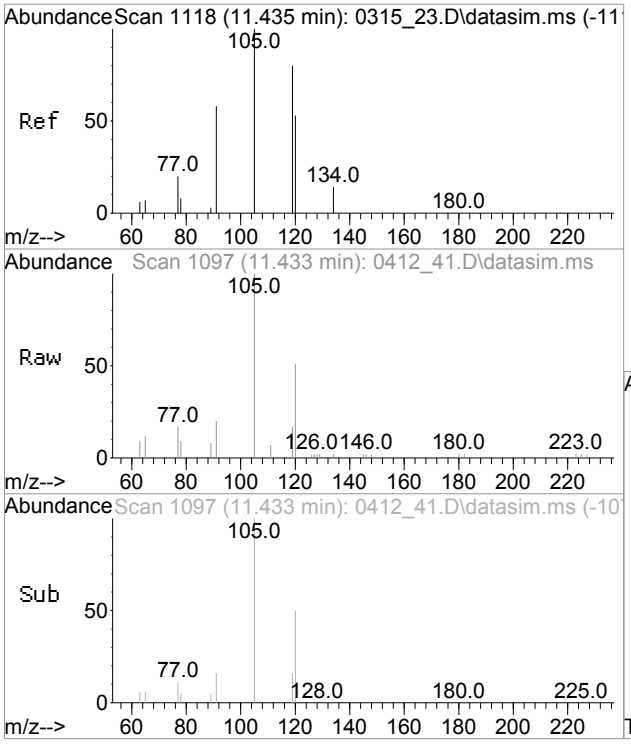


#119
1,2,4-Trimethylbenzene(sim)
Concen: 0.31 ppbv
RT: 11.426 min Scan# 1096
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:105 Resp: 8536

Ion	Ratio	Lower	Upper
105	100		
120	45.7	43.5	65.3
77	17.1	20.2	30.4#

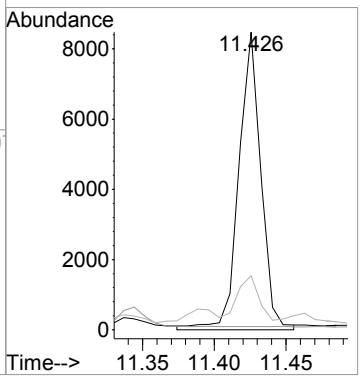




#124
sec-Butylbenzene(sim)
Concen: 0.37 ppbv
RT: 11.430 min Scan# 1097
Delta R.T. 0.000 min
Lab File: 0412_41.D
Acq: 13 Apr 2017 07:14 pm

Tgt Ion:105 Resp: 9182

Ion	Ratio	Lower	Upper
105	100		
134	0.0	0.0	35.9
77	19.1	0.0	34.1



AIR ANALYSIS DATA SHEET

CLIENT ID: OA-1

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107

Canister: 21333 Lab File ID: 0412_42.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.901		0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.502		0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	6.41	S	0.531	0.531	r
67-64-1	Acetone	7.55	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.267		0.178	0.178	r
67-63-0	Isopropylalcohol	1.20	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	11.9	S	0.288	0.288	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.473		0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	2.03		0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	0.313	U	0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.391		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	1.30		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
179601-23-1	m,p-Xylene	0.569		0.230	0.230	r
95-47-6	o-Xylene	0.245		0.230	0.230	r
135-98-8	sec-Butylbenzene	0.182	U	0.182	0.182	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.080		0.040	0.040	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-15-0	Carbon Disulfide(sim)	0.321	U	0.321	0.321	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

CLIENT ID

AIR ANALYSIS DATA SHEET

OA-1

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107

Canister: 21333 Lab File ID: 0412_42.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
67-66-3	Chloroform(sim)	0.205	U	0.205	0.205	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.221	U	0.221	0.221	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.118	U	0.118	0.118	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
127-18-4	Tetrachloroethene(sim)	0.189		0.037	0.037	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
108-90-7	Chlorobenzene(sim)	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene(sim)	0.230	U	0.230	0.230	r
100-42-5	Styrene(sim)	0.235	U	0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
98-82-8	Isopropylbenzene(sim)	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene(sim)	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_42.D
Acq On : 13 Apr 2017 07:55 pm
Operator : CORTEX\ms
Client ID : OA-1
Lab ID : BY03107
ALS Vial : 1 Sample Multiplier: 1

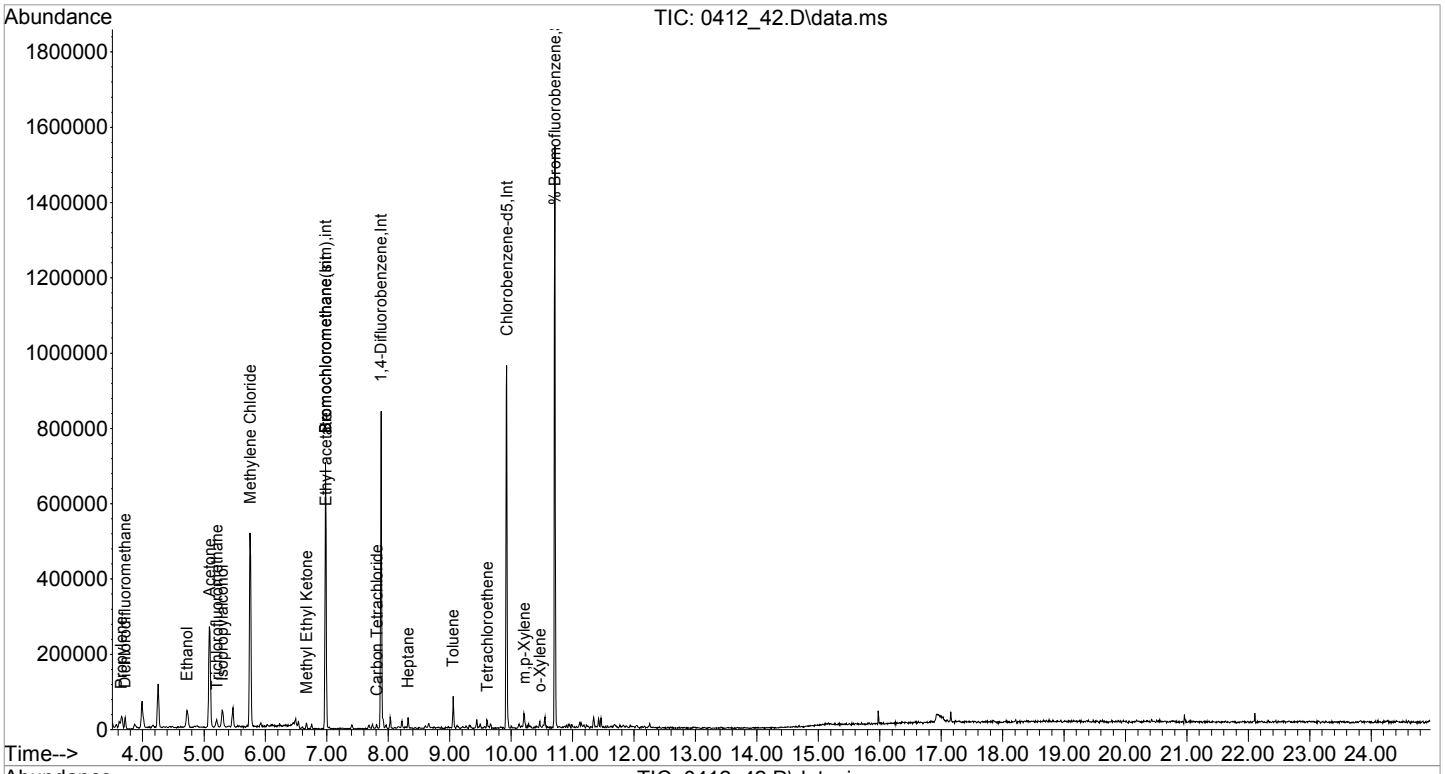
Quant Time: Apr 14 14:08:28 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

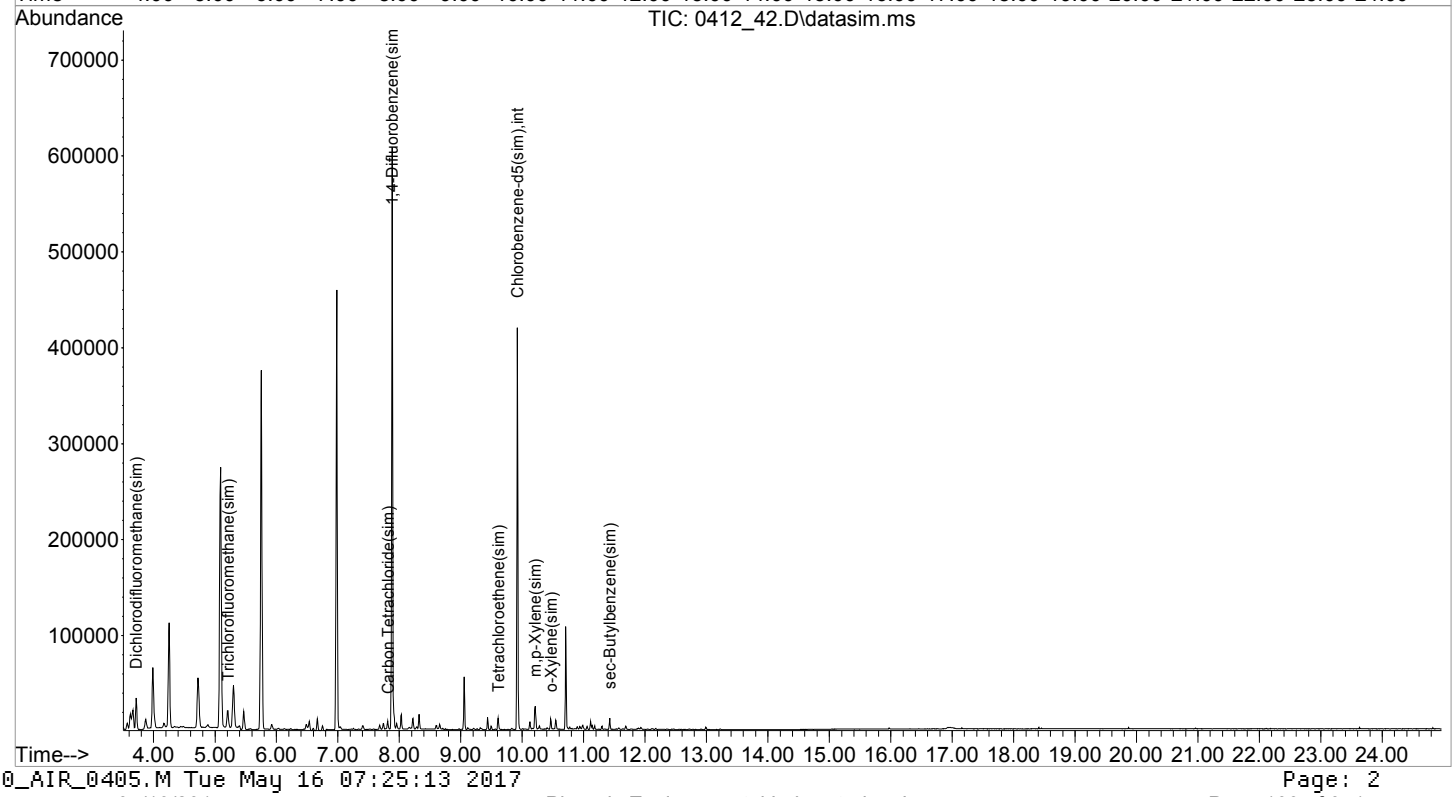
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	119785	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	329445	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	135849	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	119785	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	400626	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	143807	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	212844	11.520	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.20%				
Target Compounds							Qvalue
2) Propylene	3.651	41	11247	0.901	ppbv	#	50
3) Dichlorodifluoromethane	3.716	85	21649	0.502	ppbv	#	92
11) Ethanol	4.721	45	51817	6.405	ppbv	#	89
12) Acetone	5.086	43	280384	7.553	ppbv	#	65
13) Trichlorofluoromethane	5.208	101	13574	0.266	ppbv	#	92
14) Isopropylalcohol	5.297	45	43803	1.198	ppbv	#	67
17) Methylene Chloride	5.750	49	313993	11.874	ppbv	#	68
25) Methyl Ethyl Ketone	6.668	43	12210	0.473	ppbv	#	82
29) Ethyl acetate	6.987	61	4885	2.031	ppbv	#	1
34) Carbon Tetrachloride	7.815	117	3128	0.084	ppbv	#	69
43) Heptane	8.321	43	4771	0.391	ppbv	#	87
48) Toluene	9.055	91	29908	1.298	ppbv		94
52) Tetrachloroethene	9.611	166	3465	0.186	ppbv		95
57) m,p-Xylene	10.208	91	13086	0.569	ppbv	#	92
61) o-Xylene	10.467	91	5803	0.245	ppbv	#	94
81] Dichlorodifluoromethan...	3.718	85	27850	0.518	ppbv		95
85] Trichlorofluoromethane...	5.211	101	17254	0.260	ppbv		100
88] Carbon Tetrachloride(sim)	7.815	117	3000	0.080	ppbv	#	64
106] Tetrachloroethene(sim)	9.611	166	3465	0.188	ppbv		91
111] m,p-Xylene(sim)	10.211	91	14671	0.570	ppbv		98
114] o-Xylene(sim)	10.467	91	5803	0.252	ppbv	#	96
119] 1,2,4-Trimethylbenzene...	11.425	105	5723	0.198	ppbv	#	86
124] sec-Butylbenzene(sim)	11.423	105	5462	0.213	ppbv		76

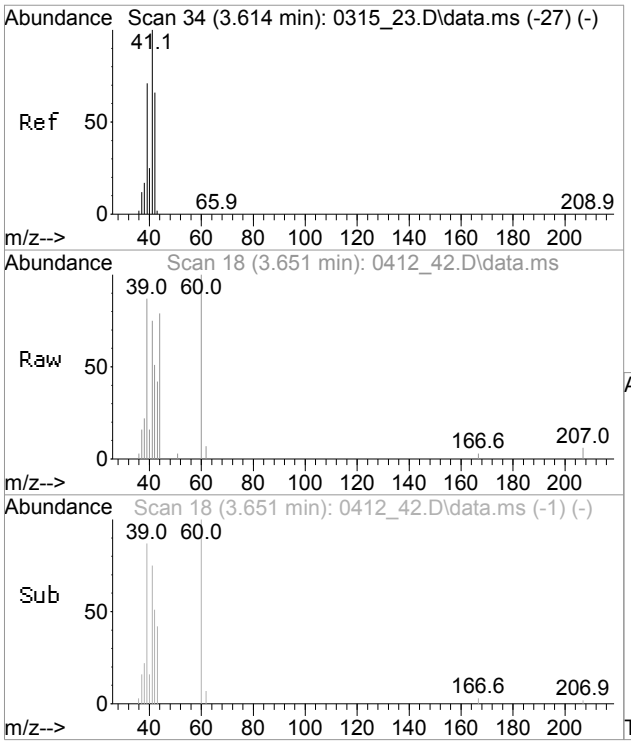
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_42.D
Acq On : 13 Apr 2017 07:55 pm
Operator : CORTEX\ms
Client ID : OA-1
Lab ID : BY03107
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:08:28 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration



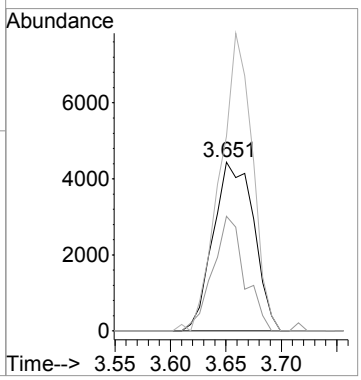


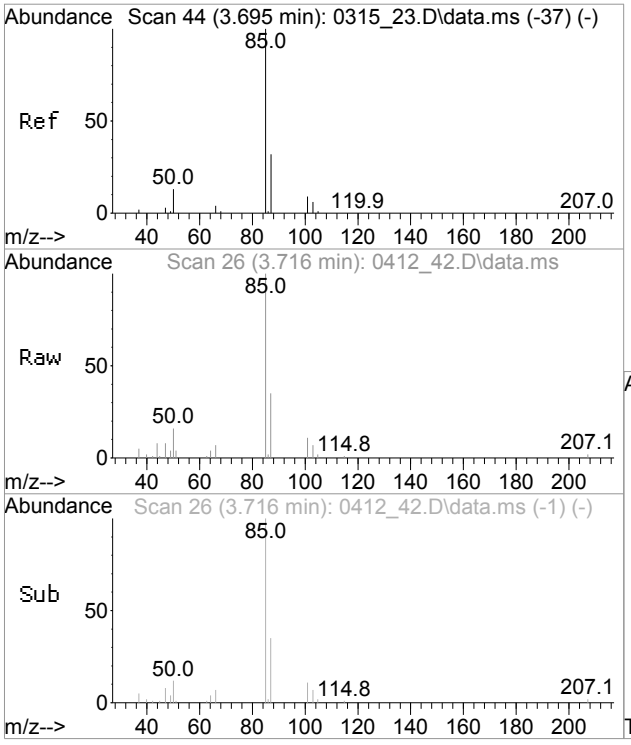


#2
Propylene
Concen: 0.90 ppbv
RT: 3.651 min Scan# 18
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 41 Resp: 11247

Ion	Ratio	Lower	Upper
41	100		
42	53.4	52.7	79.1
39	141.6	59.1	88.7#

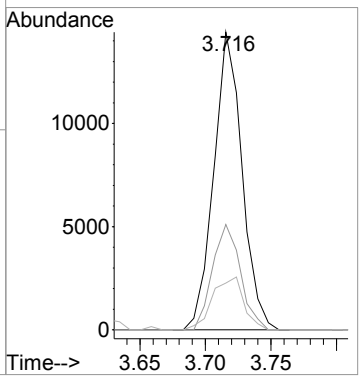


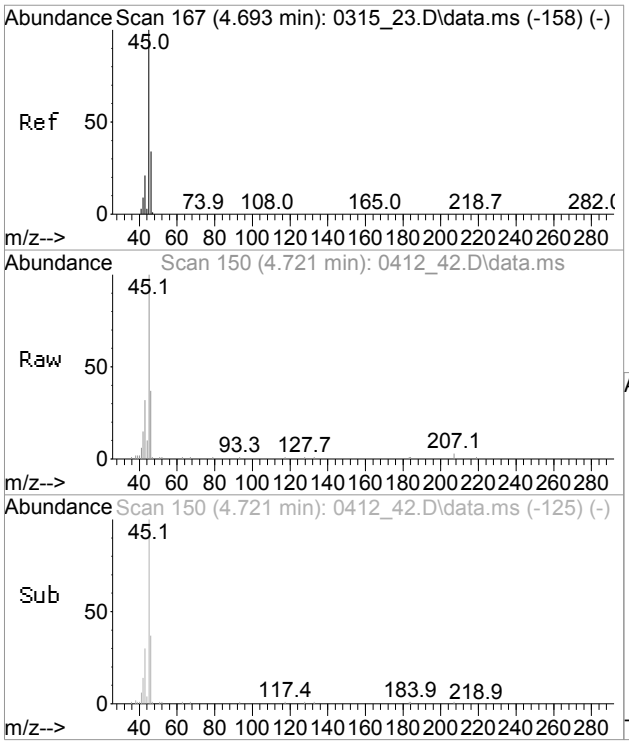


#3
Dichlorodifluoromethane
Concen: 0.50 ppbv
RT: 3.716 min Scan# 26
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 85 Resp: 21649

Ion	Ratio	Lower	Upper
85	100		
87	35.0	26.1	39.1
50	19.6	10.5	15.7#

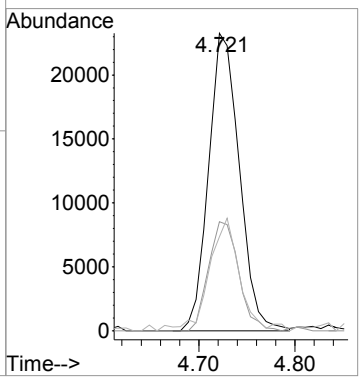


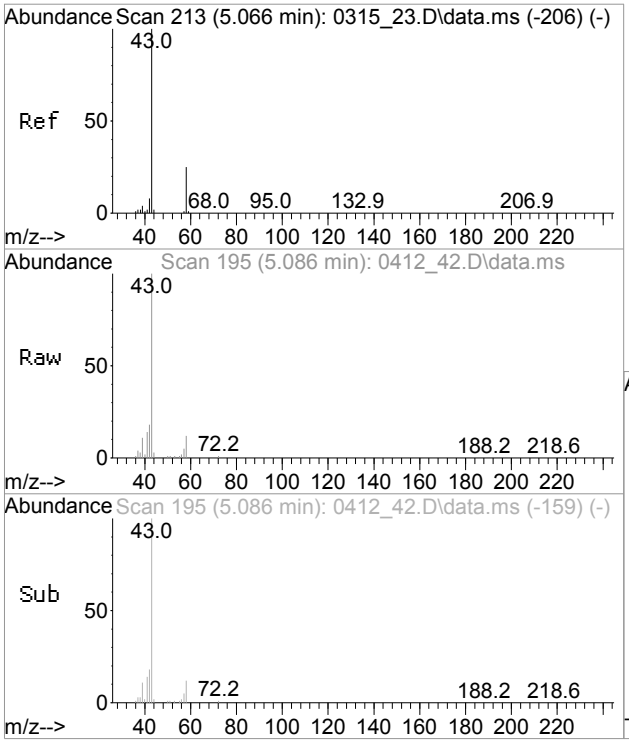


#11
Ethanol
Concen: 6.40 ppbv
RT: 4.721 min Scan# 150
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 45 Resp: 51817

Ion	Ratio	Lower	Upper
45	100		
46	35.9	28.5	42.7
43	37.4	19.7	29.5#

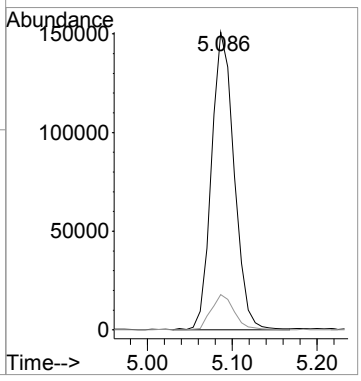


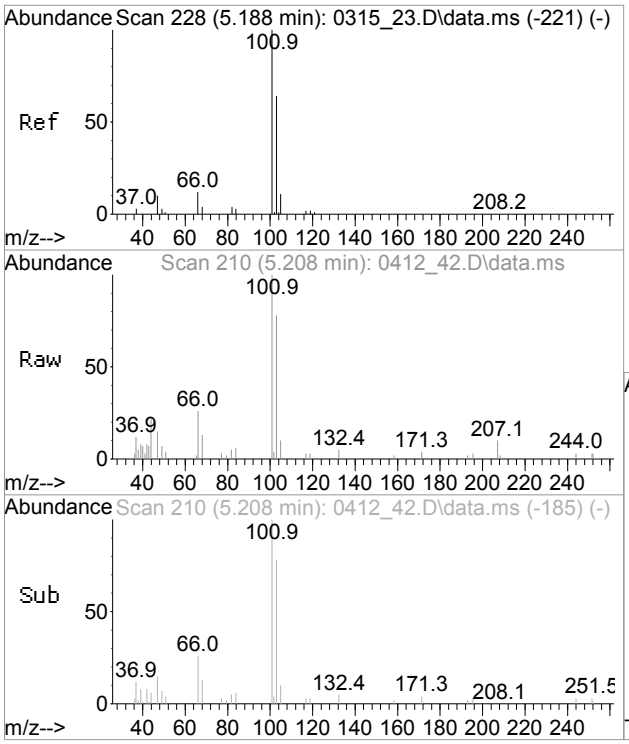


#12
Acetone
Concen: 7.55 ppbv
RT: 5.086 min Scan# 195
Delta R.T. -0.008 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 43 Resp: 280384

Ion	Ratio	Lower	Upper
43	100		
58	12.0	24.8	37.2#

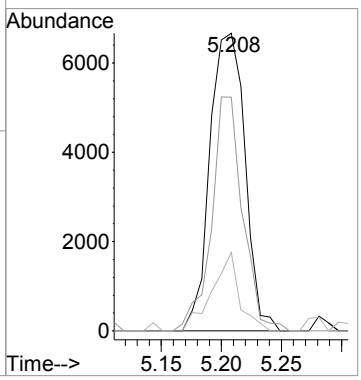


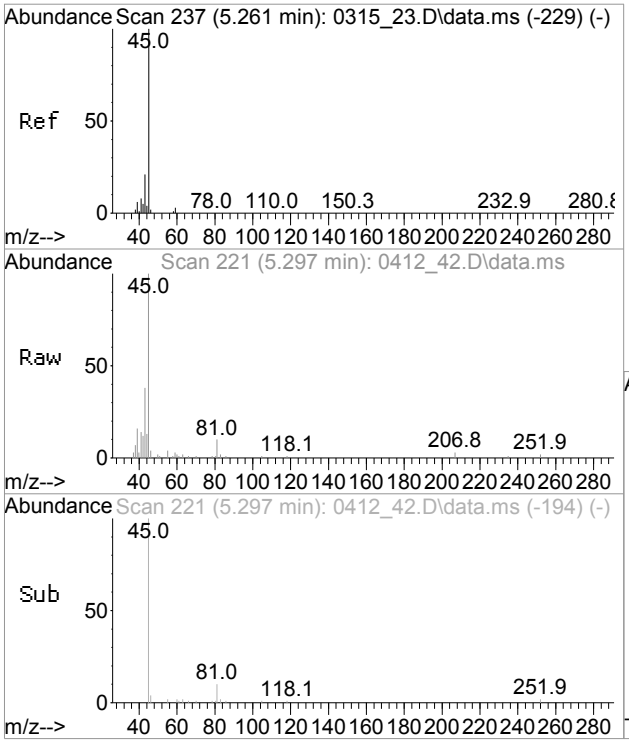


#13
Trichlorofluoromethane
Concen: 0.27 ppbv
RT: 5.208 min Scan# 210
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:101 Resp: 13574

Ion	Ratio	Lower	Upper
101	100		
103	69.6	51.8	77.8
66	20.6	11.1	16.7#

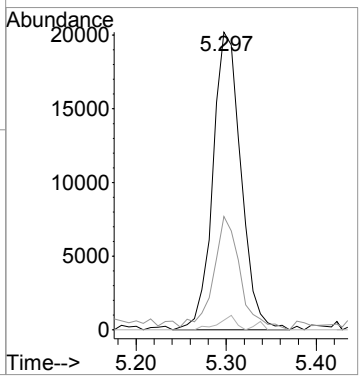


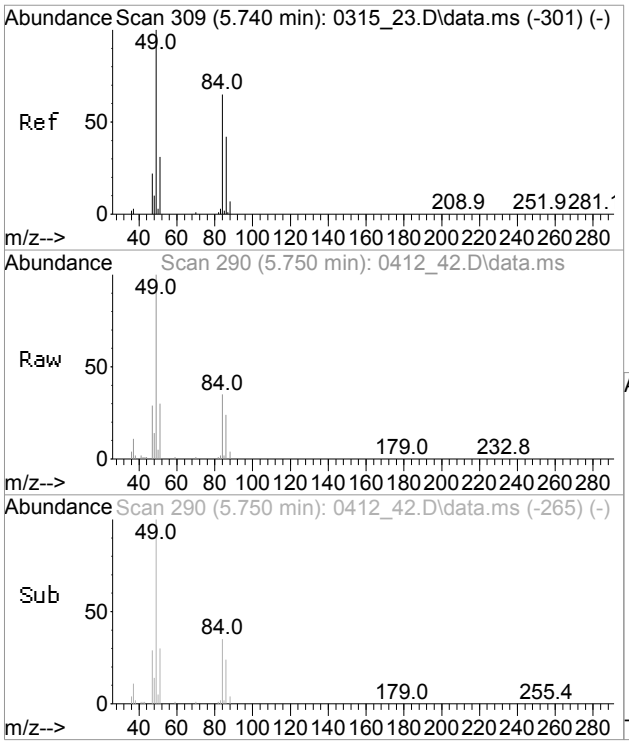


#14
Isopropylalcohol
Concen: 1.20 ppbv
RT: 5.297 min Scan# 221
Delta R.T. 0.016 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 45 Resp: 43803

Ion	Ratio	Lower	Upper
45	100		
43	36.7	15.4	23.0#
59	3.0	3.0	4.4

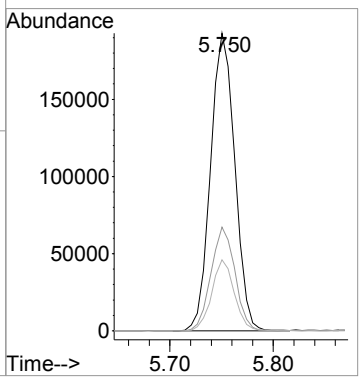


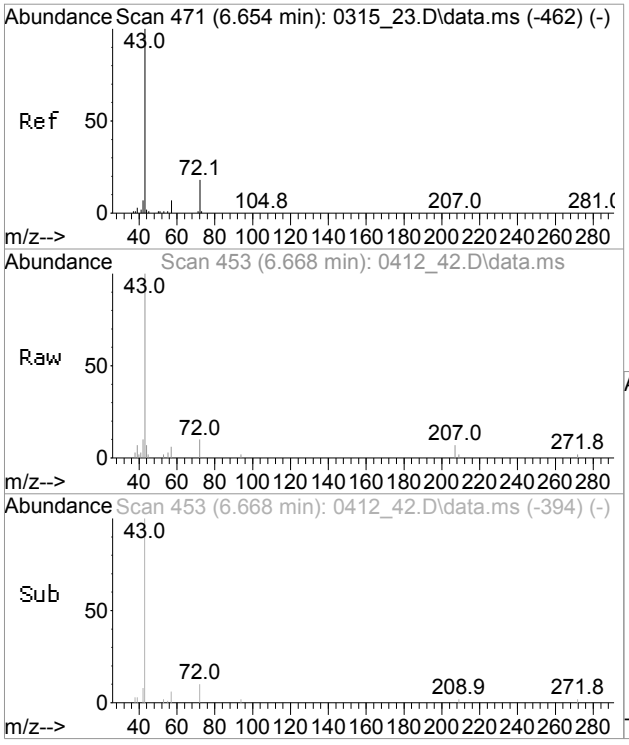


#17
Methylene Chloride
Concen: 11.87 ppbv
RT: 5.750 min Scan# 290
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 49 Resp: 313993

Ion	Ratio	Lower	Upper
49	100		
84	34.4	49.2	73.8#
86	22.2	31.5	47.3#

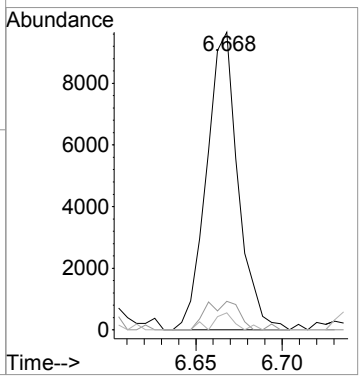


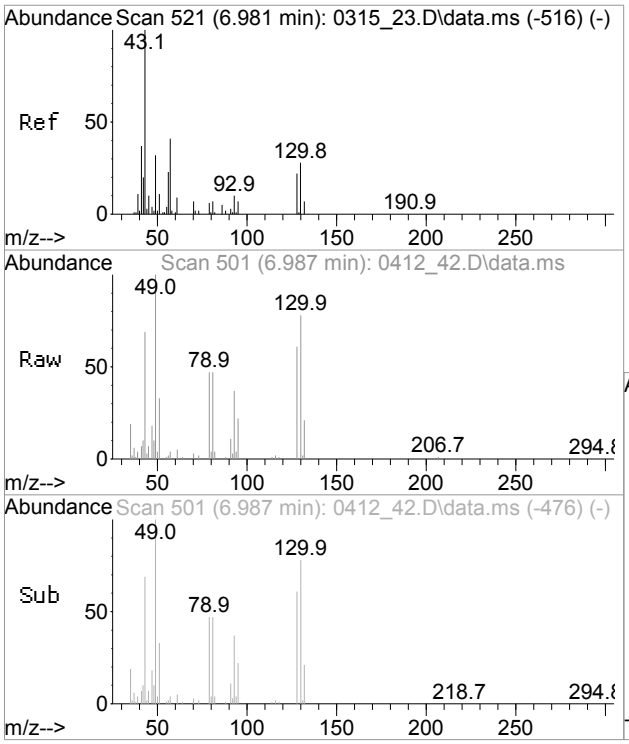


#25
Methyl Ethyl Ketone
Concen: 0.47 ppbv
RT: 6.668 min Scan# 453
Delta R.T. 0.005 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 43 Resp: 12210

Ion	Ratio	Lower	Upper
43	100		
72	9.9	15.9	23.9#
57	4.1	5.6	8.4#

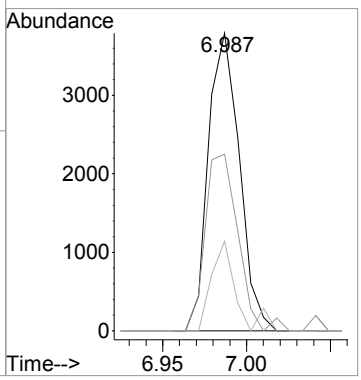


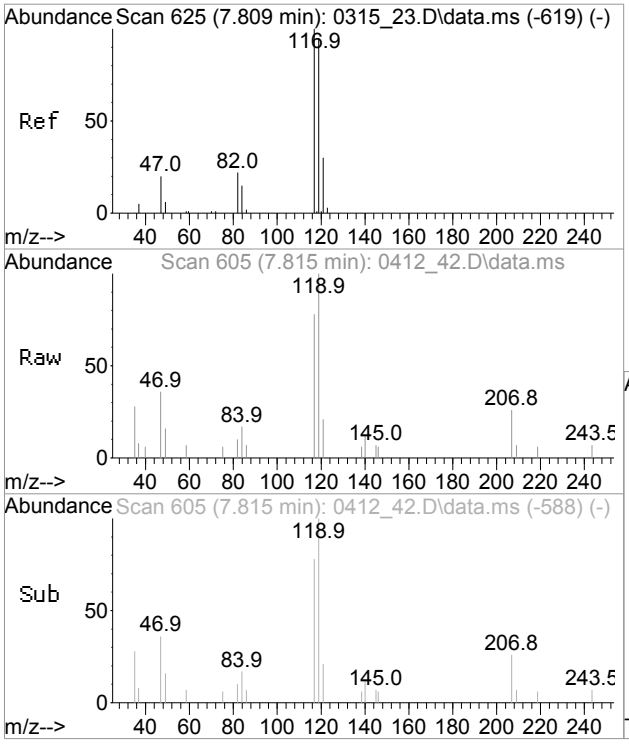


#29
Ethyl acetate
Concen: 2.03 ppbv
RT: 6.987 min Scan# 501
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 61 Resp: 4885

Ion	Ratio	Lower	Upper
61	100		
70	62.8	8.3	12.5#
88	23.8	5.8	8.6#

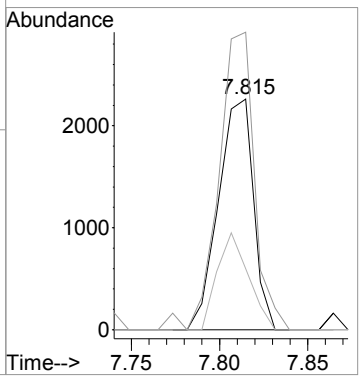


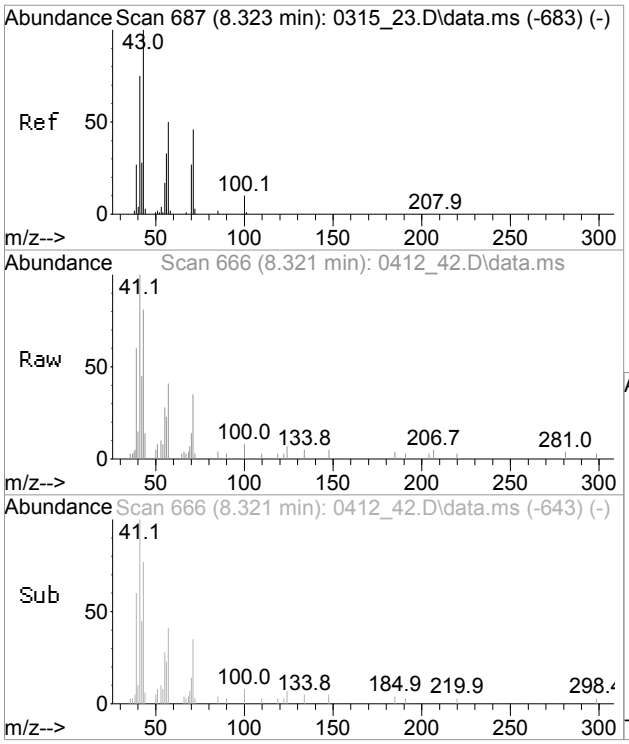


#34
Carbon Tetrachloride
Concen: Below Cal
RT: 7.815 min Scan# 605
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:117 Resp: 3128

Ion	Ratio	Lower	Upper
117	100		
119	131.6	75.9	115.9#
121	37.4	10.8	50.8

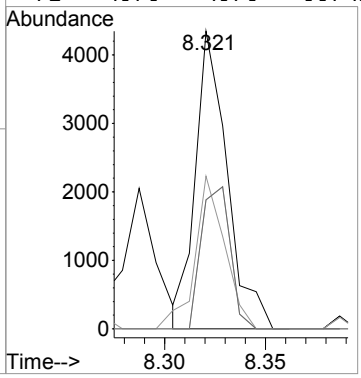


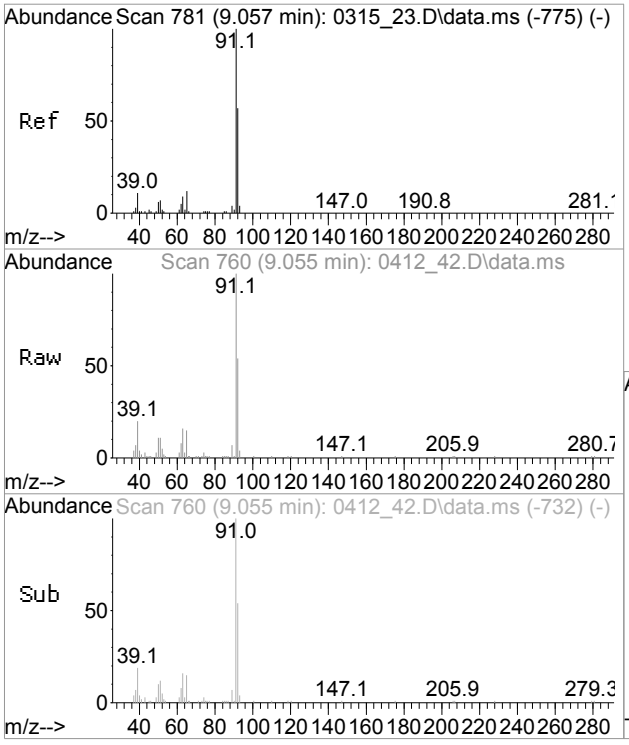


#43
Heptane
Concen: 0.39 ppbv
RT: 8.321 min Scan# 666
Delta R.T. -0.008 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 43 Resp: 4771

Ion	Ratio	Lower	Upper
43	100		
57	48.0	43.0	64.4
71	43.6	43.6	65.4#
71	43.6	43.6	65.4#

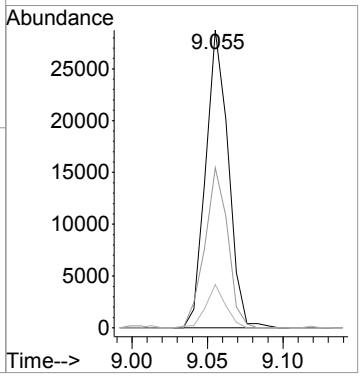


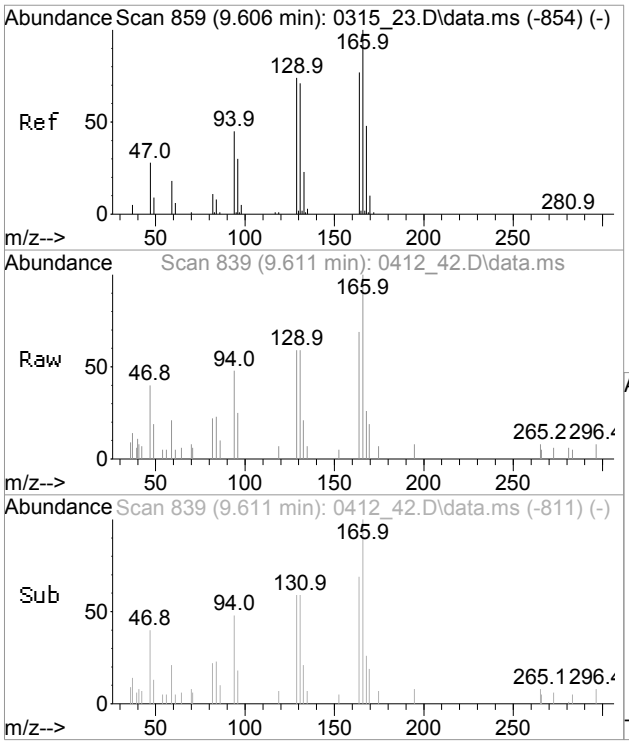


#48
Toluene
Concen: 1.30 ppbv
RT: 9.055 min Scan# 760
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 91 Resp: 29908

Ion	Ratio	Lower	Upper
91	100		
92	54.6	47.7	71.5
65	12.8	9.5	14.3

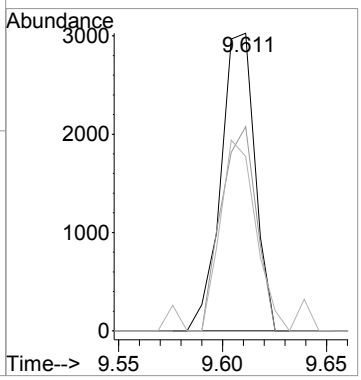


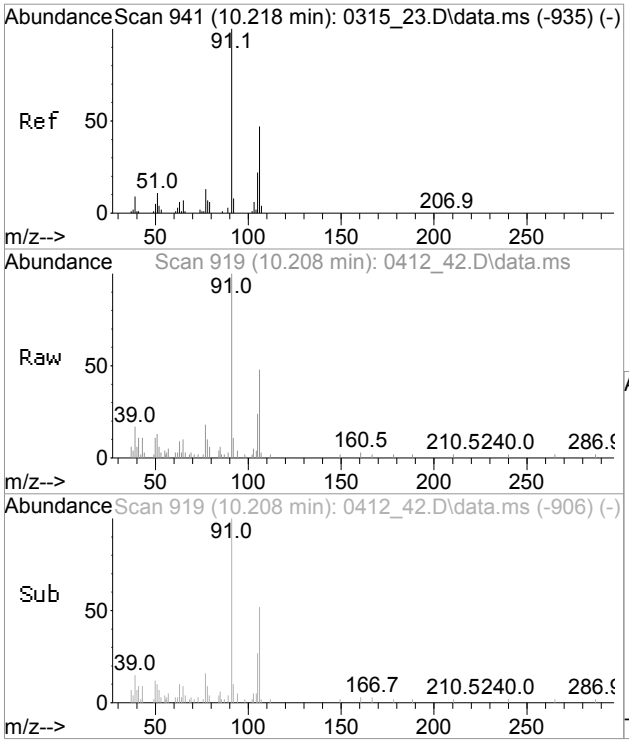


#52
Tetrachloroethene
Concen: 0.19 ppbv
RT: 9.611 min Scan# 839
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:166 Resp: 3465

Ion	Ratio	Lower	Upper
166	100		
164	70.4	62.2	93.4
129	70.4	56.6	84.8

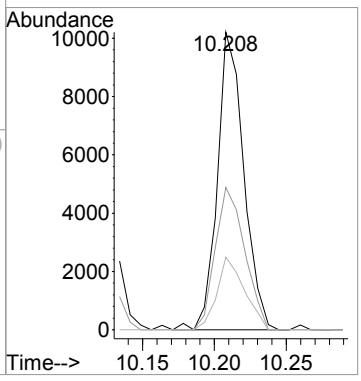


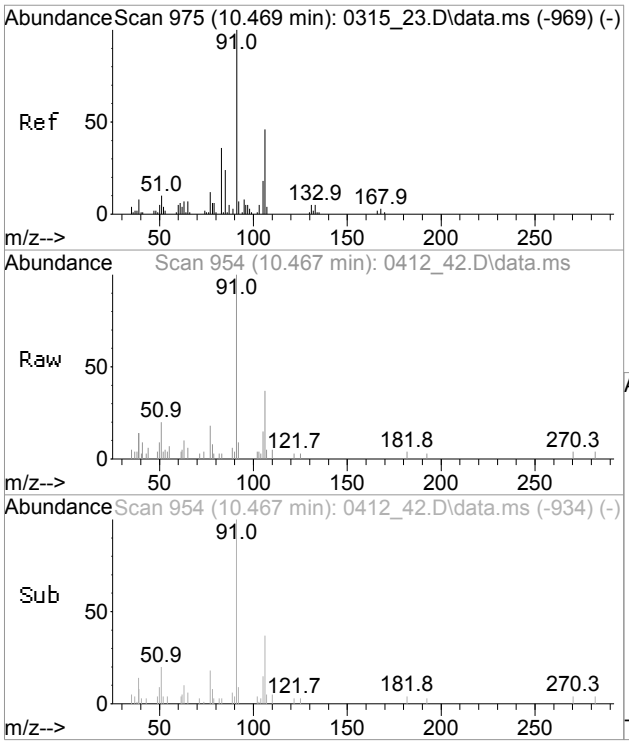


#57
m,p-Xylene
Concen: 0.57 ppbv
RT: 10.208 min Scan# 919
Delta R.T. -0.007 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 91 Resp: 13086

Ion	Ratio	Lower	Upper
91	100		
106	53.2	38.7	58.1
105	25.4	16.6	25.0#

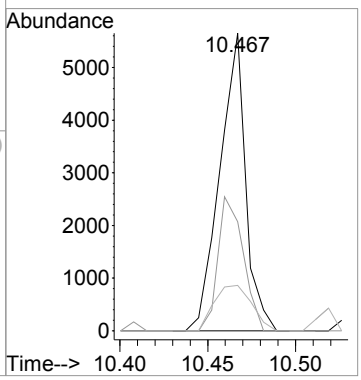


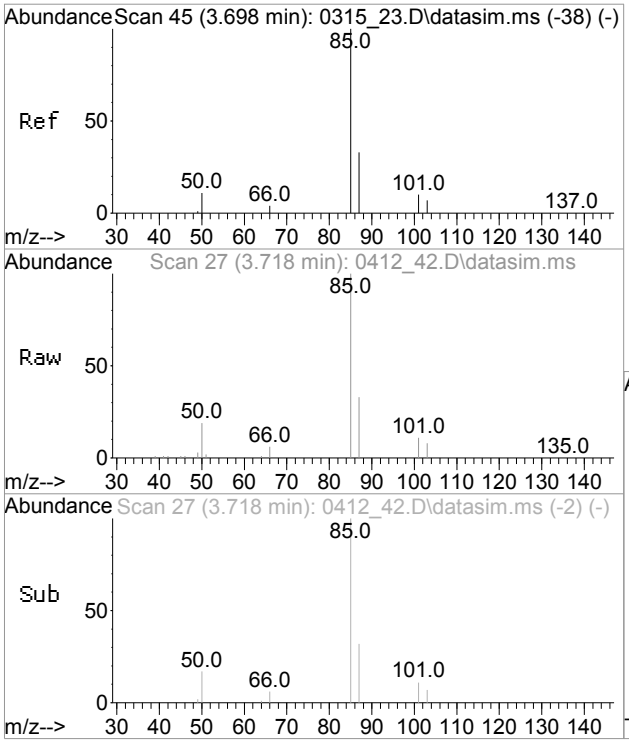


#61
o-Xylene
Concen: 0.24 ppbv
RT: 10.467 min Scan# 954
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 91 Resp: 5803

Ion	Ratio	Lower	Upper
91	100		
106	43.9	37.4	56.2
105	22.2	14.1	21.1#

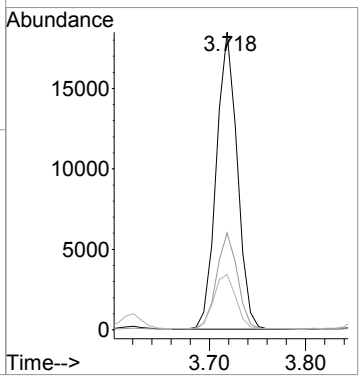


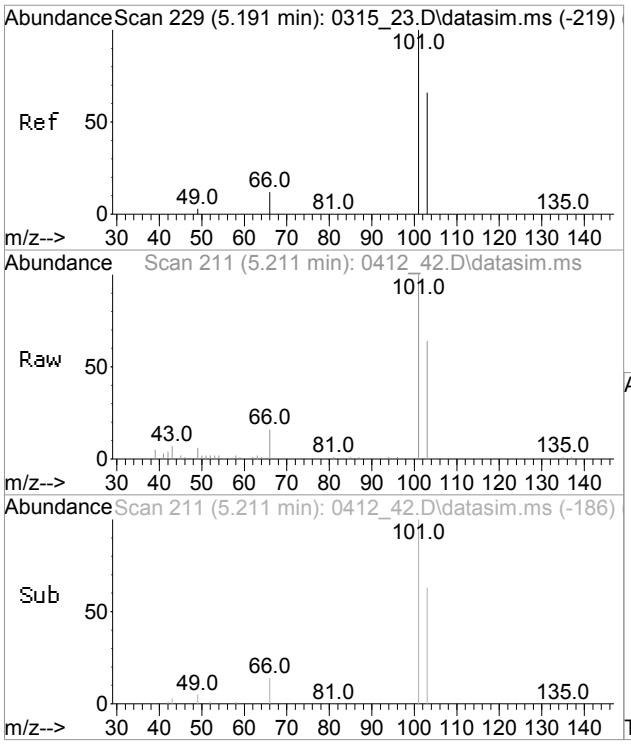


#81
Dichlorodifluoromethane(sim)
Concen: 0.52 ppbv
RT: 3.718 min Scan# 27
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 85 Resp: 27850

Ion	Ratio	Lower	Upper
85	100		
87	32.4	12.7	52.7
50	19.4	0.0	32.3

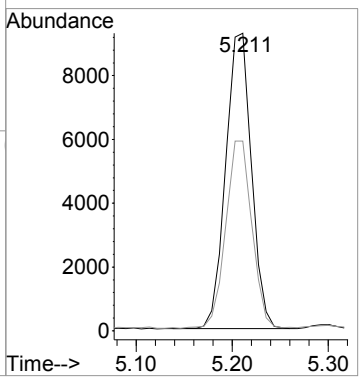


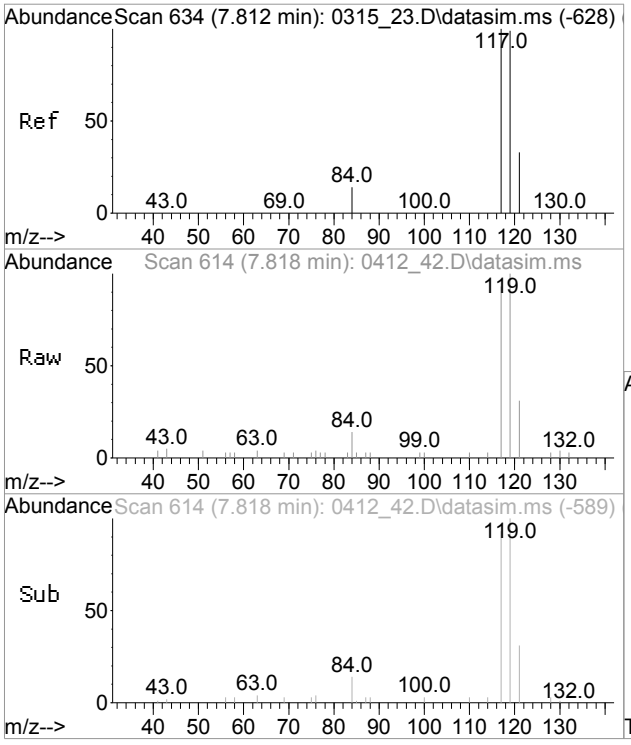


#85
Trichlorofluoromethane(sim)
Concen: 0.26 ppbv
RT: 5.211 min Scan# 211
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:101 Resp: 17254

Ion	Ratio	Lower	Upper
101	100		
103	64.7	52.0	78.0

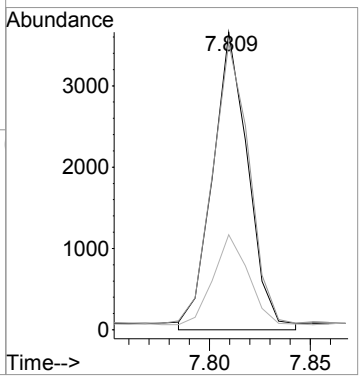


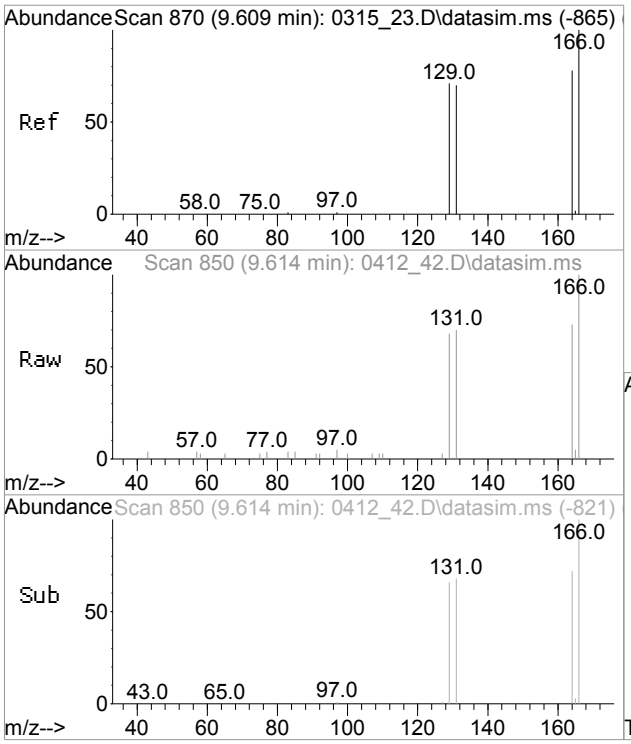


#88
Carbon Tetrachloride(sim)
Concen: 0.08 ppbv
RT: 7.815 min Scan# 614
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:117 Resp: 3000

Ion	Ratio	Lower	Upper
117	100		
119	136.6	76.7	115.1#
121	41.9	24.6	37.0#

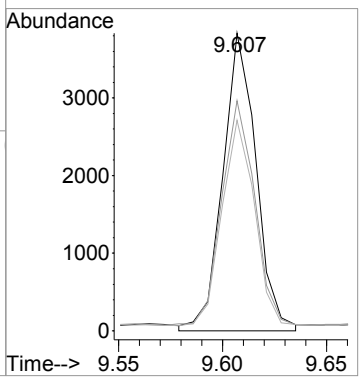


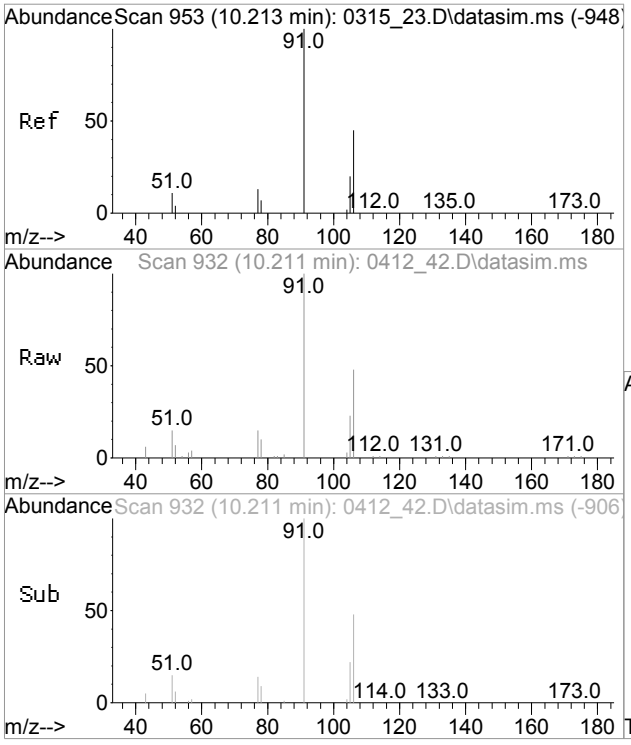


#106
Tetrachloroethene(sim)
Concen: 0.19 ppbv
RT: 9.611 min Scan# 850
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:166 Resp: 3465

Ion	Ratio	Lower	Upper
166	100		
164	64.0	57.8	97.8
129	70.4	50.7	90.7

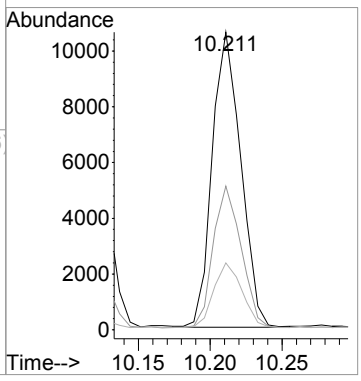


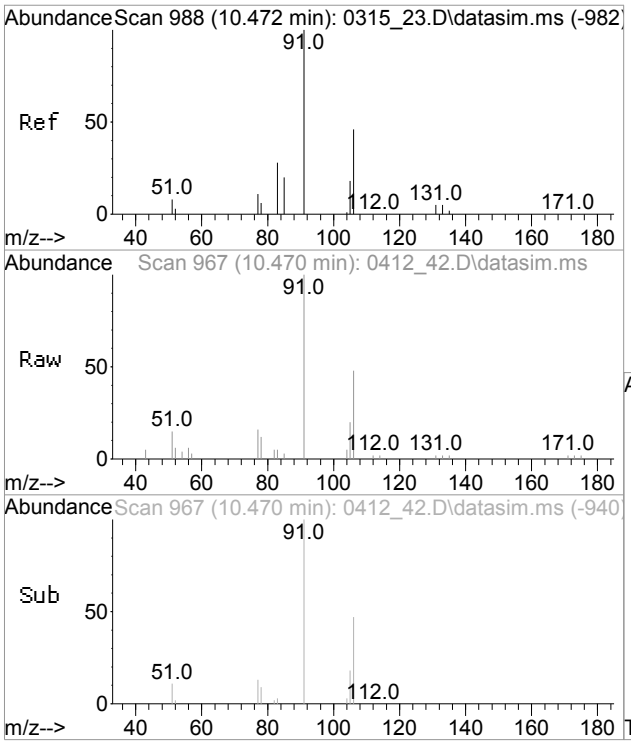


#111
m,p-Xylene(sim)
Concen: 0.57 ppbv
RT: 10.211 min Scan# 932
Delta R.T. -0.007 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 91 Resp: 14671

Ion	Ratio	Lower	Upper
91	100		
106	47.2	43.6	53.2
105	21.8	16.6	25.0

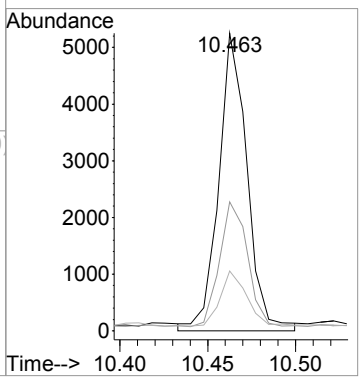


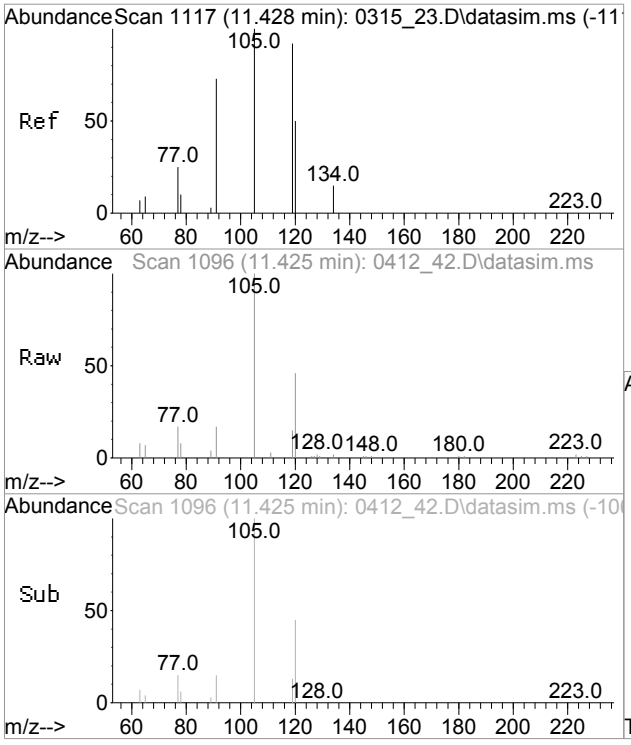


#114
o-Xylene(sim)
Concen: 0.25 ppbv
RT: 10.467 min Scan# 967
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion: 91 Resp: 5803

Ion	Ratio	Lower	Upper
91	100		
106	43.9	36.0	54.0
105	22.2	13.8	20.8#

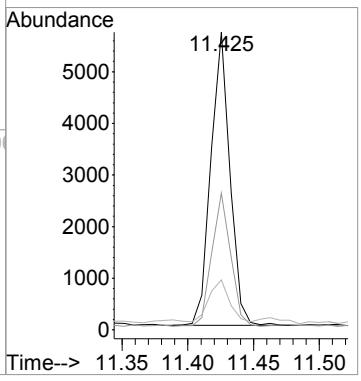


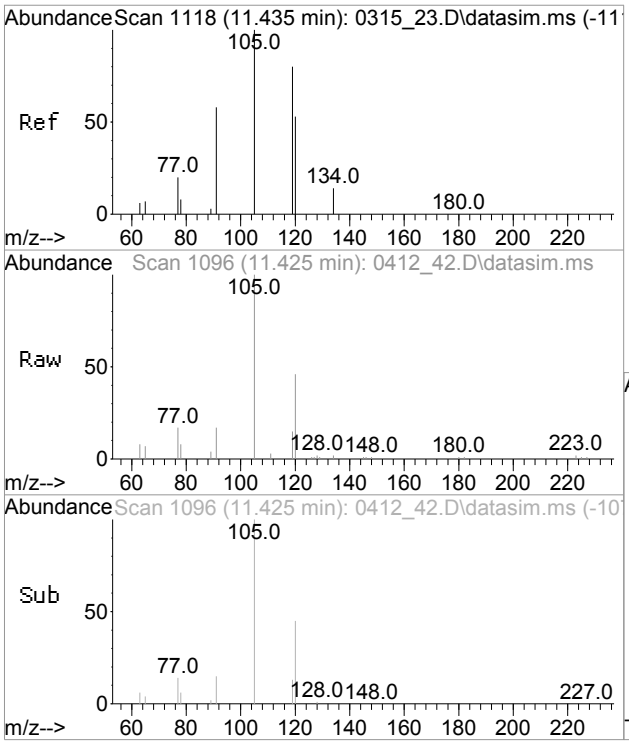


#119
1,2,4-Trimethylbenzene(sim)
Concen: 0.20 ppbv
RT: 11.425 min Scan# 1096
Delta R.T. 0.000 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:105 Resp: 5723

Ion	Ratio	Lower	Upper
105	100		
120	44.9	43.5	65.3
77	17.9	20.2	30.4#

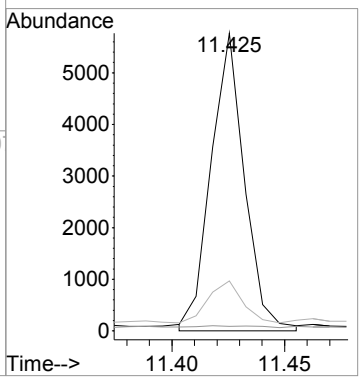




#124
sec-Butylbenzene(sim)
Concen: 0.21 ppbv
RT: 11.423 min Scan# 1096
Delta R.T. -0.007 min
Lab File: 0412_42.D
Acq: 13 Apr 2017 07:55 pm

Tgt Ion:105 Resp: 5462

Ion	Ratio	Lower	Upper
105	100		
134	0.0	0.0	35.9
77	10.4	0.0	34.1



6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM20 | Calibration Date From: 04/05/17 13:15

Heated Purge (Y/N): Y | Calibration Date Thru: 04/05/17 18:16

GC Column: zb-1ms | Method File: 20_AIR_0405.M

Laboratory File Ids

RRF1 0405_03.D RRF2 0405_04.D RRF3 0405_05.D RRF4 0405_06.D RRF5 0405_07.D RRF6 0405_08.D
RRF7 0405_09.D RRF8 0405_10.D RRF9 0405_11.D RRF10 0405_12.D RRF11 0405_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
Propylene				0.921	0.975	1.051	1.041	1.180	1.124	1.046	0.999		1.042	7.85
Dichlorodifluoromethane			3.761	3.408	3.317	3.596	3.450	3.876	3.741	3.574	3.654		3.598	5.06
Chloromethane				1.455	1.186	1.234	1.278	1.400	1.235	1.112	1.065		1.246	10.65
1,2-Dichlorotetrafluoroethane			3.375	2.974	2.919	3.151	2.956	3.273	3.128	2.965	3.046		3.088	5.10
Vinyl Chloride			1.012	1.048	1.036	1.031	0.964	1.085	1.001	0.933	0.926		1.004	5.34
1,3-Butadiene				0.835	0.921	0.925	0.871	0.927	0.841	0.798	0.770		0.861	7.02
Bromomethane				1.244	0.964	0.952	0.907	1.013	0.961	0.912	0.960		0.989	10.95
Chloroethane			0.583	0.545	0.440	0.401	0.432	0.485	0.439	0.419	0.406		0.461	13.88
Ethanol				0.980	0.785	0.684	0.605	0.653	0.624	0.549	0.524		0.675	21.79
Acetone				3.413	3.160	3.186	3.105	3.229	3.081	2.875	2.744		3.099	6.72
Trichlorofluoromethane			4.372	3.964	4.305	4.379	4.086	4.590	4.332	4.027	4.217		4.252	4.67
Isopropylalcohol				3.767	3.016	3.243	2.943	3.091	2.929	2.765	2.660		3.052	11.17
Acrylonitrile				1.237	1.051	0.924	0.953	0.657	0.983	0.966	0.949		0.965	16.55
1,1-Dichloroethene			2.294	2.049	2.060	2.123	2.074	2.355	2.261	2.150	2.156		2.169	5.06
Methylene Chloride			3.537	2.692	2.144	2.108	1.870	2.069	1.920	1.784	1.744		2.208	25.95
Carbon Disulfide			2.556	2.276	2.180	2.282	2.065	2.361	2.282	2.127	2.136		2.252	6.58
Trichlorotrifluoroethane			2.481	2.344	2.323	2.456	2.251	2.483	2.346	2.239	2.313		2.360	3.95
Trans-1,2-Dichloroethene			1.823	1.750	1.632	1.623	1.579	1.767	1.709	1.644	1.669		1.688	4.70
1,1-Dichloroethane			2.064	1.935	1.496	2.026	1.522	2.135	1.751	1.706	1.576		1.801	13.64
Methyl tert-butyl ether(MTBE)			2.008	1.825	1.631	2.000	1.843	2.854	2.161	2.153	2.148		2.069	16.64
Methyl Ethyl Ketone			2.371	2.022	1.816	1.964	1.992	2.389	2.370	2.282	2.208		2.157	9.86
Cis-1,2-Dichloroethene			1.232	1.142	0.997	1.109	1.070	1.271	1.258	1.262	1.287		1.181	8.85
Hexane			0.826	0.802	0.620	0.798	0.844	1.008	0.993	0.958	0.987		0.871	14.67
Chloroform			2.059	2.042	2.012	2.148	2.039	2.284	2.187	2.050	2.093		2.101	4.21
Ethyl acetate			0.173	0.174	0.190	0.218	0.182	0.227	0.227	0.207	0.210		0.201	10.72
Tetrahydrofuran			1.148	0.740	0.628	0.715	0.742	0.914	0.933	0.916	0.921		0.851	18.60
1,2-Dichloroethane			1.861	1.602	1.650	1.714	1.734	1.918	1.879	1.796	1.838		1.777	6.10

(#) The maximum %RSD was not met for this compound

6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM20 | Calibration Date From: 04/05/17 13:15

Heated Purge (Y/N): Y | Calibration Date Thru: 04/05/17 18:16

GC Column: zb-1ms | Method File: 20_AIR_0405.M

Laboratory File Ids

RRF1 0405_03.D RRF2 0405_04.D RRF3 0405_05.D RRF4 0405_06.D RRF5 0405_07.D RRF6 0405_08.D
RRF7 0405_09.D RRF8 0405_10.D RRF9 0405_11.D RRF10 0405_12.D RRF11 0405_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
1,1,1-Trichloroethane			2.402	2.570	2.203	2.360	2.388	2.686	2.592	2.504	2.565		2.474	5.99
Benzene			2.230	1.745	1.692	1.769	1.690	1.978	1.915	1.776	1.925		1.858	9.39
Carbon Tetrachloride				3.051	2.840	3.108	2.967	3.351	3.219	3.112	3.218		3.108	5.14
Cyclohexane			0.947	0.708	0.595	0.709	0.717	0.847	0.833	0.801	0.824		0.776	13.36
1,2-dichloropropane			0.216	0.196	0.240	0.210	0.209	0.239	0.236	0.237	0.235		0.224	7.35
Bromodichloromethane			0.854	0.779	0.745	0.771	0.788	0.892	0.873	0.874	0.908		0.831	7.29
Trichloroethene			0.441	0.378	0.407	0.393	0.415	0.465	0.446	0.443	0.443		0.426	6.77
1,4-Dioxane				0.152	0.123	0.127	0.127	0.150	0.155	0.157	0.162		0.144	10.95
Heptane			0.368	0.297	0.286	0.368	0.350	0.432	0.409	0.415	0.408		0.370	14.02
cis-1,3-Dichloropropene			0.341	0.366	0.327	0.349	0.358	0.437	0.437	0.446	0.456		0.391	13.27
4-Methyl-2-pentanone(MIBK)			0.552	0.431	0.449	0.531	0.570	0.688	0.697	0.713	0.717		0.594	19.06
trans-1,3-Dichloropropene				0.333	0.280	0.354	0.365	0.443	0.455	0.472	0.483		0.398	18.78
1,1,2-Trichloroethane				0.292	0.314	0.294	0.303	0.331	0.324	0.322	0.322		0.313	4.70
Toluene			0.767	0.596	0.589	0.606	0.636	0.771	0.777	0.777	0.774		0.699	12.69
Dibromochloromethane				0.995	0.935	0.950	0.975	1.073	1.062	1.049	1.065		1.013	5.51
2-Hexanone(MBK)				0.403	0.390	0.449	0.522	0.655	0.672	0.677	0.669		0.555	23.06
1,2-Dibromoethane(EDB)			0.592	0.559	0.517	0.563	0.570	0.652	0.642	0.643	0.653		0.599	8.34
Tetrachloroethene			0.533	0.564	0.510	0.541	0.542	0.602	0.599	0.598	0.610		0.566	6.49
1,1,1,2-Tetrachloroethane				1.281	1.243	1.407	1.268	1.366	1.239	1.012	0.896		1.214	14.30
Chlorobenzene			2.038	1.487	1.716	1.740	1.647	1.741	1.615	1.325	1.188		1.611	15.59
Ethylbenzene			2.205	1.991	1.860	1.988	2.101	2.423	2.365	1.969	1.769		2.075	10.63
m,p-Xylene			1.670	1.570	1.515	1.376	1.894	2.152	1.968	1.604	1.491		1.693	15.10
Bromoform				2.583	2.220	2.518	2.414	2.580	2.350	1.958	1.758		2.298	13.15
Styrene				0.949	1.043	1.120	1.162	1.385	1.319	1.111	1.004		1.137	13.24
1,1,2,2-Tetrachloroethane			1.721	1.398	1.438	1.626	1.470	1.599	1.427	1.218	1.128		1.447	13.11
o-Xylene			1.658	1.393	1.554	1.777	1.946	2.146	1.978	1.693	1.556		1.745	13.79
Isopropylbenzene			2.200	2.241	2.248	2.465	2.508	2.703	2.544	2.118	1.875		2.322	10.95

(#) The maximum %RSD was not met for this compound

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM20 | Calibration Date From: 04/05/17 13:15

Heated Purge (Y/N): Y | Calibration Date Thru: 04/05/17 18:16

GC Column: zb-1ms | Method File: 20_AIR_0405.M

Laboratory File Ids

RRF1 0405_03.D RRF2 0405_04.D RRF3 0405_05.D RRF4 0405_06.D RRF5 0405_07.D RRF6 0405_08.D
RRF7 0405_09.D RRF8 0405_10.D RRF9 0405_11.D RRF10 0405_12.D RRF11 0405_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
4-Ethyltoluene			1.896	1.983	2.100	2.619	2.681	3.046	2.781	2.329	2.093		2.392	16.89
1,3,5-Trimethylbenzene			2.257	1.646	1.951	2.240	2.419	2.607	2.419	2.008	1.742		2.143	15.23
1,2,4-Trimethylbenzene				1.753	1.707	2.182	2.335	2.716	2.526	2.157	1.985		2.170	16.28
Benzyl chloride				1.313	1.593	1.761	2.106	2.387	2.258	1.973	1.815		1.901	18.64
1,3-Dichlorobenzene			1.715	1.721	1.760	1.943	2.073	2.194	2.040	1.657	1.458		1.840	12.83
1,4-Dichlorobenzene			1.152	1.501	1.725	1.967	1.965	2.164	1.934	1.636	1.469		1.724	18.40
sec-Butylbenzene			2.405	2.340	2.509	3.008	3.116	3.362	3.190	2.636	2.350		2.769	14.47
4-Isopropyltoluene			2.321	2.015	2.328	2.756	3.024	3.408	3.173	2.611	2.400		2.671	17.13
1,2-Dichlorobenzene			2.020	1.522	1.770	2.028	1.895	2.111	1.939	1.581	1.397		1.807	14.01
n-Butylbenzene				1.531	1.619	2.092	2.410	2.715	2.675	2.230	1.990		2.158	20.44
1,2,4-Trichlorobenzene				0.647	0.687	0.893	1.190	1.366	1.514	1.317	1.238		1.107	29.27
Hexachlorobutadiene			1.878	1.703	1.869	1.889	1.936	1.947	1.802	1.453	1.283		1.751	13.30
Dichlorodifluoromethane(sim)	4.987	4.627	4.404	4.223	4.128	4.420	4.274	4.827					4.486	6.74
1,2-Dichlorotetrafluoroethane(sim)	3.949	3.386	3.375	2.975	2.919	3.151	2.956	3.273					3.248	10.44
Vinyl Chloride(sim)	1.515	1.364	1.204	1.222	1.125	1.220	1.152	1.282					1.261	10.04
Bromomethane(sim)	1.416	1.425	1.517	1.237	0.964	0.952	0.907	1.013					1.179	21.11
Trichlorofluoromethane(sim)	6.231	5.873	5.555	5.265	5.070	5.444	5.182	5.745					5.546	7.03
1,2-Dichloroethane(sim)	1.997	1.972	1.861	1.602	1.660	1.714	1.734	1.918					1.807	8.27
1,1,1-Trichloroethane(sim)	3.620	3.233	3.123	3.010	2.858	3.116	3.031	3.421					3.176	7.68
Carbon Tetrachloride(sim)	3.562	2.927	3.359	3.051	2.840	3.112	2.967	3.351					3.146	8.01
1,1-Dichloroethene(sim)	2.845	2.783	2.598	2.467	2.369	2.568	2.479	2.803					2.614	6.78
Carbon Disulfide(sim)	2.401	2.798	2.556	2.276	2.180	2.285	2.064	2.361					2.365	9.65
Trichlorotrifluoroethane(sim)	3.512	3.241	3.130	2.902	2.820	2.995	2.830	3.137					3.071	7.65
Trans-1,2-Dichloroethene(sim)	2.350	2.101	1.848	1.762	1.632	1.623	1.579	1.767					1.833	14.55
1,1-Dichloroethane(sim)	2.423	2.756	2.352	2.295	1.845	2.290	1.846	2.477					2.285	13.53
Cis-1,2-Dichloroethene(sim)	1.354	0.937	1.232	1.142	0.997	1.109	1.070	1.271					1.139	12.37
Chloroform(sim)	2.998	2.793	2.636	2.567	2.442	2.688	2.568	2.867					2.695	6.75

(#) The maximum %RSD was not met for this compound

6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM20 | Calibration Date From: 04/05/17 13:15

Heated Purge (Y/N): Y | Calibration Date Thru: 04/05/17 18:16

GC Column: zb-1ms | Method File: 20_AIR_0405.M

Laboratory File Ids

RRF1 0405_03.D RRF2 0405_04.D RRF3 0405_05.D RRF4 0405_06.D RRF5 0405_07.D RRF6 0405_08.D
RRF7 0405_09.D RRF8 0405_10.D RRF9 0405_11.D RRF10 0405_12.D RRF11 0405_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
Benzene(sim)	2.513	2.273	2.230	1.745	1.692	1.769	1.690	1.978					1.986	15.91
1,2-dichloropropane(sim)	0.322	0.167	0.182	0.165	0.206	0.178	0.174	0.200					0.199	25.90
Bromodichloromethane(sim)	0.617	0.572	0.548	0.535	0.515	0.534	0.523						0.549	6.39
Trichloroethene(sim)	0.443	0.346	0.370	0.334	0.350	0.333	0.346	0.390					0.364	10.22
1,4-Dioxane(sim)	0.156	0.128	0.120	0.119	0.111	0.118	0.118						0.124	11.88
cis-1,3-Dichloropropene(sim)	0.322	0.233	0.286	0.308	0.280	0.296	0.297						0.289	9.77
1,1,2-Trichloroethane(sim)	0.409	0.372	0.324	0.326	0.315	0.328	0.318	0.355					0.343	9.64
Dibromochloromethane(sim)	0.967	0.840	0.750	0.837	0.803	0.806	0.812	0.899					0.839	7.93
1,2-Dibromoethane(EDB)(sim)	0.648	0.599	0.604	0.577	0.578	0.612	0.605	0.697					0.615	6.49
Tetrachloroethene(sim)	0.385	0.457	0.448	0.475	0.449	0.459	0.451	0.505	0.501				0.459	7.64
Bromoform(sim)	3.170	2.260	2.331	2.481	2.160	2.385	2.296						2.441	13.80
Chlorobenzene(sim)	2.531	2.353	2.141	2.067	1.906	1.979	1.894	1.990					2.108	10.75
Ethylbenzene(sim)	2.463	1.977	2.100	1.913	1.810	1.889	1.998	2.279					2.054	10.66
m,p-Xylene(sim)	1.762	1.684	1.594	1.599	1.601	1.870	1.995	2.217					1.790	12.56
Styrene(sim)	1.399	0.850	0.982	0.912	1.015	1.064	1.105						1.047	16.99
1,1,2,2-Tetrachloroethane(sim)	2.047	1.950	1.857	1.769	1.746	1.849	1.750						1.852	6.09
o-Xylene(sim)	1.721	1.524	1.579	1.339	1.513	1.689	1.851						1.602	10.44
Isopropylbenzene(sim)	2.779	2.507	2.442	2.373	2.345	2.518	2.546	2.774					2.536	6.48
4-Ethyltoluene(sim)	2.321	2.049	1.942	1.996	2.189	2.583	2.766	3.075					2.365	17.22
1,3,5-Trimethylbenzene(sim)	1.985	1.778	2.149	1.582	1.898	2.128	2.301	2.451					2.034	13.88
1,2,4-Trimethylbenzene(sim)	1.833	1.665	1.654	1.653	1.839	2.250	2.407	2.747					2.006	20.56
Benzyl chloride(sim)	1.412	1.304	1.314	1.342	1.662	1.919	2.172	2.501					1.703	26.53
1,3-Dichlorobenzene(sim)	2.121	1.189	1.633	1.653	1.713	1.846	1.972	2.063					1.774	16.89
1,4-Dichlorobenzene(sim)	1.687	1.598	1.689	1.848	2.117	2.415	2.445						1.971	18.03
sec-Butylbenzene(sim)	1.898	1.320	1.635	1.684	1.661	2.073	2.219						1.784	16.93
4-Isopropyltoluene(sim)	2.307	2.221	2.115	2.147	2.359	2.805	3.008						2.423	14.27
1,2-Dichlorobenzene(sim)	1.474	1.684	1.929	1.436	1.723	1.927	1.801	1.985					1.745	11.87

(#) The maximum %RSD was not met for this compound

6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM20 | Calibration Date From: 04/05/17 13:15

Heated Purge (Y/N): Y | Calibration Date Thru: 04/05/17 18:16

GC Column: zb-1ms | Method File: 20_AIR_0405.M

Laboratory File Ids

RRF1 0405_03.D RRF2 0405_04.D RRF3 0405_05.D RRF4 0405_06.D RRF5 0405_07.D RRF6 0405_08.D
RRF7 0405_09.D RRF8 0405_10.D RRF9 0405_11.D RRF10 0405_12.D RRF11 0405_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
n-Butylbenzene(sim)	1.680	1.570	1.627	1.688	1.834	2.206	2.551	2.811					1.996	23.61
1,2,4-Trichlorobenzene(sim)	0.884	0.919	0.718	0.640	0.669	0.842	1.131	1.285					0.886	25.53
Hexachlorobutadiene(sim)	2.418	1.739	1.788	1.627	1.816	1.788	1.841	1.829					1.856	12.78
% Bromofluorobenzene			1.474	1.489	1.459	1.507	1.475	1.429	1.314	1.134	0.958		1.360	14.10

(#) The maximum %RSD was not met for this compound

Response Factor Report Chem 20

Method Path : H:\AIR2017\CHEM20\METHODS\
Method File : 20_AIR_0405.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Apr 06 08:58:57 2017
Response Via : Initial Calibration

Calibration Files (Note: Curves (l,lf,q,qf) display calculated conc and corr. coefficient.)
.035=0405_03.D 0.05=0405_04.D 0.10=0405_05.D 0.2 =0405_06.D 0.5 =0405_07.D 1.0 =0405_08.D 2.5 =0405_09.D 5.0 =0405_10.D
10 =0405_11.D 25 =0405_12.D 40 =0405_13.D

	Compound	.035	0.05	0.10	0.2	0.5	1.0	2.5	5.0	10	25	40	Avg	%RSD
1)	Int Bromochloromethane	----------ISTD----------												
2)	Propylene			0.921	0.975	1.051	1.041	1.180	1.124	1.046	0.999	1.042		7.85
3)	Dichlorodifluo...	3.761	3.408	3.317	3.596	3.450	3.876	3.741	3.574	3.654	3.598			5.06
4)	Chloromethane			1.455	1.186	1.234	1.278	1.400	1.235	1.112	1.065	1.246		10.65
5)	1,2-Dichlorote...	3.375	2.974	2.919	3.151	2.956	3.273	3.128	2.965	3.046	3.088			5.10
6)	Vinyl Chloride	1.012	1.048	1.036	1.031	0.964	1.085	1.001	0.933	0.926	1.004			5.34
7)	1,3-Butadiene			0.835	0.921	0.925	0.871	0.927	0.841	0.798	0.770	0.861		7.02
8)	Bromomethane			1.244	0.964	0.952	0.907	1.013	0.961	0.912	0.960	0.989		10.95
9)	Chloroethane	0.583	0.545	0.440	0.401	0.432	0.485	0.439	0.419	0.406	0.461			13.88
11)	Ethanol			0.980	0.785	0.684	0.605	0.653	0.624	0.549	0.524	0.675		21.79
12)	Acetone			3.413	3.160	3.186	3.105	3.229	3.081	2.875	2.744	3.099		6.72
13)	Trichlorofluor...	4.372	3.964	4.305	4.379	4.086	4.590	4.332	4.027	4.217	4.252			4.67
14)	Isopropylalcohol			3.767	3.016	3.243	2.943	3.091	2.929	2.765	2.660	3.052		11.17
15)	Acrylonitrile			1.237	1.051	0.924	0.953	0.657	0.983	0.966	0.949	0.965		16.55
16)	1,1-Dichloroet...	2.294	2.049	2.060	2.123	2.074	2.355	2.261	2.150	2.156	2.169			5.06
17)	Methylene Chlo...	3.537	2.692	2.144	2.108	1.870	2.069	1.920	1.784	1.744	2.208			25.95
20)	Carbon Disulfide	2.556	2.276	2.180	2.282	2.065	2.361	2.282	2.127	2.136	2.252			6.58
21)	Trichlorotrifl...	2.481	2.344	2.323	2.456	2.251	2.483	2.346	2.239	2.313	2.360			3.95
22)	Trans-1,2-Dich...	1.823	1.750	1.632	1.623	1.579	1.767	1.709	1.644	1.669	1.688			4.70
23)	1,1-Dichloroet...	2.064	1.935	1.496	2.026	1.522	2.135	1.751	1.706	1.576	1.801			13.64
24)	Methyl tert-bu...	2.008	1.825	1.631	2.000	1.843	2.854	2.161	2.153	2.148	2.069			16.64
25)	Methyl Ethyl K...	2.371	2.022	1.816	1.964	1.992	2.389	2.370	2.282	2.208	2.157			9.86
26)	Cis-1,2-Dichlo...	1.232	1.142	0.997	1.109	1.070	1.271	1.258	1.262	1.287	1.181			8.85
27)	Hexane	0.826	0.802	0.620	0.798	0.844	1.008	0.993	0.958	0.987	0.871			14.67
28)	Chloroform	2.059	2.042	2.012	2.148	2.039	2.284	2.187	2.050	2.093	2.101			4.21
29)	Ethyl acetate	0.173	0.174	0.190	0.218	0.182	0.227	0.227	0.207	0.210	0.201			10.72
30)	Tetrahydrofuran	1.148	0.740	0.628	0.715	0.742	0.914	0.933	0.916	0.921	0.851			18.60
31)	1,2-Dichloroet...	1.861	1.602	1.650	1.714	1.734	1.918	1.879	1.796	1.838	1.777			6.10
32)	1,1,1-Trichlor...	2.402	2.570	2.203	2.360	2.388	2.686	2.592	2.504	2.565	2.474			5.99
33)	Benzene	2.230	1.745	1.692	1.769	1.690	1.978	1.915	1.776	1.925	1.858			9.39
34)	Carbon Tetrach...			3.051	2.840	3.108	2.967	3.351	3.219	3.112	3.218	3.108		5.14
35)	Cyclohexane	0.947	0.708	0.595	0.709	0.717	0.847	0.833	0.801	0.824	0.776			13.36
36)	Int 1,4-Difluorobenzene	----------ISTD----------												
37)	1,2-dichloropr...	0.216	0.196	0.240	0.210	0.209	0.239	0.236	0.237	0.235	0.224			7.35
38)	Bromodichlorom...	0.854	0.779	0.745	0.771	0.788	0.892	0.873	0.874	0.908	0.831			7.29
39)	Trichloroethene	0.441	0.378	0.407	0.393	0.415	0.465	0.446	0.443	0.443	0.426			6.77
41)	1,4-Dioxane			0.152	0.123	0.127	0.127	0.150	0.155	0.157	0.162	0.144		10.95
43)	Heptane	0.368	0.297	0.286	0.368	0.350	0.432	0.409	0.415	0.408	0.370			14.02
44)	cis-1,3-Dichlo...	0.341	0.366	0.327	0.349	0.358	0.437	0.437	0.446	0.456	0.391			13.27

Method Path : H:\AIR2017\CHEM20\METHODS\
Method File : 20_AIR_0405.M
Title : VOA Standards for 5 point calibration

45)	4-Methyl-2-pen...		0.552	0.431	0.449	0.531	0.570	0.688	0.697	0.713	0.717	0.594	19.06
46)	trans-1,3-Dich...			0.333	0.280	0.354	0.365	0.443	0.455	0.472	0.483	0.398	18.78
47)	1,1,2-Trichlor...			0.292	0.314	0.294	0.303	0.331	0.324	0.322	0.322	0.313	4.70
48)	Toluene		0.767	0.596	0.589	0.606	0.636	0.771	0.777	0.777	0.774	0.699	12.69
49)	Dibromochlorom...			0.995	0.935	0.950	0.975	1.073	1.062	1.049	1.065	1.013	5.51
50)	2-Hexanone(MBK)			0.403	0.390	0.449	0.522	0.655	0.672	0.677	0.669	0.555	23.06
51)	1,2-Dibromoeth...		0.592	0.559	0.517	0.563	0.570	0.652	0.642	0.643	0.653	0.599	8.34
52)	Tetrachloroethene		0.533	0.564	0.510	0.541	0.542	0.602	0.599	0.598	0.610	0.566	6.49
53)	Int Chlorobenzene-d5	----------ISTD----------											
54)	1,1,1,2-Tetrac...			1.281	1.243	1.407	1.268	1.366	1.239	1.012	0.896	1.214	14.30
55)	Chlorobenzene		2.038	1.487	1.716	1.740	1.647	1.741	1.615	1.325	1.188	1.611	15.59
56)	Ethylbenzene		2.205	1.991	1.860	1.988	2.101	2.423	2.365	1.969	1.769	2.075	10.63
57)	m,p-Xylene		1.670	1.570	1.515	1.376	1.894	2.152	1.968	1.604	1.491	1.693	15.10
58)	Bromoform			2.583	2.220	2.518	2.414	2.580	2.350	1.958	1.758	2.298	13.15
59)	Styrene			0.949	1.043	1.120	1.162	1.385	1.319	1.111	1.004	1.137	13.24
60)	1,1,2,2-Tetrac...		1.721	1.398	1.438	1.626	1.470	1.599	1.427	1.218	1.128	1.447	13.11
61)	o-Xylene		1.658	1.393	1.554	1.777	1.946	2.146	1.978	1.693	1.556	1.745	13.79
62)	Surr% Bromofluorob...		1.474	1.489	1.459	1.507	1.475	1.429	1.314	1.134	0.958	1.360	14.10
64)	Isopropylbenzene		2.200	2.241	2.248	2.465	2.508	2.703	2.544	2.118	1.875	2.322	10.95
66)	4-Ethyltoluene		1.896	1.983	2.100	2.619	2.681	3.046	2.781	2.329	2.093	2.392	16.89
67)	1,3,5-Trimethy...		2.257	1.646	1.951	2.240	2.419	2.607	2.419	2.008	1.742	2.143	15.23
68)	1,2,4-Trimethy...			1.753	1.707	2.182	2.335	2.716	2.526	2.157	1.985	2.170	16.28
70)	Benzyl chloride			1.313	1.593	1.761	2.106	2.387	2.258	1.973	1.815	1.901	18.64
71)	1,3-Dichlorobe...		1.715	1.721	1.760	1.943	2.073	2.194	2.040	1.657	1.458	1.840	12.83
72)	1,4-Dichlorobe...		1.152	1.501	1.725	1.967	1.965	2.164	1.934	1.636	1.469	1.724	18.40
73)	sec-Butylbenzene		2.405	2.340	2.509	3.008	3.116	3.362	3.190	2.636	2.350	2.769	14.47
74)	4-Isopropyltol...		2.321	2.015	2.328	2.756	3.024	3.408	3.173	2.611	2.400	2.671	17.13
75)	1,2-Dichlorobe...		2.020	1.522	1.770	2.028	1.895	2.111	1.939	1.581	1.397	1.807	14.01
76)	n-Butylbenzene			1.531	1.619	2.092	2.410	2.715	2.675	2.230	1.990	2.158	20.44
77)	1,2,4-Trichlor...			0.647	0.687	0.893	1.190	1.366	1.514	1.317	1.238	1.107	29.27
79)	Hexachlorobuta...		1.878	1.703	1.869	1.889	1.936	1.947	1.802	1.453	1.283	1.751	13.30
80)	int Bromochloromethane...	----------ISTD----------											
81)	Dichlorodifluo...	4.987	4.627	4.404	4.223	4.128	4.420	4.274	4.827			4.486	6.74
82)	1,2-Dichlorote...	3.949	3.386	3.375	2.975	2.919	3.151	2.956	3.273			3.248	10.44
83)	Vinyl Chloride...	1.515	1.364	1.204	1.222	1.125	1.220	1.152	1.282			1.261	10.04
84)	Bromomethane(sim)	1.416	1.425	1.517	1.237	0.964	0.952	0.907	1.013			1.179	21.11
85)	Trichlorofluor...	6.231	5.873	5.555	5.265	5.070	5.444	5.182	5.745			5.546	7.03
86)	1,2-Dichloroet...	1.997	1.972	1.861	1.602	1.660	1.714	1.734	1.918			1.807	8.27
87)	1,1,1-Trichlor...	3.620	3.233	3.123	3.010	2.858	3.116	3.031	3.421			3.176	7.68
88)	Carbon Tetrach...	3.562	2.927	3.359	3.051	2.840	3.112	2.967	3.351			3.146	8.01
89)	1,1-Dichloroet...	2.845	2.783	2.598	2.467	2.369	2.568	2.479	2.803			2.614	6.78
90)	Carbon Disulfi...	2.401	2.798	2.556	2.276	2.180	2.285	2.064	2.361			2.365	9.65
91)	Trichlorotrifl...	3.512	3.241	3.130	2.902	2.820	2.995	2.830	3.137			3.071	7.65
92)	Trans-1,2-Dich...	2.350	2.101	1.848	1.762	1.632	1.623	1.579	1.767			1.833	14.55
93)	1,1-Dichloroet...	2.423	2.756	2.352	2.295	1.845	2.290	1.846	2.477			2.285	13.53
94)	Cis-1,2-Dichlo...	1.354	0.937	1.232	1.142	0.997	1.109	1.070	1.271			1.139	12.37
95)	Chloroform(sim)	2.998	2.793	2.636	2.567	2.442	2.688	2.568	2.867			2.695	6.75
96)	Benzene(sim)	2.513	2.273	2.230	1.745	1.692	1.769	1.690	1.978			1.986	15.91

Method Path : H:\AIR2017\CHEM20\METHODS\
Method File : 20_AIR_0405.M
Title : VOA Standards for 5 point calibration

97)	int 1,4-Difluorobenzen...	----------ISTD----------											
98)	1,2-dichloropr...	0.322	0.167	0.182	0.165	0.206	0.178	0.174	0.200			0.199	25.90
99)	Bromodichlorom...	0.617	0.572	0.548	0.535	0.515	0.534	0.523				0.549	6.39
100)	Trichloroethen...	0.443	0.346	0.370	0.334	0.350	0.333	0.346	0.390			0.364	10.22
101)	1,4-Dioxane(sim)	0.156	0.128	0.120	0.119	0.111	0.118	0.118				0.124	11.88
102)	cis-1,3-Dichlo...	0.322	0.233	0.286	0.308	0.280	0.296	0.297				0.289	9.77
103)	1,1,2-Trichlor...	0.409	0.372	0.324	0.326	0.315	0.328	0.318	0.355			0.343	9.64
104)	Dibromochlorom...	0.967	0.840	0.750	0.837	0.803	0.806	0.812	0.899			0.839	7.93
105)	1,2-Dibromoeth...	0.648	0.599	0.604	0.577	0.578	0.612	0.605	0.697			0.615	6.49
106)	Tetrachloroeth...	0.385	0.457	0.448	0.475	0.449	0.459	0.451	0.505	0.501		0.459	7.64
107)	int Chlorobenzene-d5(sim)	----------ISTD----------											
108)	Bromoform(sim)	3.170	2.260	2.331	2.481	2.160	2.385	2.296				2.441	13.80
109)	Chlorobenzene(...	2.531	2.353	2.141	2.067	1.906	1.979	1.894	1.990			2.108	10.75
110)	Ethylbenzene(sim)	2.463	1.977	2.100	1.913	1.810	1.889	1.998	2.279			2.054	10.66
111)	m,p-Xylene(sim)	1.762	1.684	1.594	1.599	1.601	1.870	1.995	2.217			1.790	12.56
112)	Styrene(sim)	1.399	0.850	0.982	0.912	1.015	1.064	1.105				1.047	16.99
113)	1,1,2,2-Tetrac...	2.047	1.950	1.857	1.769	1.746	1.849	1.750				1.852	6.09
114)	o-Xylene(sim)	1.721	1.524	1.579	1.339	1.513	1.689	1.851				1.602	10.44
115)	Isopropylbenze...	2.779	2.507	2.442	2.373	2.345	2.518	2.546	2.774			2.536	6.48
117)	4-Ethyltoluene...	2.321	2.049	1.942	1.996	2.189	2.583	2.766	3.075			2.365	17.22
118)	1,3,5-Trimethy...	1.985	1.778	2.149	1.582	1.898	2.128	2.301	2.451			2.034	13.88
119)	1,2,4-Trimethy...	1.833	1.665	1.654	1.653	1.839	2.250	2.407	2.747			2.006	20.56
121)	Benzyl chlorid...	1.412	1.304	1.314	1.342	1.662	1.919	2.172	2.501			1.703	26.53
122)	1,3-Dichlorobe...	2.121	1.189	1.633	1.653	1.713	1.846	1.972	2.063			1.774	16.89
123)	1,4-Dichlorobe...	1.687	1.598	1.689	1.848	2.117	2.415	2.445				1.971	18.03
124)	sec-Butylbenze...	1.898	1.320	1.635	1.684	1.661	2.073	2.219				1.784	16.93
125)	4-Isopropyltol...	2.307	2.221	2.115	2.147	2.359	2.805	3.008				2.423	14.27
126)	1,2-Dichlorobe...	1.474	1.684	1.929	1.436	1.723	1.927	1.801	1.985			1.745	11.87
127)	n-Butylbenzene...	1.680	1.570	1.627	1.688	1.834	2.206	2.551	2.811			1.996	23.61
128)	1,2,4-Trichlor...	0.884	0.919	0.718	0.640	0.669	0.842	1.131	1.285			0.886	25.53
130)	Hexachlorobuta...	2.418	1.739	1.788	1.627	1.816	1.788	1.841	1.829			1.856	12.78

(#,$,@)=Out of Range l=linear lf=linear(0,0) q=Quadratic qf=Quadratic(0,0)

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_03.D
Acq On : 05 Apr 2017 12:02 pm
Operator : CORTEX\ms
Client ID : ICAL 0.035
Lab ID : 0.035ppb
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:44:30 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:43:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	6.979	130	199549	10.000	ng	-0.02
36) 1,4-Difluorobenzene	7.882	114	513761	10.000	ng	0.00
53) Chlorobenzene-d5	9.927	82	210400	10.000	ng	# 0.00
80) Bromochloromethane(sim)	6.979	130	199549	10.000	ng	-0.02
97) 1,4-Difluorobenzene(sim)	7.884	114	617727	10.000	ng	0.00
107) Chlorobenzene-d5(sim)	9.923	82	216490	10.000	ng	# 0.00
System Monitoring Compounds						
62) % Bromofluorobenzene	10.712	95	302304	11.384	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.80%			
Target Compounds						Qvalue
2) Propylene	3.659	41	844	0.039	ppbv#	42
3) Dichlorodifluoromethane	3.724	85	2506	0.034	ppbv#	91
4) Chloromethane	3.886	50	1551	0.064	ppbv#	1
5) 1,2-Dichlorotetrafluor...	3.975	85	2758	0.045	ppbv#	81
6) Vinyl Chloride	4.089	62	1203	0.061	ppbv	65
7) 1,3-Butadiene	4.219	54	1102	0.066	ppbv#	59
8) Bromomethane	4.454	94	1020	0.054	ppbv#	72
9) Chloroethane	4.592	64	757	0.087	ppbv#	73
11) Ethanol	4.738	45	958	0.081	ppbv#	11
12) Acetone	5.111	43	6259	0.104	ppbv#	60
13) Trichlorofluoromethane	5.208	101	3016	0.036	ppbv#	64
14) Isopropylalcohol	5.306	45	3550	0.062	ppbv#	46
15) Acrylonitrile	5.447	53	1354	0.075	ppbv#	68
16) 1,1-Dichloroethene	5.679	61	1788	0.041	ppbv#	82
17) Methylene Chloride	5.757	49	4737	0.126	ppbv#	73
20) Carbon Disulfide	5.965	76	1742	0.040	ppbv#	74
21) Trichlorotrifluoroethane	5.929	101	1803	0.039	ppbv#	64
22) Trans-1,2-Dichloroethene	6.334	61	1641	0.049	ppbv#	82
23) 1,1-Dichloroethane	6.454	63	1612	0.046	ppbv	98
24) Methyl tert-butyl ethe...	6.496	73	1575	0.035	ppbv#	10
25) Methyl Ethyl Ketone	6.679	43	2010	0.045	ppbv#	75
26) Cis-1,2-Dichloroethene	6.886	61	946	0.039	ppbv	86
27) Hexane	6.987	57	694	0.036	ppbv#	3
28) Chloroform	7.034	83	1838	0.043	ppbv	71
29) Ethyl acetate	6.995	61	73	0.017	ppbv#	75
30) Tetrahydrofuran	7.212	42	120	0.007	ppbv#	34
31) 1,2-Dichloroethane	7.398	62	1395	0.038	ppbv#	72
32) 1,1,1-Trichloroethane	7.522	97	2228	0.044	ppbv#	86
33) Benzene	7.741	78	1755	0.047	ppbv#	86
34) Carbon Tetrachloride	7.807	117	2488	0.039	ppbv	90
35) Cyclohexane	7.865	41	1035	0.064	ppbv#	1
37) 1,2-dichloropropane	8.114	63	696	0.059	ppbv#	57
38) Bromodichloromethane	8.197	83	2107	0.047	ppbv#	99
39) Trichloroethene	8.213	130	829	0.036	ppbv#	82
41) 1,4-Dioxane	8.221	88	458	0.059	ppbv#	46
43) Heptane	8.329	43	940	0.045	ppbv#	37
44) cis-1,3-Dichloropropene	8.594	75	696	0.032	ppbv	71
45) 4-Methyl-2-pentanone(M...	8.603	43	941	0.027	ppbv#	87
46) trans-1,3-Dichloropropene	8.830	75	672	0.029	ppbv#	71
47) 1,1,2-Trichloroethane	8.929	97	656	0.040	ppbv	92
48) Toluene	9.062	91	1366	0.036	ppbv	91
49) Dibromochloromethane	9.267	129	2090	0.039	ppbv#	80

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_03.D
Acq On : 05 Apr 2017 12:02 pm
Operator : CORTEX\ms
Client ID : ICAL 0.035
Lab ID : 0.035ppb
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:44:30 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:43:15 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.154	43	1006	0.031	ppbv#	58
51) 1,2-Dibromoethane(EDB)	9.386	107	1048	0.032	ppbv	83
52) Tetrachloroethene	9.604	166	977	0.032	ppbv#	78
54) 1,1,1,2-Tetrachloroethane	9.934	131	1380	0.057	ppbv#	90
55) Chlorobenzene	9.949	112	1813	0.057	ppbv#	1
56) Ethylbenzene	10.127	91	1866	0.042	ppbv	89
57) m,p-Xylene	10.208	91	2806	0.073	ppbv	99
58) Bromoform	10.275	173	2641	0.057	ppbv#	84
59) Styrene	10.408	104	1060	0.042	ppbv#	95
60) 1,1,2,2-Tetrachloroethane	10.460	83	1838	0.064	ppbv	93
61) o-Xylene	10.467	91	1304	0.033	ppbv#	70
64) Isopropylbenzene	10.778	105	2261	0.046	ppbv	97
66) 4-Ethyltoluene	11.141	105	1509	0.028	ppbv#	93
67) 1,3,5-Trimethylbenzene	11.178	105	1504	0.032	ppbv#	96
68) 1,2,4-Trimethylbenzene	11.423	105	1438	0.029	ppbv#	87
70) Benzyl chloride	11.512	91	984	0.022	ppbv#	85
71) 1,3-Dichlorobenzene	11.534	146	1607	0.041	ppbv	96
72) 1,4-Dichlorobenzene	11.571	146	1100	0.029	ppbv#	85
73) sec-Butylbenzene	11.586	105	1798	0.029	ppbv	98
74) 4-Isopropyltoluene	11.682	119	1632	0.027	ppbv#	85
75) 1,2-Dichlorobenzene	11.786	146	1117	0.030	ppbv	95
76) n-Butylbenzene	11.949	91	1094	0.022	ppbv#	78
77) 1,2,4-Trichlorobenzene	12.906	180	670	0.024	ppbv	86
79) Hexachlorobutadiene	13.232	225	1832	0.052	ppbv	87
81] Dichlorodifluoromethan...	3.727	85	3483	0.038	ppbv	95
82] 1,2-Dichlorotetrafluor...	3.975	85	2758	0.044	ppbv#	81
83] Vinyl Chloride(sim)	4.084	62	1058	0.044	ppbv	95
84] Bromomethane(sim)	4.457	94	989m	0.052	ppbv	
85] Trichlorofluoromethane...	5.211	101	4352	0.040	ppbv	98
86] 1,2-Dichloroethane(sim)	7.398	62	1395	0.038	ppbv#	72
87] 1,1,1-Trichloroethane(...	7.525	97	2528	0.039	ppbv#	96
88] Carbon Tetrachloride(sim)	7.807	117	2488	0.039	ppbv	90
89] 1,1-Dichloroethene(sim)	5.676	61	1987	0.038	ppbv	89
90] Carbon Disulfide(sim)	5.965	76	1677	0.038	ppbv#	72
91] Trichlorotrifluoroetha...	5.926	101	2453	0.041	ppbv	96
92] Trans-1,2-Dichloroethe...	6.334	61	1641	0.049	ppbv#	82
93] 1,1-Dichloroethane(sim)	6.452	63	1692	0.039	ppbv#	93
94] Cis-1,2-Dichloroethene...	6.886	61	946	0.041	ppbv	89
95] Chloroform(sim)	7.037	83	2094	0.039	ppbv#	81
96] Benzene(sim)	7.741	78	1755	0.048	ppbv#	86
98] 1,2-dichloropropane(sim)	8.114	63	696	0.060	ppbv#	57
99] Bromodichloromethane(sim)	8.199	85	1333m	13.155	ppbv	
100] Trichloroethene(sim)	8.216	130	958m	0.042	ppbv	
101] 1,4-Dioxane(sim)	8.216	88	337	0.046	ppbv#	75
102] cis-1,3-Dichloropropen...	8.594	75	696	0.038	ppbv#	71
103] 1,1,2-Trichloroethane(...	8.925	97	885	0.043	ppbv	93
104] Dibromochloromethane(sim)	9.267	129	2090	0.040	ppbv	82
105] 1,2-Dibromoethane(EDB)...	9.389	107	1401	0.035	ppbv	100
106] Tetrachloroethene(sim)	9.604	166	833	0.028	ppbv#	73
108] Bromoform(sim)	10.275	173	2402	0.048	ppbv	90
109] Chlorobenzene(sim)	9.945	112	1918	0.046	ppbv#	1
110] Ethylbenzene(sim)	10.127	91	1866	0.040	ppbv#	85
111] m,p-Xylene(sim)	10.219	91	2670	0.059	ppbv	97
112] Styrene(sim)	10.408	104	1060	0.044	ppbv#	87
113] 1,1,2,2-Tetrachloroeth...	10.463	83	1551	0.041	ppbv#	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_03.D
Acq On : 05 Apr 2017 12:02 pm
Operator : CORTEX\ms
Client ID : ICAL 0.035
Lab ID : 0.035ppb
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:44:30 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:43:15 2017
Response via : Initial Calibration

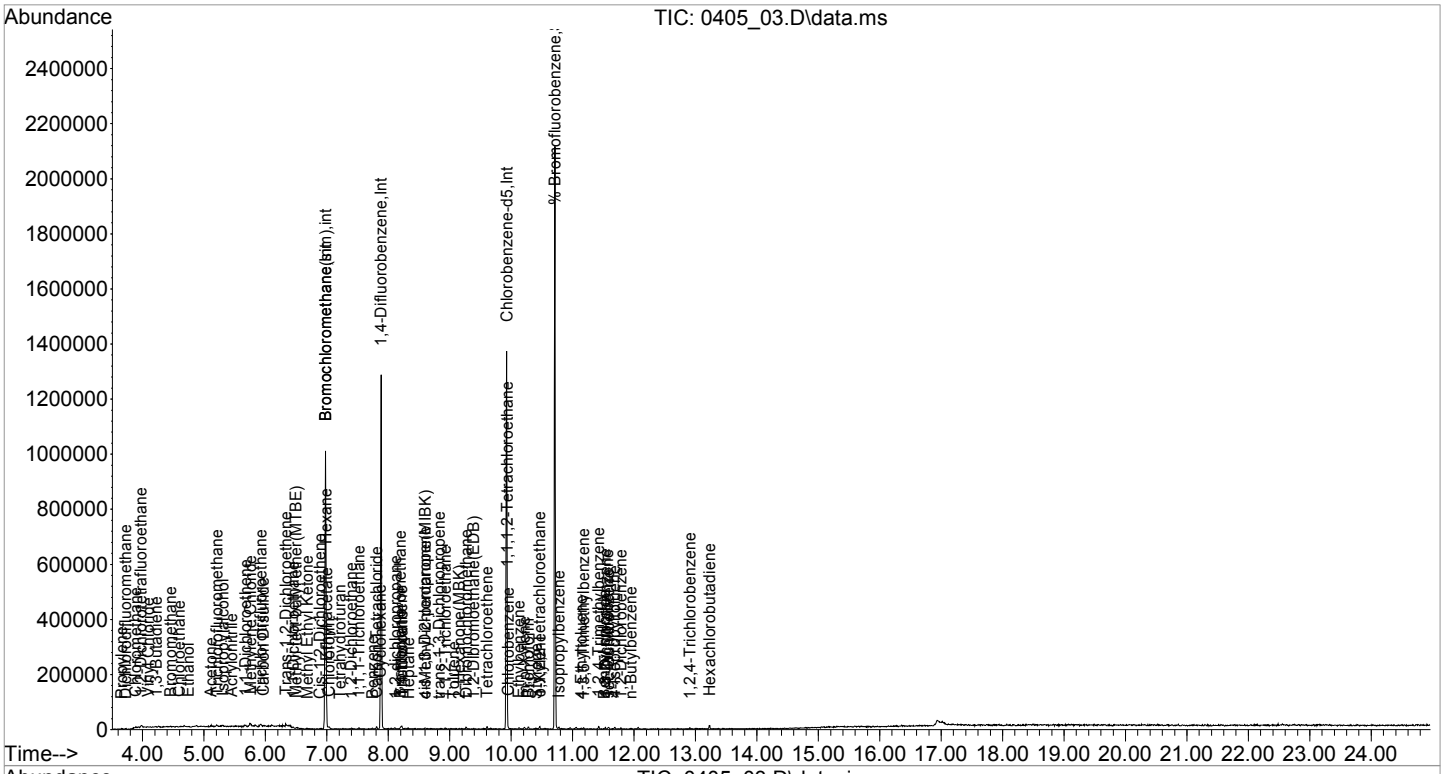
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	1304	0.033	ppbv#	67
115] Isopropylbenzene(sim)	10.774	105	2106	0.037	ppbv#	66
117] 4-Ethyltoluene(sim)	11.137	105	1759	0.028	ppbv#	84
118] 1,3,5-Trimethylbenzene...	11.178	105	1504	0.029	ppbv#	93
119] 1,2,4-Trimethylbenzene...	11.426	105	1389	0.025	ppbv#	95
121] Benzyl chloride(sim)	11.515	91	1070	0.021	ppbv	82
122] 1,3-Dichlorobenzene(sim)	11.534	146	1607	0.037	ppbv	96
123] 1,4-Dichlorobenzene(sim)	11.574	146	1278	0.024	ppbv	94
124] sec-Butylbenzene(sim)	11.423	105	1438	0.030	ppbv	58
125] 4-Isopropyltoluene(sim)	11.678	119	1748	0.027	ppbv	93
126] 1,2-Dichlorobenzene(sim)	11.786	146	1117	0.027	ppbv	94
127] n-Butylbenzene(sim)	11.945	91	1273	0.022	ppbv#	44
128] 1,2,4-Trichlorobenzene...	12.906	180	670	0.026	ppbv	84
130] Hexachlorobutadiene(sim)	13.232	225	1832	0.046	ppbv#	89

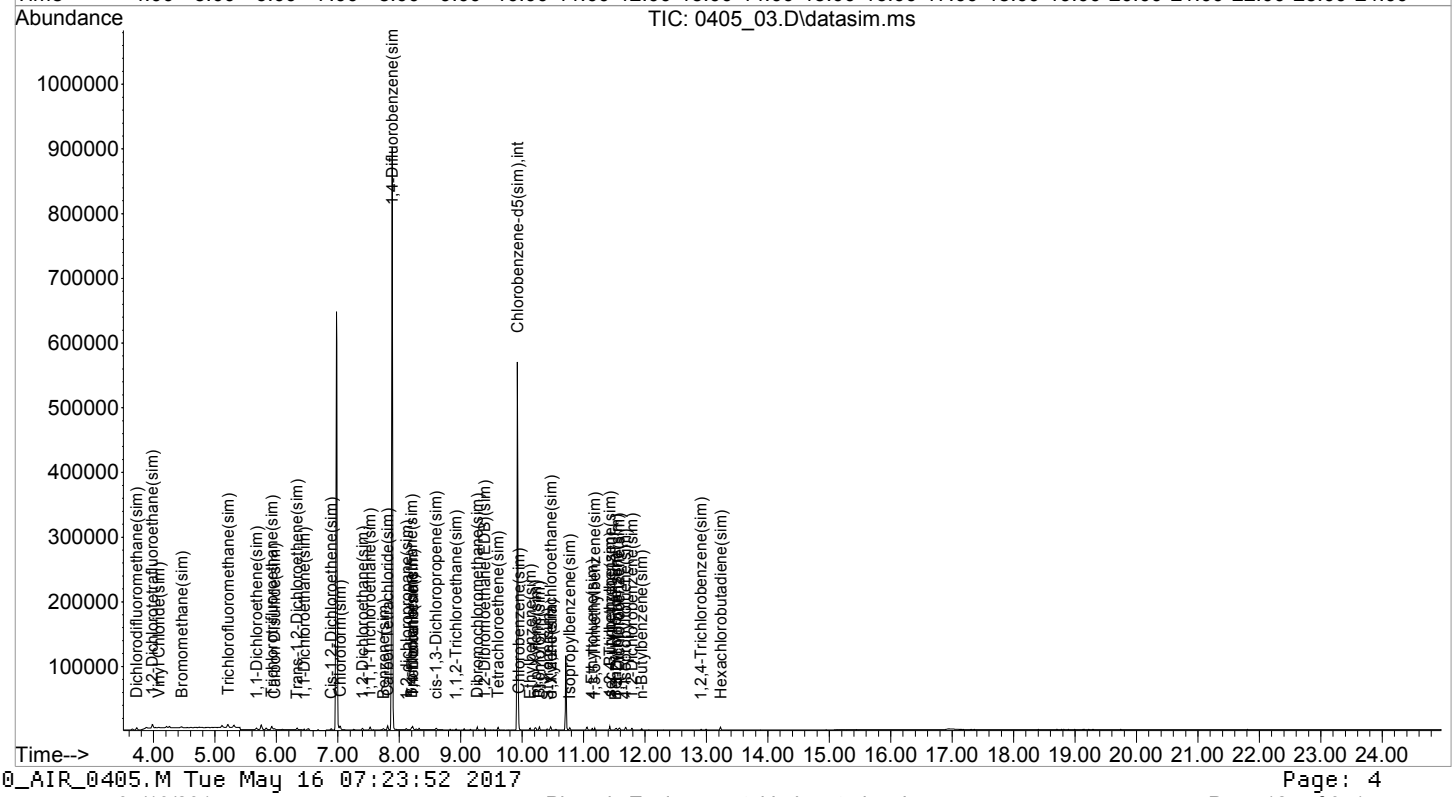
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_03.D
Acq On : 05 Apr 2017 12:02 pm
Operator : CORTEX\ms
Client ID : ICAL 0.035
Lab ID : 0.035ppb
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:44:30 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:43:15 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_04.D
Acq On : 05 Apr 2017 12:39 pm
Operator : CORTEX\ms
Client ID : ICAL 0.05
Lab ID : 0.05ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:45:21 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.971	130	207003	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	524688	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	210962	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.971	130	207003	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.876	114	624904	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	219171	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	309206	11.613	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.10%				
Target Compounds							Qvalue
2) Propylene	3.610	41	1361	0.061	ppbv	#	82
3) Dichlorodifluoromethane	3.683	85	4086	0.054	ppbv	#	96
4) Chloromethane	3.837	50	2311	0.092	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.942	85	3505	0.055	ppbv	#	94
6) Vinyl Chloride	4.048	62	1347	0.066	ppbv		89
7) 1,3-Butadiene	4.218	54	294	0.017	ppbv	#	1
8) Bromomethane	4.413	94	1606	0.082	ppbv	#	93
9) Chloroethane	4.567	64	534	0.059	ppbv	#	14
11) Ethanol	4.729	45	1653	0.135	ppbv	#	52
12) Acetone	5.103	43	5034	0.081	ppbv	#	77
13) Trichlorofluoromethane	5.176	101	5042	0.057	ppbv	#	88
14) Isopropylalcohol	5.305	45	6486	0.109	ppbv	#	32
15) Acrylonitrile	5.435	53	2104	0.113	ppbv	#	29
16) 1,1-Dichloroethene	5.655	61	2422	0.053	ppbv		92
17) Methylene Chloride	5.732	49	5646	0.145	ppbv	#	74
20) Carbon Disulfide	5.947	76	2714	0.060	ppbv	#	89
21) Trichlorotrifluoroethane	5.899	101	2380	0.049	ppbv	#	58
22) Trans-1,2-Dichloroethene	6.318	61	2175	0.063	ppbv		96
23) 1,1-Dichloroethane	6.433	63	2386	0.066	ppbv		69
24) Methyl tert-butyl ethe...	6.501	73	2169	0.047	ppbv	#	40
25) Methyl Ethyl Ketone	6.668	43	2710	0.058	ppbv	#	71
26) Cis-1,2-Dichloroethene	6.886	61	970	0.038	ppbv	#	65
27) Hexane	6.979	57	640	0.032	ppbv	#	1
28) Chloroform	7.026	83	2821	0.064	ppbv	#	69
29) Ethyl acetate	6.886	61	970	0.223	ppbv	#	83
30) Tetrahydrofuran	7.258	42	785	0.043	ppbv	#	71
31) 1,2-Dichloroethane	7.397	62	2041	0.054	ppbv	#	86
32) 1,1,1-Trichloroethane	7.514	97	2394	0.045	ppbv	#	74
33) Benzene	7.732	78	2353	0.061	ppbv	#	70
34) Carbon Tetrachloride	7.806	117	3030	0.046	ppbv		89
35) Cyclohexane	7.864	41	1112	0.067	ppbv	#	1
37) 1,2-dichloropropane	8.105	63	523	0.043	ppbv	#	1
38) Bromodichloromethane	8.196	83	2640	0.058	ppbv		91
39) Trichloroethene	8.213	130	1081	0.047	ppbv	#	82
41) 1,4-Dioxane	8.213	88	249	0.032	ppbv	#	1
43) Heptane	8.354	43	93	0.004	ppbv	#	1
44) cis-1,3-Dichloropropene	8.594	75	728	0.033	ppbv	#	22
45) 4-Methyl-2-pentanone(M...	8.602	43	1663	0.047	ppbv	#	96
46) trans-1,3-Dichloropropene	8.823	75	1103	0.047	ppbv	#	81
47) 1,1,2-Trichloroethane	8.914	97	1100	0.065	ppbv		92
48) Toluene	9.055	91	1698	0.043	ppbv	#	92
49) Dibromochloromethane	9.266	129	2626	0.048	ppbv	#	86

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_04.D
Acq On : 05 Apr 2017 12:39 pm
Operator : CORTEX\ms
Client ID : ICAL 0.05
Lab ID : 0.05ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:45:21 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.161	43	1061	0.032	ppbv#	89
51) 1,2-Dibromoethane(EDB)	9.386	107	1469	0.044	ppbv	98
52) Tetrachloroethene	9.611	166	1427	0.046	ppbv#	76
54) 1,1,1,2-Tetrachloroethane	9.934	131	1611	0.066	ppbv#	84
55) Chlorobenzene	9.941	112	2410	0.076	ppbv#	1
56) Ethylbenzene	10.126	91	2167	0.048	ppbv	96
57) m,p-Xylene	10.215	91	3350	0.087	ppbv	99
58) Bromoform	10.282	173	2477	0.053	ppbv	92
59) Styrene	10.408	104	932	0.037	ppbv#	31
60) 1,1,2,2-Tetrachloroethane	10.459	83	1596	0.055	ppbv	89
61) o-Xylene	10.467	91	1670	0.042	ppbv#	75
64) Isopropylbenzene	10.778	105	2461	0.050	ppbv#	66
66) 4-Ethyltoluene	11.141	105	2433	0.045	ppbv#	89
67) 1,3,5-Trimethylbenzene	11.185	105	1948	0.041	ppbv#	98
68) 1,2,4-Trimethylbenzene	11.430	105	1646	0.033	ppbv#	88
70) Benzyl chloride	11.519	91	1092	0.025	ppbv#	64
71) 1,3-Dichlorobenzene	11.534	146	1303	0.033	ppbv#	83
72) 1,4-Dichlorobenzene	11.571	146	1404	0.036	ppbv	87
73) sec-Butylbenzene	11.586	105	2481	0.040	ppbv#	87
74) 4-Isopropyltoluene	11.682	119	2392	0.039	ppbv	95
75) 1,2-Dichlorobenzene	11.786	146	1928	0.051	ppbv	90
76) n-Butylbenzene	11.941	91	1387	0.027	ppbv#	73
77) 1,2,4-Trichlorobenzene	12.913	180	1007	0.036	ppbv#	54
79) Hexachlorobutadiene	13.232	225	1906	0.054	ppbv	88
81] Dichlorodifluoromethan...	3.686	85	4789	0.049	ppbv	95
82] 1,2-Dichlorotetrafluor...	3.942	85	3505	0.050	ppbv#	91
83] Vinyl Chloride(sim)	4.051	62	1412	0.052	ppbv#	87
84] Bromomethane(sim)	4.416	94	1475m	0.064	ppbv	
85] Trichlorofluoromethane...	5.187	101	6079	0.051	ppbv	100
86] 1,2-Dichloroethane(sim)	7.397	62	2041	0.052	ppbv#	86
87] 1,1,1-Trichloroethane(...	7.517	97	3346	0.048	ppbv#	94
88] Carbon Tetrachloride(sim)	7.806	117	3030	0.044	ppbv#	89
89] 1,1-Dichloroethene(sim)	5.652	61	2880	0.051	ppbv	87
90] Carbon Disulfide(sim)	5.941	76	2896	0.061	ppbv#	81
91] Trichlorotrifluoroetha...	5.908	101	3354	0.051	ppbv	100
92] Trans-1,2-Dichloroethe...	6.318	61	2175	0.055	ppbv	96
93] 1,1-Dichloroethane(sim)	6.441	63	2853	0.061	ppbv#	76
94] Cis-1,2-Dichloroethene...	6.886	61	970	0.038	ppbv#	72
95] Chloroform(sim)	7.028	83	2891	0.050	ppbv#	81
96] Benzene(sim)	7.732	78	2353	0.055	ppbv#	70
98] 1,2-dichloropropane(sim)	8.105	63	523	0.036	ppbv#	1
99] Bromodichloromethane(sim)	8.199	85	1788	0.093	ppbv#	50
100] Trichloroethene(sim)	8.213	130	1081	0.044	ppbv	91
101] 1,4-Dioxane(sim)	8.224	88	399m	0.047	ppbv	
102] cis-1,3-Dichloropropen...	8.594	75	728	0.038	ppbv#	22
103] 1,1,2-Trichloroethane(...	8.917	97	1161	0.051	ppbv	95
104] Dibromochloromethane(sim)	9.266	129	2626	0.047	ppbv	90
105] 1,2-Dibromoethane(EDB)...	9.389	107	1871	0.046	ppbv	98
106] Tetrachloroethene(sim)	9.611	166	1427	0.050	ppbv#	80
108] Bromoform(sim)	10.282	173	2477	0.041	ppbv	97
109] Chlorobenzene(sim)	9.944	112	2579	0.055	ppbv#	1
110] Ethylbenzene(sim)	10.126	91	2167	0.044	ppbv	95
111] m,p-Xylene(sim)	10.211	91	3691	0.085	ppbv	96
112] Styrene(sim)	10.408	104	932	0.034	ppbv#	32
113] 1,1,2,2-Tetrachloroeth...	10.462	83	2137	0.051	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_04.D
Acq On : 05 Apr 2017 12:39 pm
Operator : CORTEX\ms
Client ID : ICAL 0.05
Lab ID : 0.05ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:45:21 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration

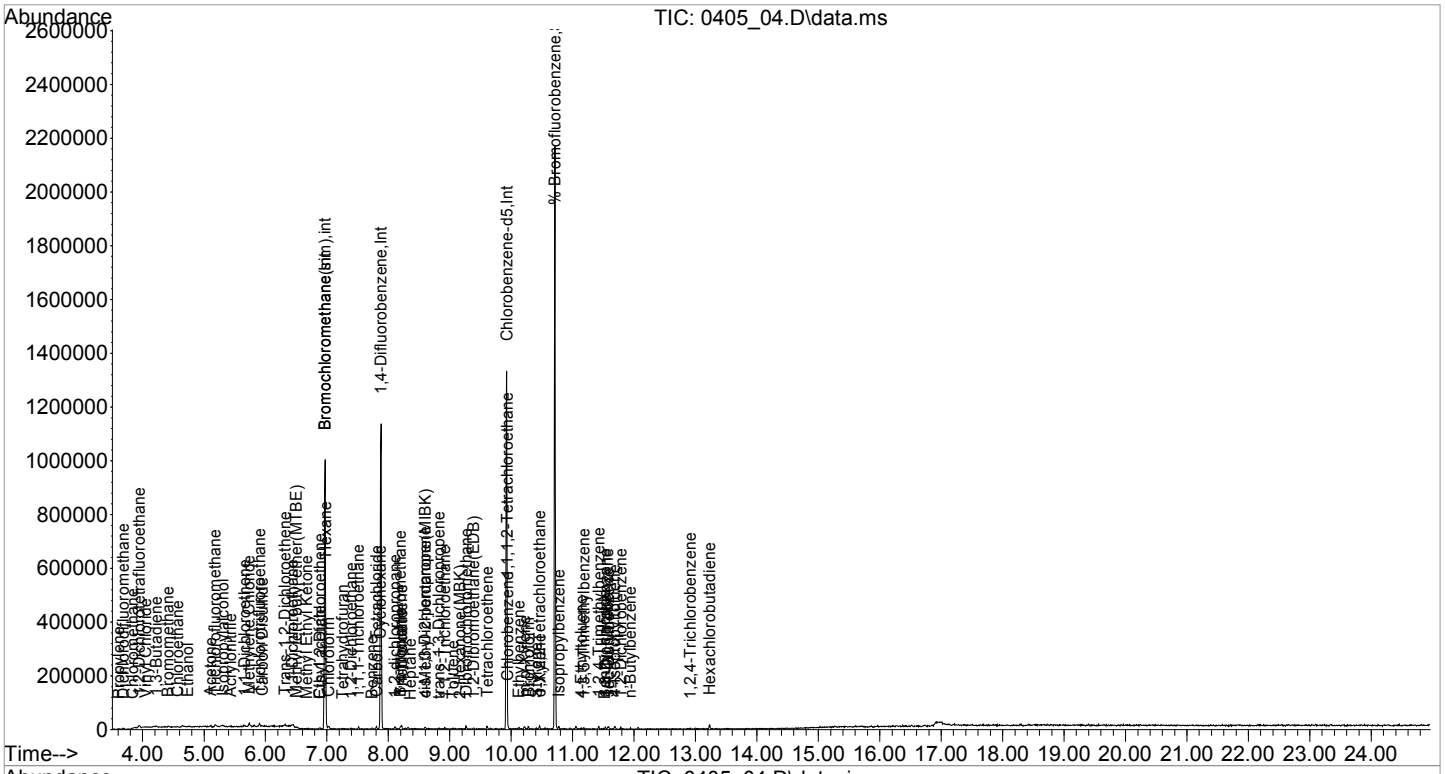
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	1670	0.043	ppbv#	72
115] Isopropylbenzene(sim)	10.773	105	2747	0.046	ppbv#	66
117] 4-Ethyltoluene(sim)	11.136	105	2245	0.038	ppbv#	88
118] 1,3,5-Trimethylbenzene...	11.185	105	1948	0.040	ppbv#	96
119] 1,2,4-Trimethylbenzene...	11.425	105	1825	0.036	ppbv#	94
121] Benzyl chloride(sim)	11.514	91	1429	0.032	ppbv	91
122] 1,3-Dichlorobenzene(sim)	11.534	146	1303	0.029	ppbv#	85
123] 1,4-Dichlorobenzene(sim)	11.574	146	1751	0.039	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	1447	0.032	ppbv#	48
125] 4-Isopropyltoluene(sim)	11.685	119	2434	0.042	ppbv	95
126] 1,2-Dichlorobenzene(sim)	11.786	146	1845	0.048	ppbv	94
127] n-Butylbenzene(sim)	11.944	91	1721	0.033	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	1007	0.042	ppbv#	43
130] Hexachlorobutadiene(sim)	13.232	225	1906	0.043	ppbv	92

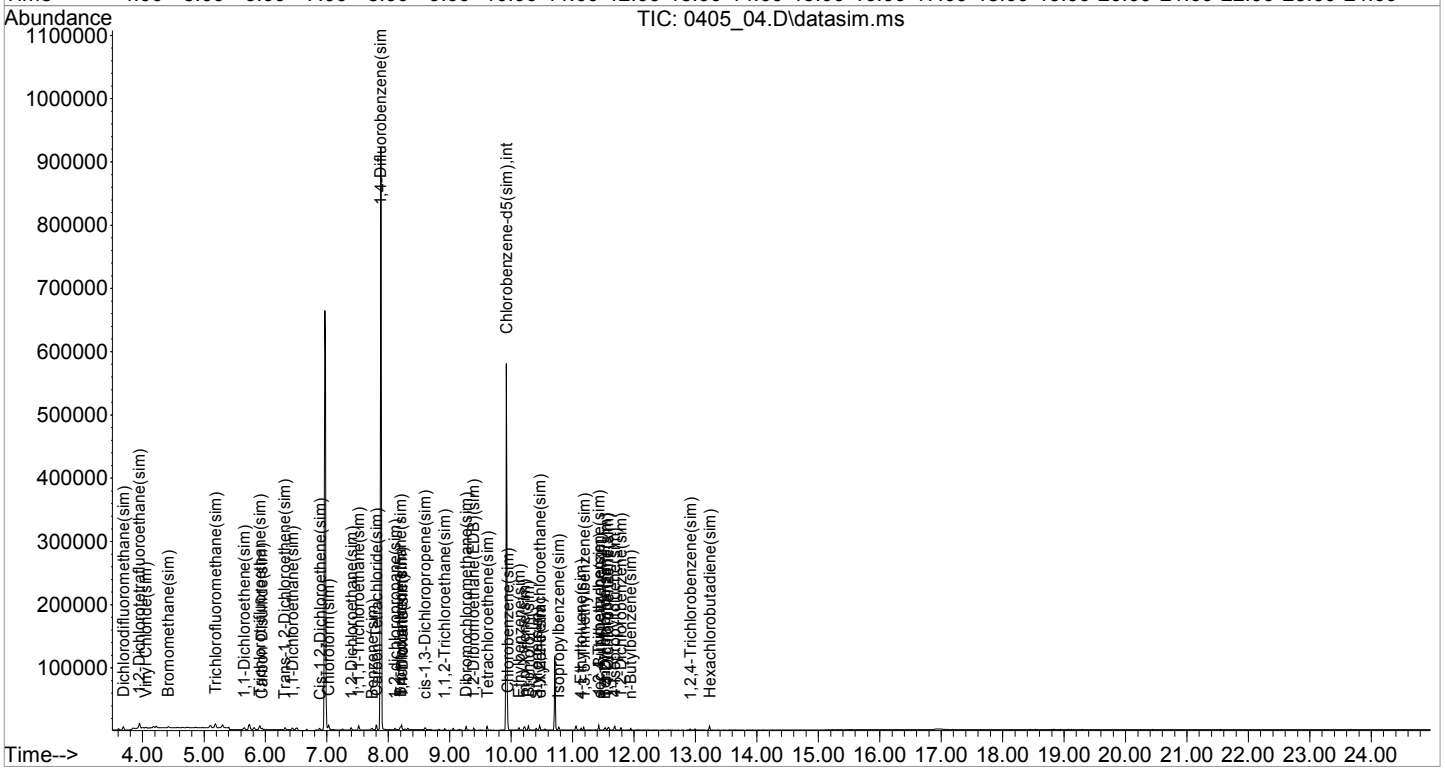
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_04.D
Acq On : 05 Apr 2017 12:39 pm
Operator : CORTEX\ms
Client ID : ICAL 0.05
Lab ID : 0.05ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:45:21 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_05.D
Acq On : 05 Apr 2017 01:15 pm
Operator : CORTEX\ms
Client ID : ICAL 0.1
Lab ID : 0.10ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:47:20 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	203473	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	515088	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	205850	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	203473	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	613305	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	216209	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	303429	11.679	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.80%				
Target Compounds							Qvalue
2) Propylene	3.659	41	2305	0.105	ppbv	#	89
3) Dichlorodifluoromethane	3.724	85	7653	0.103	ppbv	#	95
4) Chloromethane	3.878	50	3038	0.123	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.975	85	6868	0.110	ppbv		87
6) Vinyl Chloride	4.089	62	2059	0.103	ppbv		75
7) 1,3-Butadiene	4.202	54	1552	0.091	ppbv	#	1
8) Bromomethane	4.454	94	3173	0.164	ppbv	#	86
9) Chloroethane	4.600	64	1186	0.134	ppbv	#	19
11) Ethanol	4.738	45	2867	0.238	ppbv	#	66
12) Acetone	5.119	43	9089	0.149	ppbv	#	69
13) Trichlorofluoromethane	5.208	101	8895	0.103	ppbv	#	94
14) Isopropylalcohol	5.305	45	8622	0.147	ppbv	#	56
15) Acrylonitrile	5.435	53	2956	0.161	ppbv	#	82
16) 1,1-Dichloroethene	5.673	61	4667	0.104	ppbv	#	92
17) Methylene Chloride	5.750	49	7196	0.188	ppbv	#	78
20) Carbon Disulfide	5.959	76	5200	0.116	ppbv	#	78
21) Trichlorotrifluoroethane	5.923	101	5049	0.107	ppbv		94
22) Trans-1,2-Dichloroethene	6.334	61	3710	0.109	ppbv		94
23) 1,1-Dichloroethane	6.454	63	4199	0.119	ppbv		88
24) Methyl tert-butyl ethe...	6.501	73	4086	0.090	ppbv	#	61
25) Methyl Ethyl Ketone	6.683	43	4824	0.105	ppbv	#	75
26) Cis-1,2-Dichloroethene	6.894	61	2506	0.100	ppbv	#	85
27) Hexane	6.987	57	1681	0.086	ppbv	#	46
28) Chloroform	7.033	83	4190	0.097	ppbv	#	77
29) Ethyl acetate	6.995	61	351	0.082	ppbv	#	1
30) Tetrahydrofuran	7.258	42	2335	0.130	ppbv	#	61
31) 1,2-Dichloroethane	7.398	62	3787	0.102	ppbv		95
32) 1,1,1-Trichloroethane	7.522	97	4887	0.094	ppbv	#	81
33) Benzene	7.740	78	4537	0.120	ppbv	#	77
34) Carbon Tetrachloride	7.806	117	6834	0.106	ppbv		97
35) Cyclohexane	7.873	41	1927	0.118	ppbv	#	1
37) 1,2-dichloropropane	8.113	63	1114	0.093	ppbv	#	34
38) Bromodichloromethane	8.196	83	4397	0.098	ppbv		95
39) Trichloroethene	8.213	130	2272	0.100	ppbv	#	81
41) 1,4-Dioxane	8.221	88	662	0.086	ppbv	#	84
43) Heptane	8.320	43	1895	0.091	ppbv		86
44) cis-1,3-Dichloropropene	8.594	75	1756	0.080	ppbv		81
45) 4-Methyl-2-pentanone(M...	8.602	43	2844	0.082	ppbv	#	84
46) trans-1,3-Dichloropropene	8.830	75	1923	0.084	ppbv	#	90
47) 1,1,2-Trichloroethane	8.921	97	1573	0.095	ppbv	#	73
48) Toluene	9.055	91	3953	0.103	ppbv	#	79
49) Dibromochloromethane	9.266	129	4599	0.085	ppbv	#	88

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_05.D
Acq On : 05 Apr 2017 01:15 pm
Operator : CORTEX\ms
Client ID : ICAL 0.1
Lab ID : 0.10ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:47:20 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.154	43	1609	0.049	ppbv#	89
51) 1,2-Dibromoethane(EDB)	9.393	107	3050	0.094	ppbv	96
52) Tetrachloroethene	9.611	166	2746	0.090	ppbv	89
54) 1,1,1,2-Tetrachloroethane	9.934	131	2626	0.110	ppbv#	83
55) Chlorobenzene	9.949	112	4195	0.136	ppbv#	1
56) Ethylbenzene	10.126	91	4540	0.104	ppbv	89
57) m,p-Xylene	10.215	91	6877	0.183	ppbv#	89
58) Bromoform	10.275	173	5040	0.111	ppbv	96
59) Styrene	10.408	104	2123	0.086	ppbv#	85
60) 1,1,2,2-Tetrachloroethane	10.460	83	3542	0.126	ppbv#	84
61) o-Xylene	10.467	91	3413	0.089	ppbv#	95
64) Isopropylbenzene	10.778	105	4528	0.094	ppbv#	88
66) 4-Ethyltoluene	11.141	105	3903	0.073	ppbv#	90
67) 1,3,5-Trimethylbenzene	11.178	105	4647	0.101	ppbv	93
68) 1,2,4-Trimethylbenzene	11.430	105	3535	0.073	ppbv#	86
70) Benzyl chloride	11.519	91	2683	0.062	ppbv#	86
71) 1,3-Dichlorobenzene	11.534	146	3531	0.091	ppbv	99
72) 1,4-Dichlorobenzene	11.571	146	2371	0.063	ppbv#	76
73) sec-Butylbenzene	11.586	105	4950	0.082	ppbv#	93
74) 4-Isopropyltoluene	11.682	119	4777	0.079	ppbv	98
75) 1,2-Dichlorobenzene	11.786	146	4158	0.113	ppbv#	87
76) n-Butylbenzene	11.949	91	3493	0.071	ppbv#	86
77) 1,2,4-Trichlorobenzene	12.913	180	1622	0.059	ppbv#	83
79) Hexachlorobutadiene	13.224	225	3866	0.112	ppbv	91
81] Dichlorodifluoromethan...	3.727	85	8960	0.094	ppbv	95
82] 1,2-Dichlorotetrafluor...	3.975	85	6868	0.099	ppbv	87
83] Vinyl Chloride(sim)	4.083	62	2450	0.091	ppbv	96
84] Bromomethane(sim)	4.454	94	3086	0.136	ppbv#	88
85] Trichlorofluoromethane...	5.211	101	11303	0.097	ppbv	99
86] 1,2-Dichloroethane(sim)	7.398	62	3787	0.099	ppbv	95
87] 1,1,1-Trichloroethane(...	7.524	97	6354	0.093	ppbv#	96
88] Carbon Tetrachloride(sim)	7.806	117	6834	0.102	ppbv	95
89] 1,1-Dichloroethene(sim)	5.676	61	5287	0.096	ppbv	89
90] Carbon Disulfide(sim)	5.959	76	5200	0.112	ppbv#	78
91] Trichlorotrifluoroetha...	5.920	101	6369	0.099	ppbv	99
92] Trans-1,2-Dichloroethe...	6.334	61	3761	0.097	ppbv	94
93] 1,1-Dichloroethane(sim)	6.452	63	4785	0.105	ppbv#	90
94] Cis-1,2-Dichloroethene...	6.894	61	2506	0.100	ppbv#	85
95] Chloroform(sim)	7.036	83	5364	0.094	ppbv#	87
96] Benzene(sim)	7.740	78	4537	0.108	ppbv#	77
98] 1,2-dichloropropane(sim)	8.113	63	1114	0.078	ppbv#	34
99] Bromodichloromethane(sim)	8.199	85	3363m	0.177	ppbv	
100] Trichloroethene(sim)	8.213	130	2272	0.094	ppbv	84
101] 1,4-Dioxane(sim)	8.216	88	738	0.088	ppbv#	72
102] cis-1,3-Dichloropropen...	8.594	75	1756	0.092	ppbv#	85
103] 1,1,2-Trichloroethane(...	8.924	97	1985	0.090	ppbv	98
104] Dibromochloromethane(sim)	9.266	129	4599	0.084	ppbv	93
105] 1,2-Dibromoethane(EDB)...	9.389	107	3702	0.093	ppbv	97
106] Tetrachloroethene(sim)	9.611	166	2746	0.097	ppbv	89
108] Bromoform(sim)	10.275	173	5040	0.085	ppbv	96
109] Chlorobenzene(sim)	9.944	112	4630	0.100	ppbv#	1
110] Ethylbenzene(sim)	10.126	91	4540	0.093	ppbv#	88
111] m,p-Xylene(sim)	10.218	91	6893	0.160	ppbv	99
112] Styrene(sim)	10.408	104	2123	0.078	ppbv#	85
113] 1,1,2,2-Tetrachloroeth...	10.462	83	4015	0.098	ppbv#	97

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_05.D
Acq On : 05 Apr 2017 01:15 pm
Operator : CORTEX\ms
Client ID : ICAL 0.1
Lab ID : 0.10ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

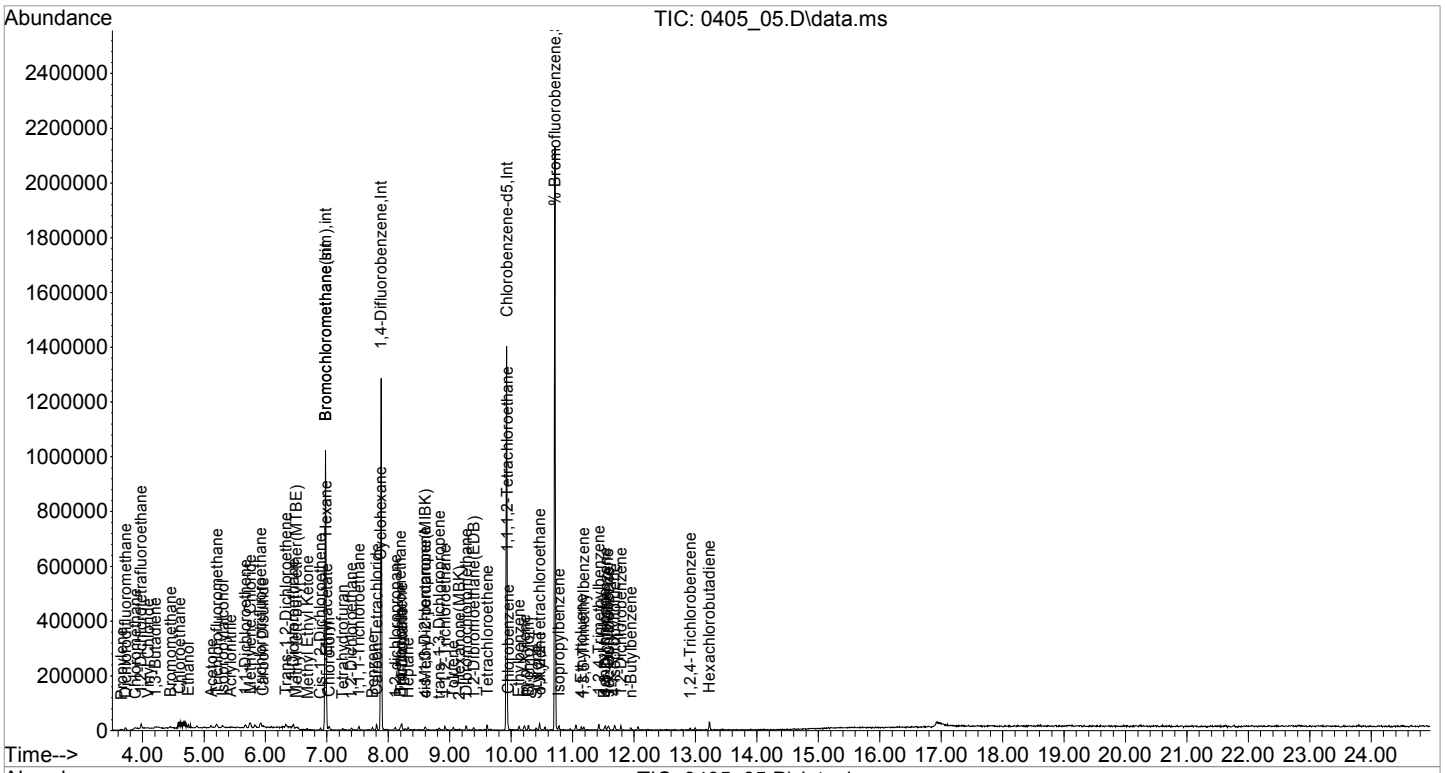
Quant Time: Apr 06 08:47:20 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	3413	0.088	ppbv#	97
115] Isopropylbenzene(sim)	10.773	105	5280	0.090	ppbv#	67
117] 4-Ethyltoluene(sim)	11.136	105	4198	0.071	ppbv	96
118] 1,3,5-Trimethylbenzene...	11.178	105	4647	0.096	ppbv	90
119] 1,2,4-Trimethylbenzene...	11.425	105	3577	0.071	ppbv	96
121] Benzyl chloride(sim)	11.514	91	2841	0.065	ppbv	98
122] 1,3-Dichlorobenzene(sim)	11.534	146	3531	0.080	ppbv	99
123] 1,4-Dichlorobenzene(sim)	11.574	146	3652	0.082	ppbv	96
124] sec-Butylbenzene(sim)	11.430	105	3535	0.079	ppbv#	71
125] 4-Isopropyltoluene(sim)	11.678	119	4573	0.080	ppbv	95
126] 1,2-Dichlorobenzene(sim)	11.786	146	4170	0.110	ppbv	87
127] n-Butylbenzene(sim)	11.944	91	3517	0.069	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	1552	0.065	ppbv#	77
130] Hexachlorobutadiene(sim)	13.224	225	3866	0.088	ppbv	94

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_05.D
Acq On : 05 Apr 2017 01:15 pm
Operator : CORTEX\ms
Client ID : ICAL 0.1
Lab ID : 0.10ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:47:20 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:44:45 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_06.D
Acq On : 05 Apr 2017 01:52 pm
Operator : CORTEX\ms
Client ID : ICAL 0.25
Lab ID : 0.2ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:59:22 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	205388	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	510786	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	209222	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	205388	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	607106	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	217763	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.712	95	311636	10.952	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.50%				
Target Compounds							Qvalue
2) Propylene	3.643	41	3785	0.177	ppbv	#	76
3) Dichlorodifluoromethane	3.724	85	14001	0.189	ppbv		97
4) Chloromethane	3.878	50	5978	0.234	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.975	85	12218	0.193	ppbv		95
6) Vinyl Chloride	4.081	62	4304	0.209	ppbv		96
7) 1,3-Butadiene	4.203	54	3429	0.194	ppbv	#	13
8) Bromomethane	4.446	94	5111	0.252	ppbv	#	75
9) Chloroethane	4.592	64	2239	0.236	ppbv	#	66
11) Ethanol	4.738	45	4024	0.290	ppbv	#	56
12) Acetone	5.111	43	14020	0.220	ppbv	#	81
13) Trichlorofluoromethane	5.200	101	16283	0.186	ppbv	#	89
14) Isopropylalcohol	5.306	45	15475	0.247	ppbv	#	78
15) Acrylonitrile	5.447	53	5082	0.256	ppbv	#	82
16) 1,1-Dichloroethene	5.673	61	8417	0.189	ppbv		94
17) Methylene Chloride	5.751	49	11059	0.244	ppbv	#	77
20) Carbon Disulfide	5.959	76	9349	0.202	ppbv	#	93
21) Trichlorotrifluoroethane	5.923	101	9628	0.199	ppbv	#	85
22) Trans-1,2-Dichloroethene	6.329	61	7187	0.207	ppbv		91
23) 1,1-Dichloroethane	6.444	63	7949	0.215	ppbv		94
24) Methyl tert-butyl ethe...	6.501	73	7496	0.176	ppbv	#	57
25) Methyl Ethyl Ketone	6.673	43	8306	0.187	ppbv	#	85
26) Cis-1,2-Dichloroethene	6.886	61	4692	0.193	ppbv	#	87
27) Hexane	6.987	57	3296	0.184	ppbv	#	45
28) Chloroform	7.041	83	8388	0.194	ppbv		87
29) Ethyl acetate	6.995	61	716	0.174	ppbv	#	1
30) Tetrahydrofuran	7.258	42	3039	0.174	ppbv	#	70
31) 1,2-Dichloroethane	7.398	62	6581	0.180	ppbv		97
32) 1,1,1-Trichloroethane	7.522	97	10555	0.208	ppbv		95
33) Benzene	7.740	78	7167	0.188	ppbv	#	90
34) Carbon Tetrachloride	7.807	117	12532	0.196	ppbv		98
35) Cyclohexane	7.873	41	2907	0.182	ppbv	#	1
37) 1,2-dichloropropane	8.114	63	2002	0.175	ppbv	#	1
38) Bromodichloromethane	8.196	83	7959	0.187	ppbv		95
39) Trichloroethene	8.213	130	3857	0.177	ppbv		95
41) 1,4-Dioxane	8.221	88	1549	0.210	ppbv	#	74
43) Heptane	8.329	43	3035	0.160	ppbv	#	85
44) cis-1,3-Dichloropropene	8.594	75	3741	0.188	ppbv		89
45) 4-Methyl-2-pentanone(M...	8.603	43	4404	0.145	ppbv		96
46) trans-1,3-Dichloropropene	8.830	75	3403	0.167	ppbv		93
47) 1,1,2-Trichloroethane	8.922	97	2981	0.187	ppbv		94
48) Toluene	9.055	91	6089	0.170	ppbv	#	84
49) Dibromochloromethane	9.267	129	10169	0.197	ppbv		93

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_06.D
Acq On : 05 Apr 2017 01:52 pm
Operator : CORTEX\ms
Client ID : ICAL 0.25
Lab ID : 0.2ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:59:22 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.154	43	4120	0.145	ppbv#	79
51)	1,2-Dibromoethane(EDB)	9.393	107	5715	0.187	ppbv	94
52)	Tetrachloroethene	9.611	166	5765	0.199	ppbv	97
54)	1,1,1,2-Tetrachloroethane	9.934	131	5359	0.211	ppbv	93
55)	Chlorobenzene	9.949	112	6222	0.185	ppbv#	1
56)	Ethylbenzene	10.127	91	8330	0.192	ppbv	91
57)	m,p-Xylene	10.216	91	13140	0.371	ppbv#	96
58)	Bromoform	10.282	173	10807	0.225	ppbv	98
59)	Styrene	10.408	104	3972	0.167	ppbv#	86
60)	1,1,2,2-Tetrachloroethane	10.460	83	5850	0.193	ppbv	92
61)	o-Xylene	10.467	91	5830	0.160	ppbv#	86
64)	Isopropylbenzene	10.778	105	9376	0.193	ppbv#	88
66)	4-Ethyltoluene	11.141	105	8297	0.166	ppbv#	95
67)	1,3,5-Trimethylbenzene	11.186	105	6889	0.154	ppbv#	96
68)	1,2,4-Trimethylbenzene	11.430	105	7337	0.162	ppbv	97
70)	Benzyl chloride	11.519	91	5493	0.138	ppbv#	95
71)	1,3-Dichlorobenzene	11.534	146	7201	0.187	ppbv	88
72)	1,4-Dichlorobenzene	11.571	146	6281	0.174	ppbv	93
73)	sec-Butylbenzene	11.586	105	9793	0.169	ppbv#	94
74)	4-Isopropyltoluene	11.682	119	8430	0.151	ppbv#	88
75)	1,2-Dichlorobenzene	11.786	146	6368	0.168	ppbv	90
76)	n-Butylbenzene	11.949	91	6405	0.142	ppbv	97
77)	1,2,4-Trichlorobenzene	12.913	180	2709	0.117	ppbv#	96
79)	Hexachlorobutadiene	13.225	225	7126	0.194	ppbv	82
81]	Dichlorodifluoromethan...	3.719	85	17348	0.188	ppbv	96
82]	1,2-Dichlorotetrafluor...	3.975	85	12218	0.183	ppbv	96
83]	Vinyl Chloride(sim)	4.076	62	5021	0.194	ppbv	98
84]	Bromomethane(sim)	4.446	94	5082	0.210	ppbv#	75
85]	Trichlorofluoromethane...	5.203	101	21616	0.190	ppbv	100
86]	1,2-Dichloroethane(sim)	7.398	62	6581	0.177	ppbv	97
87]	1,1,1-Trichloroethane(...	7.525	97	12366	0.190	ppbv#	94
88]	Carbon Tetrachloride(sim)	7.807	117	12532	0.194	ppbv	98
89]	1,1-Dichloroethene(sim)	5.670	61	10126	0.189	ppbv	87
90]	Carbon Disulfide(sim)	5.959	76	9349	0.192	ppbv	98
91]	Trichlorotrifluoroetha...	5.920	101	11922	0.189	ppbv	98
92]	Trans-1,2-Dichloroethe...	6.329	61	7237	0.192	ppbv	90
93]	1,1-Dichloroethane(sim)	6.452	63	9427	0.201	ppbv#	96
94]	Cis-1,2-Dichloroethene...	6.886	61	4692	0.201	ppbv#	87
95]	Chloroform(sim)	7.037	83	10543	0.190	ppbv#	89
96]	Benzene(sim)	7.740	78	7167	0.176	ppbv#	90
98]	1,2-dichloropropane(sim)	8.114	63	2002	0.165	ppbv#	1
99]	Bromodichloromethane(sim)	8.199	85	6501	0.195	ppbv#	42
100]	Trichloroethene(sim)	8.213	130	4053	0.183	ppbv	92
101]	1,4-Dioxane(sim)	8.216	88	1492	0.198	ppbv#	81
102]	cis-1,3-Dichloropropen...	8.594	75	3741	0.213	ppbv#	87
103]	1,1,2-Trichloroethane(...	8.925	97	3963	0.190	ppbv	95
104]	Dibromochloromethane(sim)	9.267	129	10169	0.200	ppbv	92
105]	1,2-Dibromoethane(EDB)...	9.389	107	7007	0.188	ppbv	100
106]	Tetrachloroethene(sim)	9.611	166	5765	0.207	ppbv	94
108]	Bromoform(sim)	10.282	173	10807	0.203	ppbv	98
109]	Chlorobenzene(sim)	9.945	112	9002	0.196	ppbv#	37
110]	Ethylbenzene(sim)	10.127	91	8330	0.186	ppbv#	90
111]	m,p-Xylene(sim)	10.219	91	13924	0.357	ppbv	97
112]	Styrene(sim)	10.408	104	3972	0.174	ppbv#	87
113]	1,1,2,2-Tetrachloroeth...	10.463	83	7704	0.191	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_06.D
Acq On : 05 Apr 2017 01:52 pm
Operator : CORTEX\ms
Client ID : ICAL 0.25
Lab ID : 0.2ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

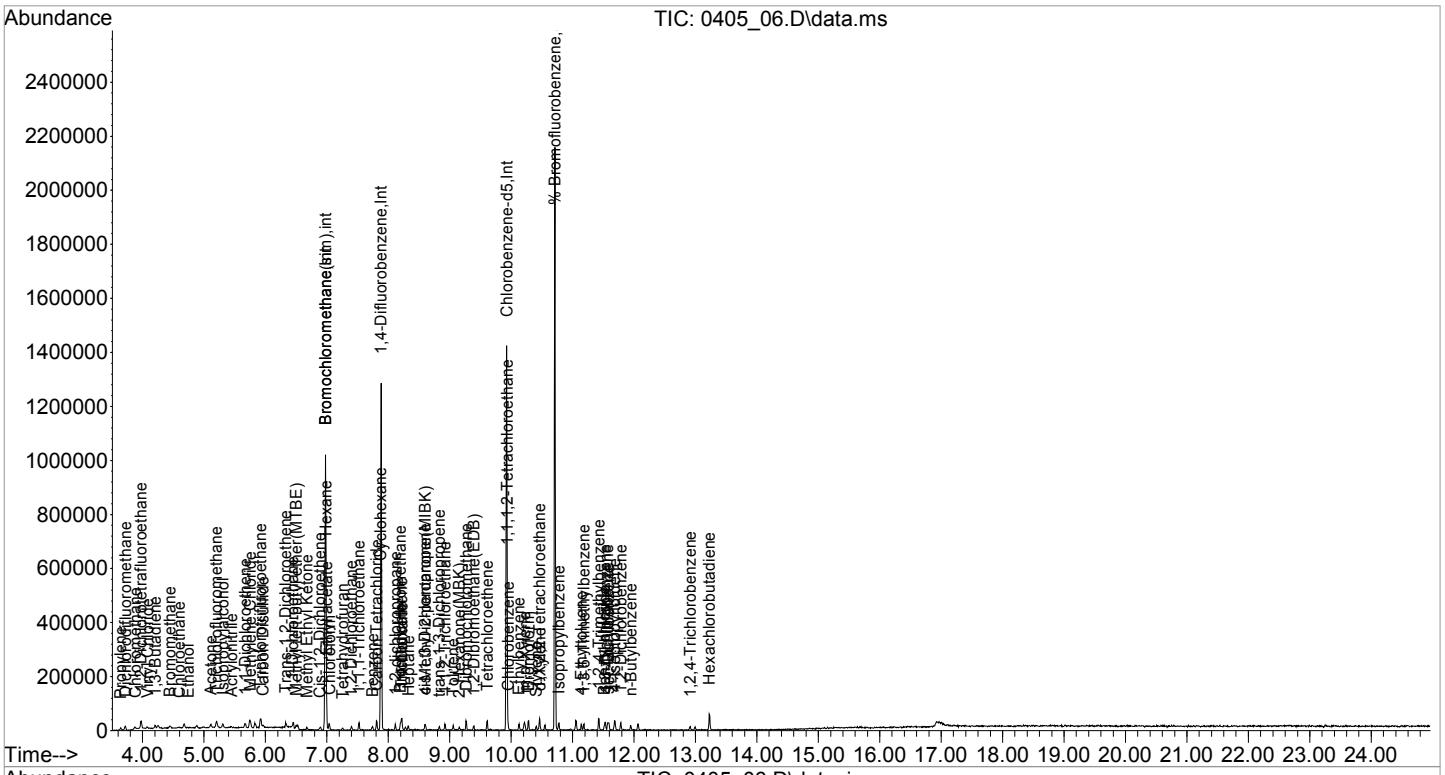
Quant Time: Apr 06 08:59:22 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

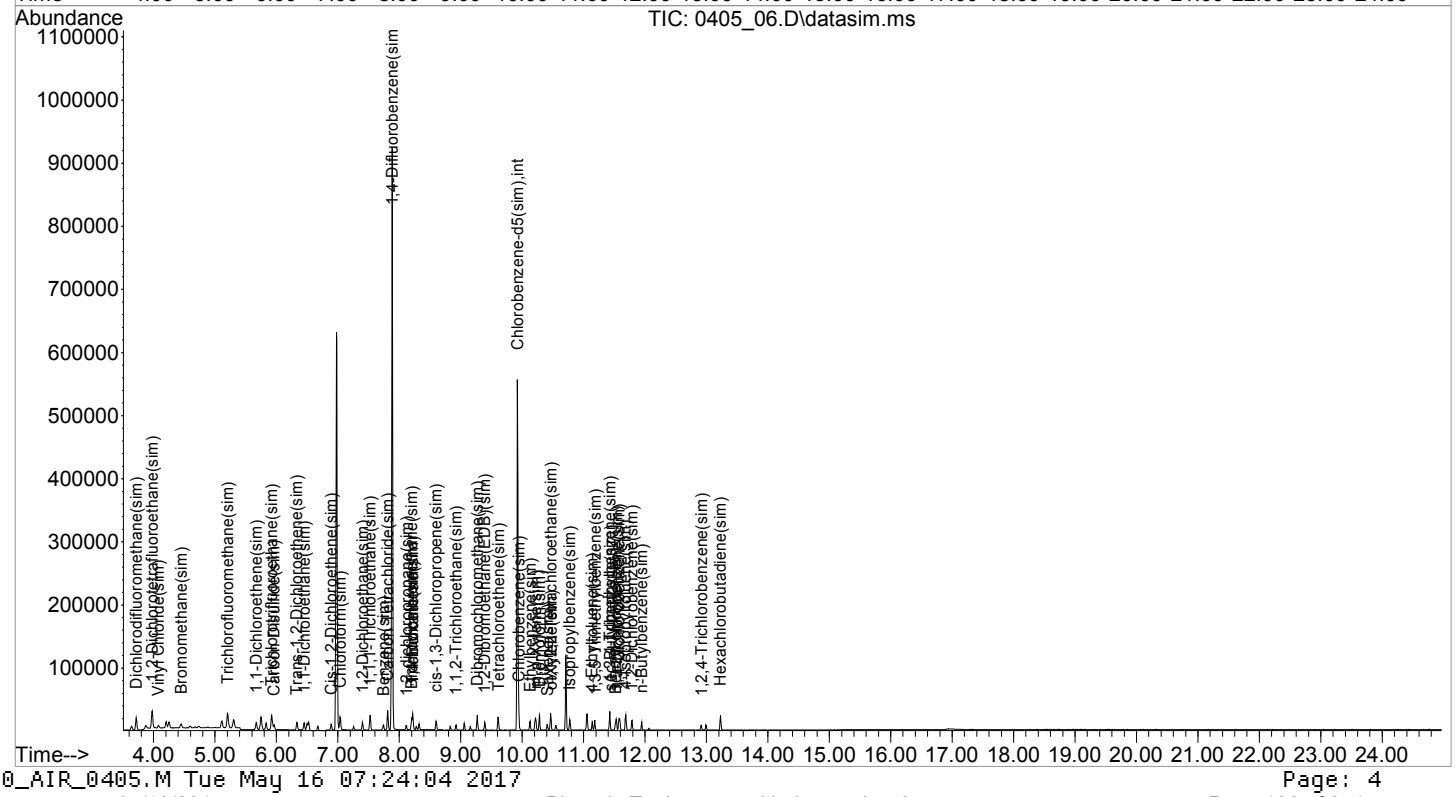
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	5830	0.167	ppbv#	83
115] Isopropylbenzene(sim)	10.774	105	10336	0.187	ppbv#	68
117] 4-Ethyltoluene(sim)	11.137	105	8692	0.169	ppbv	99
118] 1,3,5-Trimethylbenzene...	11.186	105	6889	0.156	ppbv#	94
119] 1,2,4-Trimethylbenzene...	11.426	105	7199	0.165	ppbv	96
121] Benzyl chloride(sim)	11.515	91	5845	0.158	ppbv	94
122] 1,3-Dichlorobenzene(sim)	11.534	146	7201	0.186	ppbv	88
123] 1,4-Dichlorobenzene(sim)	11.574	146	8047	0.187	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	7336	0.189	ppbv	81
125] 4-Isopropyltoluene(sim)	11.678	119	9349	0.177	ppbv	94
126] 1,2-Dichlorobenzene(sim)	11.786	146	6256	0.165	ppbv	86
127] n-Butylbenzene(sim)	11.945	91	7352	0.169	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	2788	0.145	ppbv	93
130] Hexachlorobutadiene(sim)	13.225	225	7085	0.175	ppbv#	79

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_06.D
Acq On : 05 Apr 2017 01:52 pm
Operator : CORTEX\ms
Client ID : ICAL 0.25
Lab ID : 0.2ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:59:22 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_07.D
Acq On : 05 Apr 2017 02:31 pm
Operator : CORTEX\ms
Client ID : ICAL 0.5
Lab ID : 0.5ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:56:47 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:53:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	207360	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	528843	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	217835	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	207360	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	616005	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	223851	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.712	95	317714	11.008	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.10%				
Target Compounds							Qvalue
2) Propylene	3.651	41	10105	0.463	ppbv		94
3) Dichlorodifluoromethane	3.724	85	34387	0.456	ppbv#		97
4) Chloromethane	3.886	50	12298	0.472	ppbv#		1
5) 1,2-Dichlorotetrafluor...	3.983	85	30264	0.470	ppbv		93
6) Vinyl Chloride	4.081	62	10745	0.520	ppbv		93
7) 1,3-Butadiene	4.211	54	9550	0.548	ppbv#		55
8) Bromomethane	4.454	94	9993	0.482	ppbv#		91
9) Chloroethane	4.600	64	4558	0.465	ppbv#		69
11) Ethanol	4.730	45	8139	0.599	ppbv#		88
12) Acetone	5.103	43	32767	0.514	ppbv#		74
13) Trichlorofluoromethane	5.208	101	44631	0.509	ppbv		95
14) Isopropylalcohol	5.298	45	31273	0.498	ppbv#		72
15) Acrylonitrile	5.441	53	10901	0.549	ppbv#		93
16) 1,1-Dichloroethene	5.673	61	21360	0.470	ppbv		87
17) Methylene Chloride	5.757	49	22232	0.481	ppbv#		72
20) Carbon Disulfide	5.965	76	22604	0.483	ppbv		96
21) Trichlorotrifluoroethane	5.923	101	24085	0.494	ppbv#		90
22) Trans-1,2-Dichloroethene	6.334	61	16919	0.478	ppbv#		86
23) 1,1-Dichloroethane	6.449	63	15507	0.413	ppbv		97
24) Methyl tert-butyl ethe...	6.491	73	16914	0.381	ppbv#		68
25) Methyl Ethyl Ketone	6.668	43	18826	0.407	ppbv#		90
26) Cis-1,2-Dichloroethene	6.894	61	10339	0.410	ppbv		96
27) Hexane	6.987	57	6424	0.338	ppbv#		8
28) Chloroform	7.041	83	20858	0.477	ppbv		90
29) Ethyl acetate	6.995	61	1975m	0.282	ppbv		
30) Tetrahydrofuran	7.251	42	6509	0.348	ppbv		89
31) 1,2-Dichloroethane	7.406	62	17108	0.457	ppbv		96
32) 1,1,1-Trichloroethane	7.522	97	22843	0.436	ppbv#		93
33) Benzene	7.740	78	17544	0.447	ppbv#		80
34) Carbon Tetrachloride	7.815	117	29442	0.450	ppbv		97
35) Cyclohexane	7.873	41	6172	0.367	ppbv#		1
37) 1,2-dichloropropane	8.114	63	6334	0.534	ppbv#		38
38) Bromodichloromethane	8.196	83	19700	0.437	ppbv		96
39) Trichloroethene	8.221	130	10770	0.470	ppbv		92
41) 1,4-Dioxane	8.213	88	3252	0.409	ppbv#		78
43) Heptane	8.321	43	7570	0.374	ppbv#		63
44) cis-1,3-Dichloropropene	8.594	75	8638	0.403	ppbv		96
45) 4-Methyl-2-pentanone(M...	8.603	43	11877	0.360	ppbv#		98
46) trans-1,3-Dichloropropene	8.830	75	7391	0.329	ppbv#		94
47) 1,1,2-Trichloroethane	8.922	97	8305	0.498	ppbv		91
48) Toluene	9.055	91	15582	0.405	ppbv#		97
49) Dibromochloromethane	9.267	129	24733	0.451	ppbv		97

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_07.D
Acq On : 05 Apr 2017 02:31 pm
Operator : CORTEX\ms
Client ID : ICAL 0.5
Lab ID : 0.5ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:56:47 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:53:23 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.154	43	10302	0.325	ppbv#	83
51) 1,2-Dibromoethane(EDB)	9.393	107	13669	0.420	ppbv	94
52) Tetrachloroethene	9.611	166	13474	0.441	ppbv	93
54) 1,1,1,2-Tetrachloroethane	9.934	131	13543	0.528	ppbv	99
55) Chlorobenzene	9.949	112	18688	0.544	ppbv	86
56) Ethylbenzene	10.127	91	20258	0.439	ppbv	97
57) m,p-Xylene	10.216	91	33000	0.859	ppbv	95
58) Bromoform	10.282	173	24181	0.488	ppbv	96
59) Styrene	10.408	104	11355	0.451	ppbv	98
60) 1,1,2,2-Tetrachloroethane	10.460	83	15662	0.505	ppbv	97
61) o-Xylene	10.467	91	16930	0.440	ppbv	96
64) Isopropylbenzene	10.778	105	24483	0.486	ppbv#	95
66) 4-Ethyltoluene	11.141	105	22868	0.437	ppbv#	93
67) 1,3,5-Trimethylbenzene	11.178	105	21249	0.452	ppbv#	92
68) 1,2,4-Trimethylbenzene	11.430	105	18597	0.380	ppbv	95
70) Benzyl chloride	11.519	91	17352	0.403	ppbv#	94
71) 1,3-Dichlorobenzene	11.534	146	19173	0.479	ppbv	94
72) 1,4-Dichlorobenzene	11.571	146	18791	0.511	ppbv	98
73) sec-Butylbenzene	11.586	105	27330	0.453	ppbv#	95
74) 4-Isopropyltoluene	11.682	119	25360	0.430	ppbv	97
75) 1,2-Dichlorobenzene	11.786	146	19282	0.497	ppbv	97
76) n-Butylbenzene	11.949	91	17639	0.359	ppbv	99
77) 1,2,4-Trichlorobenzene	12.913	180	7483	0.283	ppbv#	82
79) Hexachlorobutadiene	13.232	225	20360	0.545	ppbv	98
81] Dichlorodifluoromethan...	3.727	85	42796	0.453	ppbv	96
82] 1,2-Dichlorotetrafluor...	3.983	85	30264	0.440	ppbv	93
83] Vinyl Chloride(sim)	4.084	62	11668	0.436	ppbv	97
84] Bromomethane(sim)	4.454	94	9993	0.385	ppbv#	90
85] Trichlorofluoromethane...	5.211	101	52562	0.449	ppbv	99
86] 1,2-Dichloroethane(sim)	7.406	62	17211	0.449	ppbv	96
87] 1,1,1-Trichloroethane(...	7.525	97	29631	0.441	ppbv#	95
88] Carbon Tetrachloride(sim)	7.815	117	29442	0.443	ppbv	97
89] 1,1-Dichloroethene(sim)	5.676	61	24557	0.445	ppbv#	86
90] Carbon Disulfide(sim)	5.965	76	22604	0.452	ppbv	96
91] Trichlorotrifluoroetha...	5.926	101	29240	0.451	ppbv	100
92] Trans-1,2-Dichloroethe...	6.334	61	16919	0.429	ppbv#	86
93] 1,1-Dichloroethane(sim)	6.452	63	19124	0.391	ppbv#	96
94] Cis-1,2-Dichloroethene...	6.894	61	10339	0.427	ppbv	96
95] Chloroform(sim)	7.044	83	25322	0.446	ppbv#	90
96] Benzene(sim)	7.740	78	17544	0.408	ppbv#	80
98] 1,2-dichloropropane(sim)	8.114	63	6334	0.510	ppbv#	38
99] Bromodichloromethane(sim)	8.199	85	15848	0.566	ppbv#	41
100] Trichloroethene(sim)	8.221	130	10770	0.471	ppbv	90
101] 1,4-Dioxane(sim)	8.216	88	3414	0.432	ppbv#	82
102] cis-1,3-Dichloropropen...	8.594	75	8638	0.485	ppbv	96
103] 1,1,2-Trichloroethane(...	8.925	97	9687	0.448	ppbv	95
104] Dibromochloromethane(sim)	9.267	129	24733	0.472	ppbv	97
105] 1,2-Dibromoethane(EDB)...	9.389	107	17813	0.465	ppbv	98
106] Tetrachloroethene(sim)	9.611	166	13834	0.488	ppbv	94
108] Bromoform(sim)	10.282	173	24181	0.431	ppbv	96
109] Chlorobenzene(sim)	9.945	112	21336	0.441	ppbv#	76
110] Ethylbenzene(sim)	10.127	91	20258	0.427	ppbv	98
111] m,p-Xylene(sim)	10.219	91	35829	0.885	ppbv	96
112] Styrene(sim)	10.408	104	11355	0.483	ppbv	98
113] 1,1,2,2-Tetrachloroeth...	10.463	83	19539	0.466	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_07.D
Acq On : 05 Apr 2017 02:31 pm
Operator : CORTEX\ms
Client ID : ICAL 0.5
Lab ID : 0.5ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:56:47 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:53:23 2017
Response via : Initial Calibration

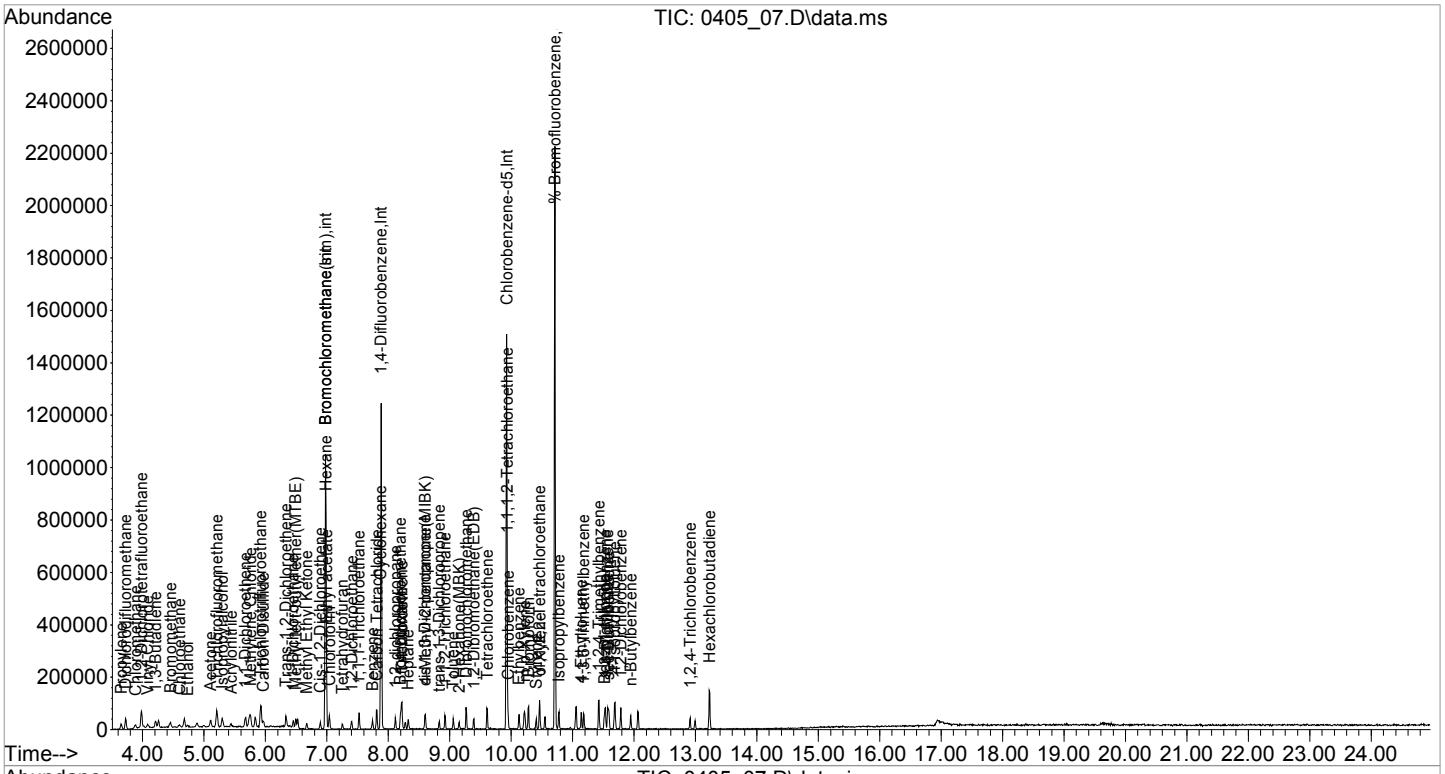
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	16930	0.472	ppbv	93
115] Isopropylbenzene(sim)	10.774	105	26248	0.456	ppbv#	68
117] 4-Ethyltoluene(sim)	11.137	105	24495	0.464	ppbv	99
118] 1,3,5-Trimethylbenzene...	11.178	105	21249	0.465	ppbv#	94
119] 1,2,4-Trimethylbenzene...	11.426	105	20586	0.461	ppbv	95
121] Benzyl chloride(sim)	11.515	91	18604	0.496	ppbv	99
122] 1,3-Dichlorobenzene(sim)	11.534	146	19173	0.483	ppbv	94
123] 1,4-Dichlorobenzene(sim)	11.574	146	23690	0.571	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	18596	0.474	ppbv	81
125] 4-Isopropyltoluene(sim)	11.685	119	26400	0.500	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	19282	0.501	ppbv	97
127] n-Butylbenzene(sim)	11.945	91	20530	0.461	ppbv#	47
128] 1,2,4-Trichlorobenzene...	12.913	180	7483	0.360	ppbv	82
130] Hexachlorobutadiene(sim)	13.232	225	20323	0.485	ppbv	97

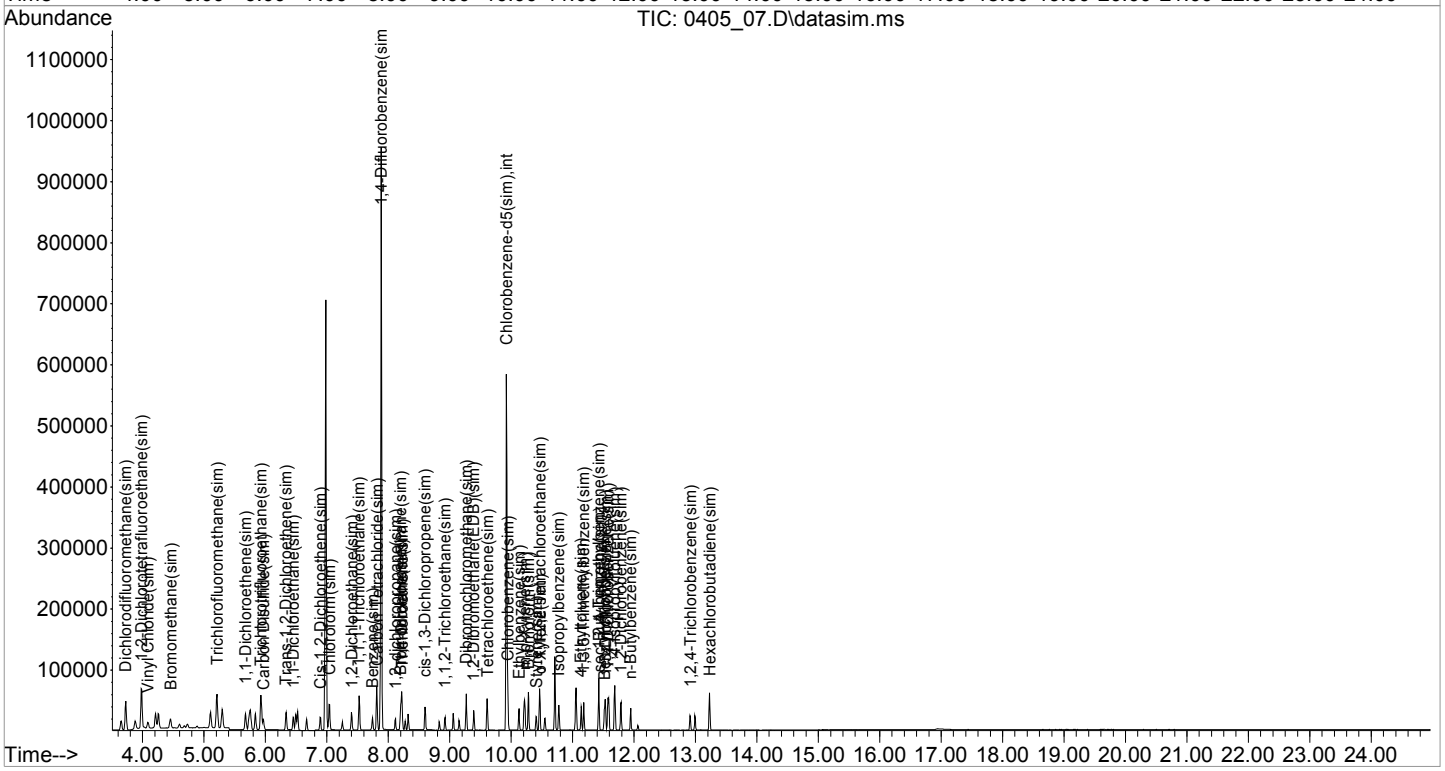
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_07.D
Acq On : 05 Apr 2017 02:31 pm
Operator : CORTEX\ms
Client ID : ICAL 0.5
Lab ID : 0.5ppb;air03m
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:56:47 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:53:23 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_08.D
Acq On : 05 Apr 2017 03:07 pm
Operator : CORTEX\ms
Client ID : ICAL 1
Lab ID : 1.0ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:00:13 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	200175	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	528433	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	216379	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	200175	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	622984	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	227743	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	326170	11.084	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.80%				
Target Compounds							Qvalue
2) Propylene	3.634	41	21038	1.008	ppbv		90
3) Dichlorodifluoromethane	3.707	85	71974	0.999	ppbv#		97
4) Chloromethane	3.862	50	24693	0.990	ppbv#		1
5) 1,2-Dichlorotetrafluor...	3.967	85	63074	1.021	ppbv		92
6) Vinyl Chloride	4.072	62	20644	1.027	ppbv		99
7) 1,3-Butadiene	4.194	54	18521	1.075	ppbv#		55
8) Bromomethane	4.429	94	19050	0.962	ppbv#		80
9) Chloroethane	4.583	64	8018	0.869	ppbv#		59
11) Ethanol	4.721	45	13686	1.012	ppbv#		86
12) Acetone	5.095	43	63769	1.028	ppbv#		74
13) Trichlorofluoromethane	5.200	101	87662	1.030	ppbv		99
14) Isopropylalcohol	5.289	45	64917	1.063	ppbv#		83
15) Acrylonitrile	5.429	53	18498	0.958	ppbv#		79
16) 1,1-Dichloroethene	5.661	61	42499	0.979	ppbv#		86
17) Methylene Chloride	5.744	49	42205	0.955	ppbv#		73
20) Carbon Disulfide	5.953	76	45676	1.013	ppbv		96
21) Trichlorotrifluoroethane	5.917	101	49156	1.041	ppbv		92
22) Trans-1,2-Dichloroethene	6.324	61	32491	0.961	ppbv		89
23) 1,1-Dichloroethane	6.449	63	40564	1.125	ppbv		96
24) Methyl tert-butyl ethe...	6.485	73	40044	0.967	ppbv#		80
25) Methyl Ethyl Ketone	6.668	43	39324	0.911	ppbv#		87
26) Cis-1,2-Dichloroethene	6.886	61	22194	0.939	ppbv		91
27) Hexane	6.987	57	15975	0.917	ppbv#		43
28) Chloroform	7.041	83	42996	1.022	ppbv#		88
29) Ethyl acetate	6.995	61	4029	1.002	ppbv#		16
30) Tetrahydrofuran	7.250	42	14311	0.840	ppbv#		81
31) 1,2-Dichloroethane	7.398	62	34320	0.965	ppbv		97
32) 1,1,1-Trichloroethane	7.522	97	47249	0.954	ppbv#		89
33) Benzene	7.740	78	35417	0.952	ppbv#		88
34) Carbon Tetrachloride	7.807	117	62205	1.000	ppbv		99
35) Cyclohexane	7.873	41	14184	0.914	ppbv#		38
37) 1,2-dichloropropane	8.113	63	11107	0.937	ppbv#		27
38) Bromodichloromethane	8.196	83	40724	0.927	ppbv		100
39) Trichloroethene	8.213	130	20754	0.923	ppbv		96
41) 1,4-Dioxane	8.213	88	6708	0.881	ppbv#		83
43) Heptane	8.321	43	19452	0.994	ppbv#		53
44) cis-1,3-Dichloropropene	8.594	75	18420	0.892	ppbv		93
45) 4-Methyl-2-pentanone(M...	8.602	43	28058	0.893	ppbv#		88
46) trans-1,3-Dichloropropene	8.830	75	18725	0.890	ppbv		98
47) 1,1,2-Trichloroethane	8.921	97	15556	0.941	ppbv		95
48) Toluene	9.055	91	32004	0.866	ppbv#		98
49) Dibromochloromethane	9.266	129	50184	0.937	ppbv		99

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_08.D
Acq On : 05 Apr 2017 03:07 pm
Operator : CORTEX\ms
Client ID : ICAL 1
Lab ID : 1.0ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:00:13 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.154	43	23724	0.809	ppbv#	79
51) 1,2-Dibromoethane(EDB)	9.393	107	29744	0.940	ppbv	96
52) Tetrachloroethene	9.611	166	28591	0.955	ppbv	98
54) 1,1,1,2-Tetrachloroethane	9.934	131	30437	1.159	ppbv	93
55) Chlorobenzene	9.949	112	37654	1.080	ppbv	85
56) Ethylbenzene	10.126	91	43022	0.958	ppbv	95
57) m,p-Xylene	10.215	91	74443	2.032	ppbv	99
58) Bromoform	10.282	173	54488	1.096	ppbv	98
59) Styrene	10.408	104	24225	0.985	ppbv#	91
60) 1,1,2,2-Tetrachloroethane	10.460	83	35193	1.124	ppbv	99
61) o-Xylene	10.467	91	38457	1.019	ppbv#	93
64) Isopropylbenzene	10.778	105	53338	1.061	ppbv#	96
66) 4-Ethyltoluene	11.141	105	56667	1.095	ppbv	98
67) 1,3,5-Trimethylbenzene	11.185	105	48463	1.045	ppbv	97
68) 1,2,4-Trimethylbenzene	11.430	105	47205	1.005	ppbv	96
70) Benzyl chloride	11.519	91	38094	0.926	ppbv#	96
71) 1,3-Dichlorobenzene	11.534	146	42045	1.056	ppbv	94
72) 1,4-Dichlorobenzene	11.571	146	42562	1.141	ppbv	99
73) sec-Butylbenzene	11.586	105	65095	1.087	ppbv	96
74) 4-Isopropyltoluene	11.682	119	59633	1.032	ppbv#	91
75) 1,2-Dichlorobenzene	11.786	146	43883	1.122	ppbv	98
76) n-Butylbenzene	11.949	91	45262	0.969	ppbv	97
77) 1,2,4-Trichlorobenzene	12.913	180	19323	0.807	ppbv	94
79) Hexachlorobutadiene	13.224	225	40873	1.079	ppbv	96
81] Dichlorodifluoromethan...	3.710	85	88476	0.985	ppbv	97
82] 1,2-Dichlorotetrafluor...	3.967	85	63074	0.970	ppbv	92
83] Vinyl Chloride(sim)	4.067	62	24417	0.968	ppbv	98
84] Bromomethane(sim)	4.429	94	19050	0.807	ppbv#	80
85] Trichlorofluoromethane...	5.195	101	108977	0.982	ppbv	100
86] 1,2-Dichloroethane(sim)	7.398	62	34320	0.949	ppbv	97
87] 1,1,1-Trichloroethane(...	7.524	97	62371	0.981	ppbv#	96
88] Carbon Tetrachloride(sim)	7.807	117	62298	0.989	ppbv	99
89] 1,1-Dichloroethene(sim)	5.664	61	51392	0.982	ppbv#	85
90] Carbon Disulfide(sim)	5.953	76	45736	0.966	ppbv	96
91] Trichlorotrifluoroetha...	5.920	101	59953	0.975	ppbv	100
92] Trans-1,2-Dichloroethe...	6.324	61	32491	0.886	ppbv	89
93] 1,1-Dichloroethane(sim)	6.446	63	45832	1.002	ppbv#	97
94] Cis-1,2-Dichloroethene...	6.886	61	22194	0.973	ppbv	91
95] Chloroform(sim)	7.036	83	53806	0.997	ppbv#	91
96] Benzene(sim)	7.740	78	35417	0.891	ppbv#	88
98] 1,2-dichloropropane(sim)	8.113	63	11107	0.894	ppbv#	27
99] Bromodichloromethane(sim)	8.199	85	33292	0.973	ppbv#	41
100] Trichloroethene(sim)	8.213	130	20754	0.915	ppbv	95
101] 1,4-Dioxane(sim)	8.216	88	7376	0.952	ppbv#	82
102] cis-1,3-Dichloropropen...	8.594	75	18420	1.023	ppbv#	93
103] 1,1,2-Trichloroethane(...	8.924	97	20418	0.955	ppbv	96
104] Dibromochloromethane(sim)	9.266	129	50184	0.960	ppbv	100
105] 1,2-Dibromoethane(EDB)...	9.389	107	38136	0.995	ppbv	100
106] Tetrachloroethene(sim)	9.611	166	28591	1.000	ppbv	98
108] Bromoform(sim)	10.282	173	54326	0.977	ppbv	97
109] Chlorobenzene(sim)	9.944	112	45081	0.939	ppbv#	93
110] Ethylbenzene(sim)	10.126	91	43022	0.920	ppbv#	94
111] m,p-Xylene(sim)	10.218	91	85164	2.089	ppbv	96
112] Styrene(sim)	10.408	104	24225	1.016	ppbv#	91
113] 1,1,2,2-Tetrachloroeth...	10.463	83	42110	0.998	ppbv#	97

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_08.D
Acq On : 05 Apr 2017 03:07 pm
Operator : CORTEX\ms
Client ID : ICAL 1
Lab ID : 1.0ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

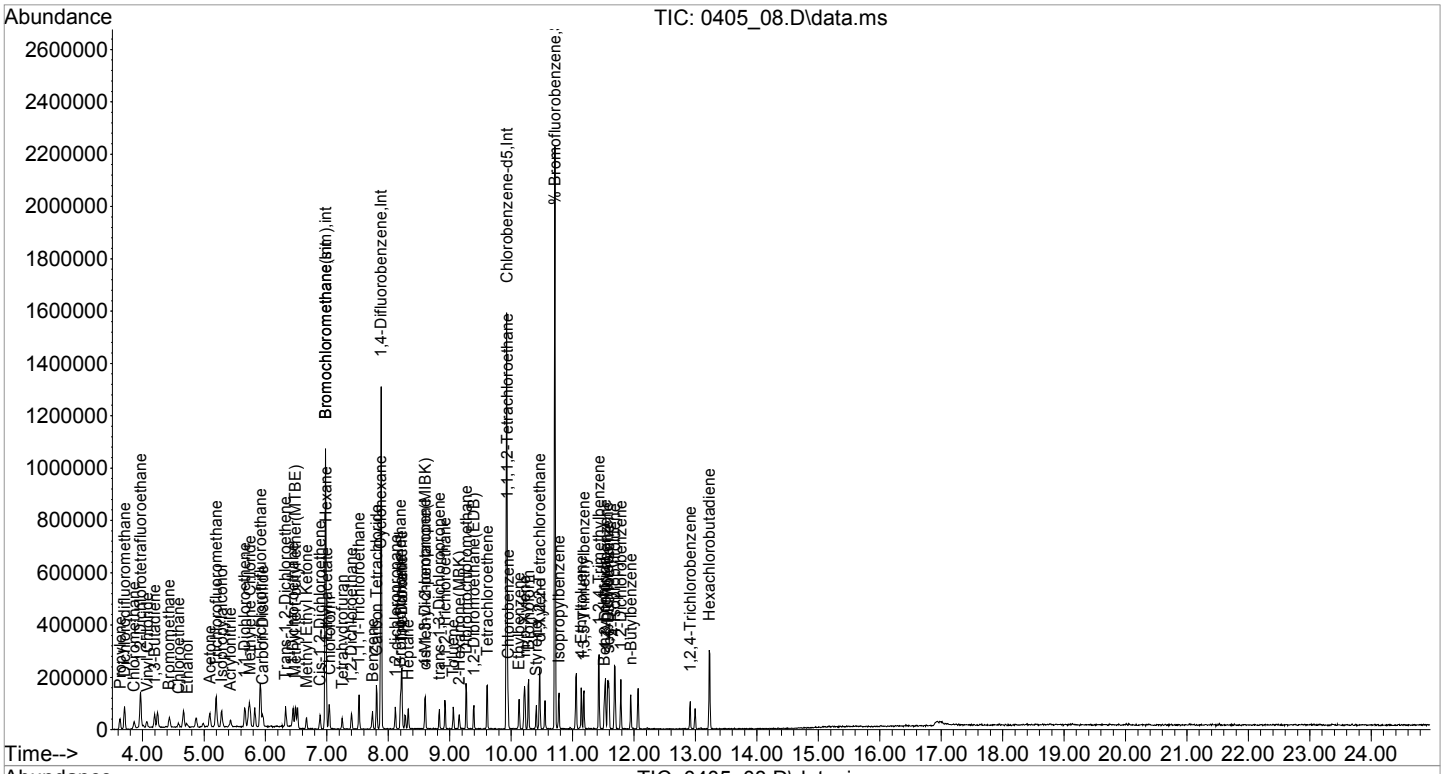
Quant Time: Apr 06 09:00:13 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

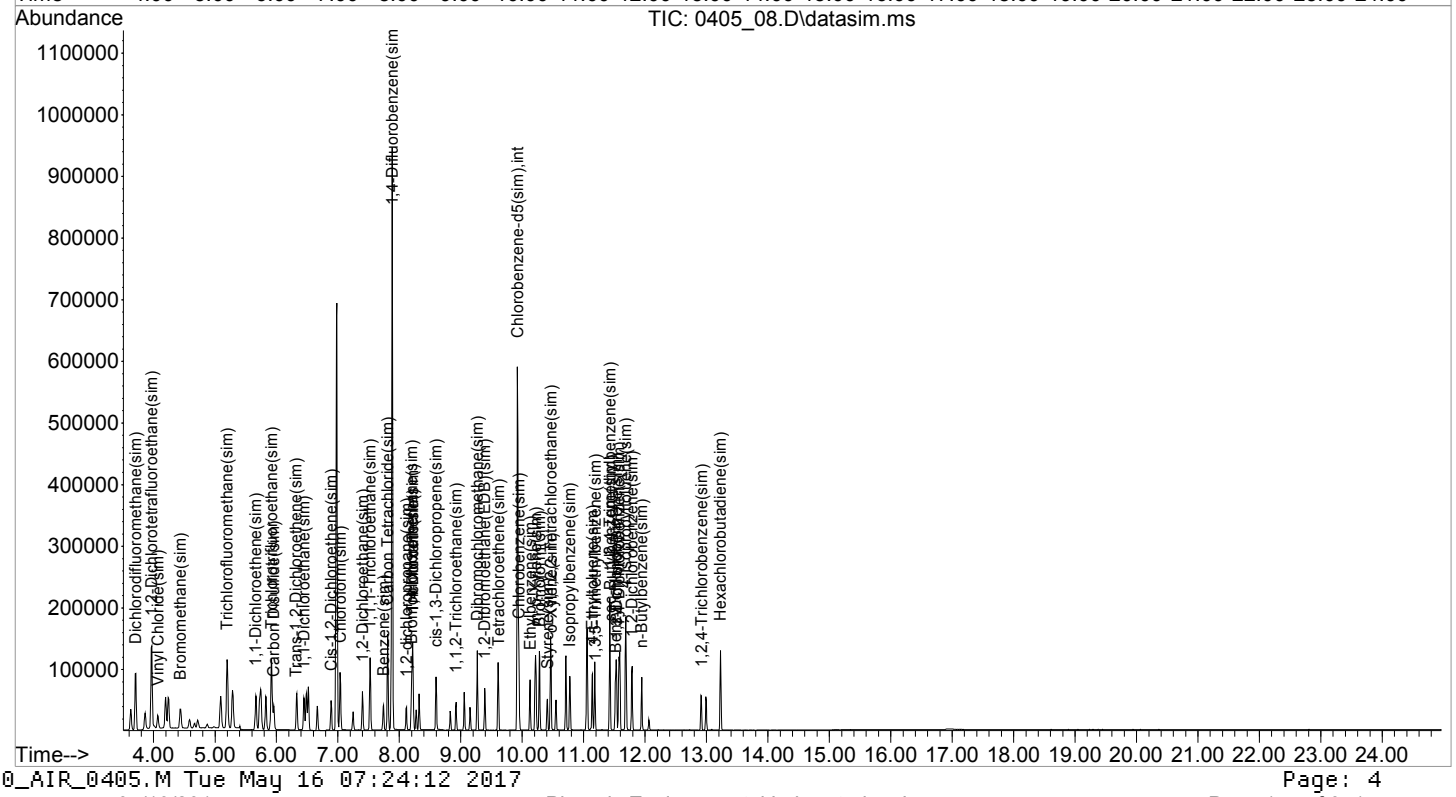
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	38457	1.054	ppbv#	90
115] Isopropylbenzene(sim)	10.773	105	57343	0.993	ppbv#	68
117] 4-Ethyltoluene(sim)	11.144	105	58833	1.092	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.185	105	48463	1.046	ppbv	99
119] 1,2,4-Trimethylbenzene...	11.425	105	51250	1.122	ppbv	94
121] Benzyl chloride(sim)	11.514	91	43707	1.127	ppbv	97
122] 1,3-Dichlorobenzene(sim)	11.534	146	42045	1.041	ppbv	95
123] 1,4-Dichlorobenzene(sim)	11.574	146	54997	1.225	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	47203	1.162	ppbv	80
125] 4-Isopropyltoluene(sim)	11.685	119	63890	1.158	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	43883	1.104	ppbv	96
127] n-Butylbenzene(sim)	11.944	91	50234	1.105	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	19172	0.950	ppbv	94
130] Hexachlorobutadiene(sim)	13.224	225	40721	0.964	ppbv	96

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_08.D
Acq On : 05 Apr 2017 03:07 pm
Operator : CORTEX\ms
Client ID : ICAL 1
Lab ID : 1.0ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:00:13 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_09.D
Acq On : 05 Apr 2017 03:45 pm
Operator : CORTEX\ms
Client ID : ICAL 2.5
Lab ID : 2.5ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:58:48 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Fri Mar 24 10:23:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	201555	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	536452	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	225639	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	201555	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	643757	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	237218	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	332864	10.863	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.60%				
Target Compounds							Qvalue
2) Propylene	3.650	41	52431	1.980	ppbv		97
3) Dichlorodifluoromethane	3.715	85	173856	2.442	ppbv#		96
4) Chloromethane	3.878	50	64400	2.388	ppbv#		1
5) 1,2-Dichlorotetrafluor...	3.975	85	148930	2.360	ppbv		94
6) Vinyl Chloride	4.080	62	48595	2.076	ppbv		96
7) 1,3-Butadiene	4.210	54	43907	2.378	ppbv#		46
8) Bromomethane	4.445	94	45714	2.100	ppbv#		88
9) Chloroethane	4.591	64	21775	2.086	ppbv#		76
11) Ethanol	4.721	45	30487	2.321	ppbv#		90
12) Acetone	5.094	43	156433	2.798	ppbv#		73
13) Trichlorofluoromethane	5.208	101	205907	2.560	ppbv		99
14) Isopropylalcohol	5.281	45	148306	2.547	ppbv#		81
15) Acrylonitrile	5.441	53	47998	2.743	ppbv		92
16) 1,1-Dichloroethene	5.673	61	104505	2.439	ppbv#		83
17) Methylene Chloride	5.750	49	94247	2.429	ppbv#		73
20) Carbon Disulfide	5.964	76	104060	2.165	ppbv		99
21) Trichlorotrifluoroethane	5.923	101	113433	2.429	ppbv#		88
22) Trans-1,2-Dichloroethene	6.334	61	79565	2.596	ppbv		90
23) 1,1-Dichloroethane	6.454	63	76671	1.919	ppbv		97
24) Methyl tert-butyl ethe...	6.485	73	92861	1.908	ppbv#		78
25) Methyl Ethyl Ketone	6.662	43	100369	1.910	ppbv#		86
26) Cis-1,2-Dichloroethene	6.894	61	53898	1.912	ppbv		91
27) Hexane	6.987	57	42511	1.982	ppbv#		46
28) Chloroform	7.041	83	102762	2.212	ppbv		90
29) Ethyl acetate	6.987	61	9169	1.793	ppbv#		1
30) Tetrahydrofuran	7.250	42	37378	2.012	ppbv#		79
31) 1,2-Dichloroethane	7.405	62	87366	2.656	ppbv		97
32) 1,1,1-Trichloroethane	7.529	97	120306	2.544	ppbv#		93
33) Benzene	7.740	78	85141	2.061	ppbv#		87
34) Carbon Tetrachloride	7.815	117	149498	2.837	ppbv		99
35) Cyclohexane	7.873	41	36116	2.578	ppbv#		63
37) 1,2-dichloropropane	8.113	63	28078	2.049	ppbv#		34
38) Bromodichloromethane	8.204	83	105671	2.470	ppbv		95
39) Trichloroethene	8.221	130	55645	2.578	ppbv		93
41) 1,4-Dioxane	8.213	88	17013	2.315	ppbv#		82
43) Heptane	8.329	43	46935	2.391	ppbv#		79
44) cis-1,3-Dichloropropene	8.594	75	48001	2.335	ppbv		92
45) 4-Methyl-2-pentanone(M...	8.602	43	76497	2.591	ppbv#		87
46) trans-1,3-Dichloropropene	8.830	75	48944	2.304	ppbv		96
47) 1,1,2-Trichloroethane	8.921	97	40607	2.400	ppbv		97
48) Toluene	9.055	91	85250	2.341	ppbv#		97
49) Dibromochloromethane	9.266	129	130726	2.699	ppbv		99

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_09.D
Acq On : 05 Apr 2017 03:45 pm
Operator : CORTEX\ms
Client ID : ICAL 2.5
Lab ID : 2.5ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:58:48 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Fri Mar 24 10:23:55 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.153	43	69950	2.676	ppbv#	81
51)	1,2-Dibromoethane(EDB)	9.393	107	76447	2.461	ppbv	97
52)	Tetrachloroethene	9.611	166	72627	2.573	ppbv	99
54)	1,1,1,2-Tetrachloroethane	9.934	131	71516	2.717	ppbv	99
55)	Chlorobenzene	9.949	112	92889	2.512	ppbv	98
56)	Ethylbenzene	10.126	91	118517	2.459	ppbv	98
57)	m,p-Xylene	10.215	91	213633	5.600	ppbv	97
58)	Bromoform	10.282	173	136157	2.827	ppbv	99
59)	Styrene	10.408	104	65546	2.531	ppbv#	89
60)	1,1,2,2-Tetrachloroethane	10.459	83	82931	2.404	ppbv	97
61)	o-Xylene	10.467	91	109801	2.749	ppbv	95
64)	Isopropylbenzene	10.778	105	141494	2.621	ppbv	96
66)	4-Ethyltoluene	11.141	105	151240	2.903	ppbv	99
67)	1,3,5-Trimethylbenzene	11.185	105	136434	2.975	ppbv	97
68)	1,2,4-Trimethylbenzene	11.430	105	131724	2.836	ppbv	95
70)	Benzyl chloride	11.519	91	118778	2.921	ppbv	96
71)	1,3-Dichlorobenzene	11.534	146	116921	3.026	ppbv	99
72)	1,4-Dichlorobenzene	11.571	146	110855	3.096	ppbv	99
73)	sec-Butylbenzene	11.593	105	175771	2.862	ppbv#	95
74)	4-Isopropyltoluene	11.682	119	170580	2.928	ppbv	93
75)	1,2-Dichlorobenzene	11.786	146	106890	2.895	ppbv	98
76)	n-Butylbenzene	11.949	91	135924	2.814	ppbv	95
77)	1,2,4-Trichlorobenzene	12.913	180	67100	3.373	ppbv	99
79)	Hexachlorobutadiene	13.231	225	109208	3.321	ppbv	98
81]	Dichlorodifluoromethan...	3.718	85	215361	2.292	ppbv	97
82]	1,2-Dichlorotetrafluor...	3.975	85	148947	2.202	ppbv	94
83]	Vinyl Chloride(sim)	4.083	62	58067	2.062	ppbv	98
84]	Bromomethane(sim)	4.445	94	45714	1.774	ppbv#	88
85]	Trichlorofluoromethane...	5.211	101	261105	2.520	ppbv	99
86]	1,2-Dichloroethane(sim)	7.405	62	87366	2.514	ppbv	97
87]	1,1,1-Trichloroethane(...	7.524	97	152714	2.503	ppbv#	96
88]	Carbon Tetrachloride(sim)	7.815	117	149498	2.712	ppbv	99
89]	1,1-Dichloroethene(sim)	5.670	61	124914	2.420	ppbv#	85
90]	Carbon Disulfide(sim)	5.964	76	103992	1.934	ppbv	99
91]	Trichlorotrifluoroetha...	5.926	101	142608	2.321	ppbv	100
92]	Trans-1,2-Dichloroethe...	6.334	61	79565	2.402	ppbv	90
93]	1,1-Dichloroethane(sim)	6.451	63	93017	1.916	ppbv	96
94]	Cis-1,2-Dichloroethene...	6.894	61	53898	1.808	ppbv	91
95]	Chloroform(sim)	7.044	83	129376	2.206	ppbv#	91
96]	Benzene(sim)	7.740	78	85141	2.077	ppbv#	87
98]	1,2-dichloropropane(sim)	8.113	63	28078	1.820	ppbv#	34
99]	Bromodichloromethane(sim)	8.199	85	84097m	2.422	ppbv	
100]	Trichloroethene(sim)	8.221	130	55645	2.192	ppbv	95
101]	1,4-Dioxane(sim)	8.216	88	18934	2.370	ppbv#	82
102]	cis-1,3-Dichloropropen...	8.594	75	47843	2.308	ppbv#	92
103]	1,1,2-Trichloroethane(...	8.924	97	51218	2.256	ppbv	95
104]	Dibromochloromethane(sim)	9.266	129	130726	2.577	ppbv	99
105]	1,2-Dibromoethane(EDB)...	9.389	107	97357	2.450	ppbv	100
106]	Tetrachloroethene(sim)	9.611	166	72627	2.260	ppbv	99
108]	Bromoform(sim)	10.282	173	136157	2.454	ppbv	99
109]	Chlorobenzene(sim)	9.952	112	112342	2.206	ppbv#	97
110]	Ethylbenzene(sim)	10.126	91	118517	2.410	ppbv	97
111]	m,p-Xylene(sim)	10.218	91	236575	5.457	ppbv	96
112]	Styrene(sim)	10.408	104	65546	2.758	ppbv#	89
113]	1,1,2,2-Tetrachloroeth...	10.462	83	103764	2.162	ppbv#	97

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_09.D
Acq On : 05 Apr 2017 03:45 pm
Operator : CORTEX\ms
Client ID : ICAL 2.5
Lab ID : 2.5ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:58:48 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Fri Mar 24 10:23:55 2017
Response via : Initial Calibration

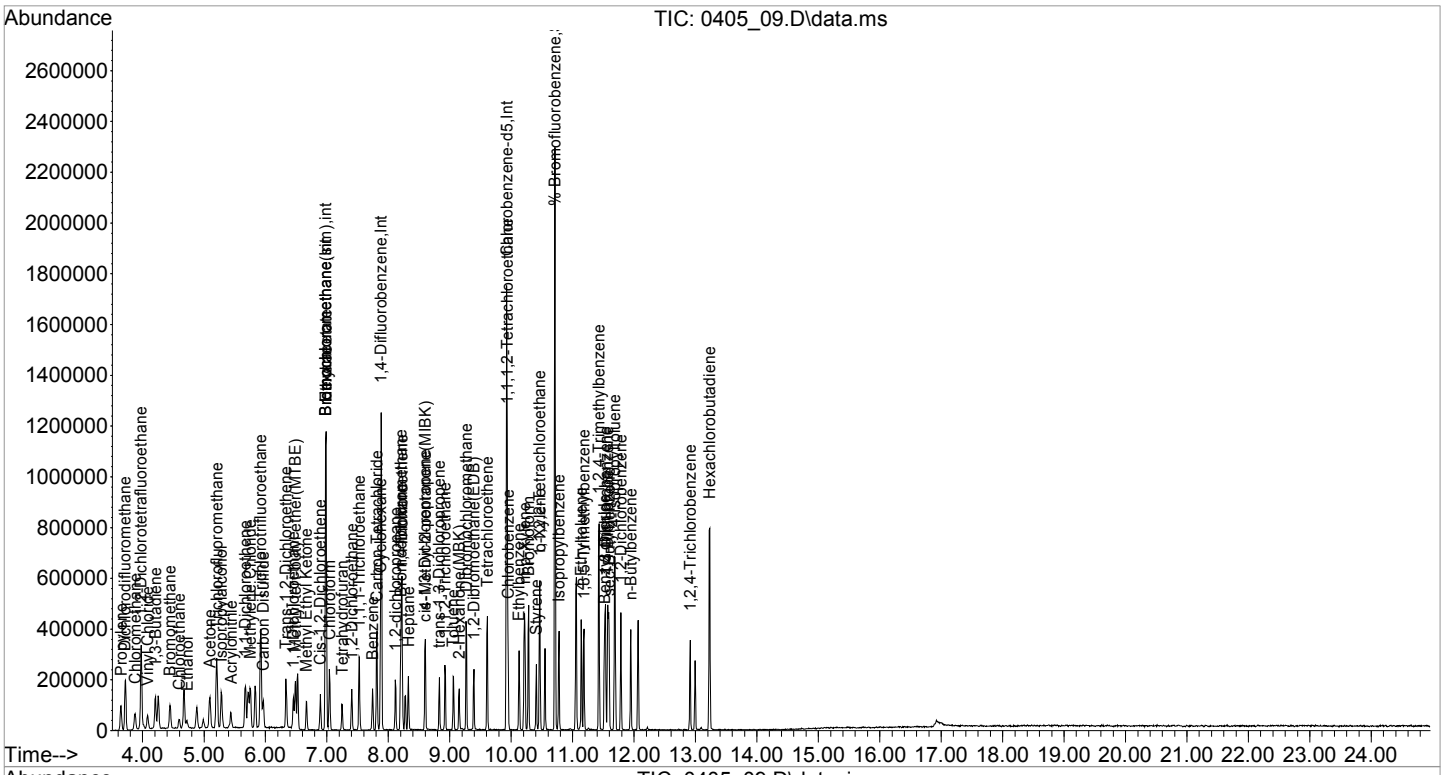
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	109801	2.680	ppbv	97
115] Isopropylbenzene(sim)	10.773	105	150986	2.464	ppbv#	68
117] 4-Ethyltoluene(sim)	11.144	105	164033	3.024	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.185	105	136434	2.945	ppbv	99
119] 1,2,4-Trimethylbenzene...	11.425	105	142721	3.133	ppbv#	93
121] Benzyl chloride(sim)	11.514	91	128795	3.536	ppbv	97
122] 1,3-Dichlorobenzene(sim)	11.534	146	116921	2.828	ppbv	100
123] 1,4-Dichlorobenzene(sim)	11.574	146	144989	3.409	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	131602	3.118	ppbv	82
125] 4-Isopropyltoluene(sim)	11.685	119	178381	3.276	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	106805	2.654	ppbv	97
127] n-Butylbenzene(sim)	11.944	91	151279	3.321	ppbv#	47
128] 1,2,4-Trichlorobenzene...	12.913	180	67100	3.906	ppbv	98
130] Hexachlorobutadiene(sim)	13.231	225	109208	2.748	ppbv	98

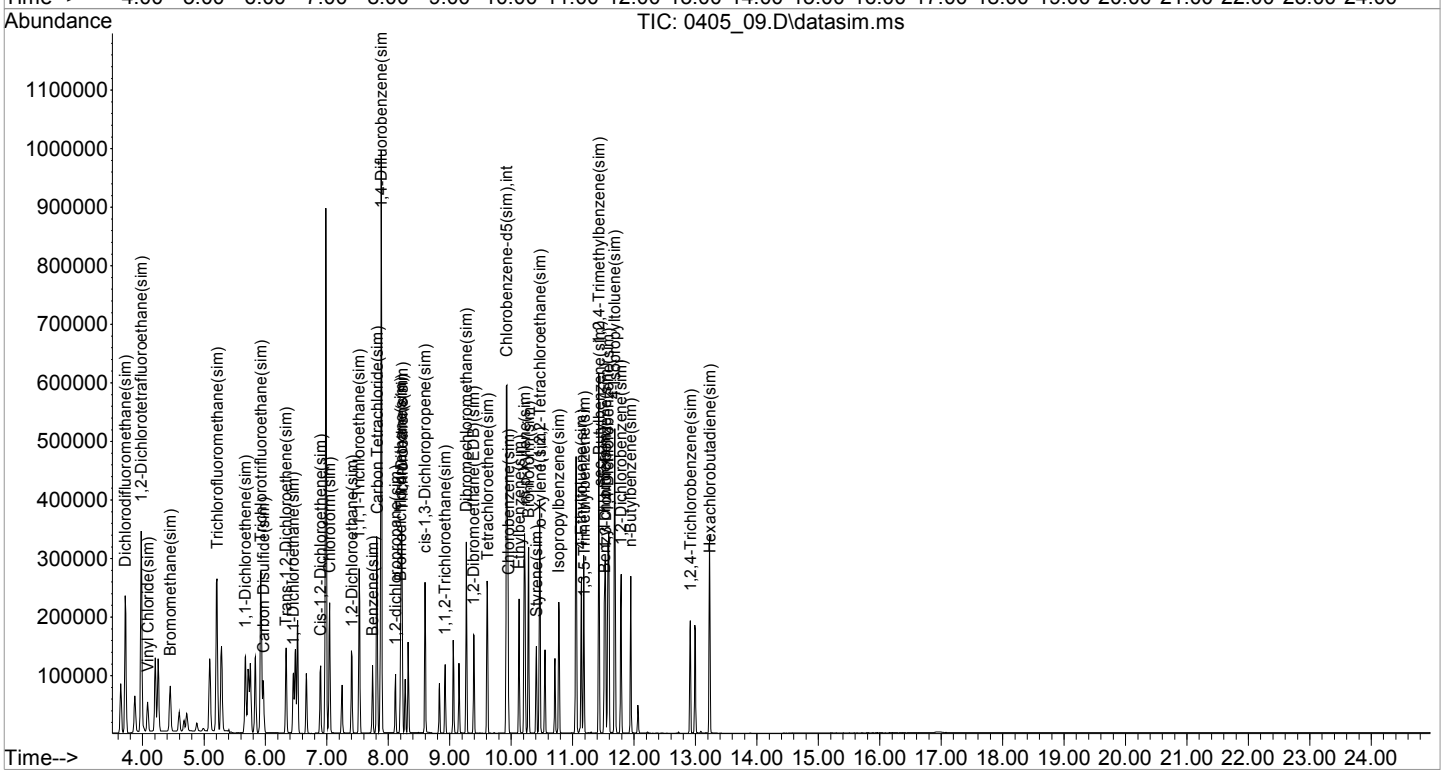
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_09.D
Acq On : 05 Apr 2017 03:45 pm
Operator : CORTEX\ms
Client ID : ICAL 2.5
Lab ID : 2.5ppb;air03y
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:58:48 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Fri Mar 24 10:23:55 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_10.D
Acq On : 05 Apr 2017 04:22 pm
Operator : CORTEX\ms
Client ID : ICAL 5
Lab ID : 5.0ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:00 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:41:47 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.972	130	198155	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	535009	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	234280	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.972	130	198155	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	638335	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	249158	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.712	95	334892	9.690	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.90%				
Target Compounds							Qvalue
2) Propylene	3.602	41	116948	5.672	ppbv		94
3) Dichlorodifluoromethane	3.667	85	384072	5.618	ppbv#		96
4) Chloromethane	3.829	50	138662	5.475	ppbv#		1
5) 1,2-Dichlorotetrafluor...	3.935	85	324291	5.537	ppbv		94
6) Vinyl Chloride	4.032	62	107523	5.627	ppbv		98
7) 1,3-Butadiene	4.162	54	91846	5.319	ppbv#		41
8) Bromomethane	4.405	94	100338	5.581	ppbv#		91
9) Chloroethane	4.559	64	48034	5.609	ppbv#		73
11) Ethanol	4.697	45	64719	5.398	ppbv		94
12) Acetone	5.062	43	319887	5.200	ppbv#		73
13) Trichlorofluoromethane	5.176	101	454775	5.616	ppbv		99
14) Isopropylalcohol	5.265	45	306221	5.251	ppbv#		84
15) Acrylonitrile	5.417	53	65132	3.451	ppbv#		86
16) 1,1-Dichloroethene	5.649	61	233327	5.677	ppbv#		84
17) Methylene Chloride	5.733	49	204955	5.530	ppbv#		73
20) Carbon Disulfide	5.941	76	233944	5.717	ppbv		98
21) Trichlorotrifluoroethane	5.899	101	246025	5.515	ppbv#		89
22) Trans-1,2-Dichloroethene	6.319	61	175116	5.597	ppbv		90
23) 1,1-Dichloroethane	6.439	63	211566	7.017	ppbv		96
24) Methyl tert-butyl ethe...	6.470	73	282781	7.744	ppbv#		86
25) Methyl Ethyl Ketone	6.652	43	236665	5.996	ppbv#		87
26) Cis-1,2-Dichloroethene	6.886	61	125887	5.939	ppbv		92
27) Hexane	6.979	57	99859	5.973	ppbv#		46
28) Chloroform	7.034	83	226264	5.599	ppbv		90
29) Ethyl acetate	6.979	61	22460	6.229	ppbv#		6
30) Tetrahydrofuran	7.235	42	90542	6.160	ppbv#		76
31) 1,2-Dichloroethane	7.398	62	190037	5.531	ppbv		98
32) 1,1,1-Trichloroethane	7.522	97	266073	5.624	ppbv#		92
33) Benzene	7.740	78	196023	5.855	ppbv#		87
34) Carbon Tetrachloride	7.807	117	331977	5.647	ppbv		99
35) Cyclohexane	7.865	41	83944	5.910	ppbv#		54
37) 1,2-dichloropropane	8.114	63	63939	5.708	ppbv#		29
38) Bromodichloromethane	8.196	83	238644	5.661	ppbv		98
39) Trichloroethene	8.213	130	124324	5.601	ppbv		94
41) 1,4-Dioxane	8.205	88	40221	5.926	ppbv#		86
43) Heptane	8.321	43	115601	6.174	ppbv#		75
44) cis-1,3-Dichloropropene	8.594	75	116778	6.098	ppbv		97
45) 4-Methyl-2-pentanone(M...	8.594	43	184107	6.033	ppbv#		88
46) trans-1,3-Dichloropropene	8.830	75	118408	6.064	ppbv		98
47) 1,1,2-Trichloroethane	8.922	97	88537	5.466	ppbv		99
48) Toluene	9.055	91	206257	6.065	ppbv		95
49) Dibromochloromethane	9.266	129	287047	5.504	ppbv		99

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_10.D
Acq On : 05 Apr 2017 04:22 pm
Operator : CORTEX\ms
Client ID : ICAL 5
Lab ID : 5.0ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:00 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:41:47 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.147	43	175252	6.280	ppbv#	80
51) 1,2-Dibromoethane(EDB)	9.393	107	174425	5.720	ppbv	100
52) Tetrachloroethene	9.611	166	161010	5.557	ppbv	96
54) 1,1,1,2-Tetrachloroethane	9.934	131	160069	5.389	ppbv	97
55) Chlorobenzene	9.949	112	203928	5.286	ppbv	99
56) Ethylbenzene	10.127	91	283882	5.767	ppbv	96
57) m,p-Xylene	10.216	91	504117	11.363	ppbv	96
58) Bromoform	10.282	173	302182	5.344	ppbv	100
59) Styrene	10.408	104	162260	5.961	ppbv#	88
60) 1,1,2,2-Tetrachloroethane	10.460	83	187326	5.439	ppbv	97
61) o-Xylene	10.467	91	251433	5.514	ppbv	96
64) Isopropylbenzene	10.778	105	316578	5.387	ppbv	97
66) 4-Ethyltoluene	11.141	105	356762	5.680	ppbv	98
67) 1,3,5-Trimethylbenzene	11.178	105	305367	5.389	ppbv	96
68) 1,2,4-Trimethylbenzene	11.430	105	318109	5.815	ppbv	95
70) Benzyl chloride	11.519	91	279655	5.669	ppbv	98
71) 1,3-Dichlorobenzene	11.534	146	257046	5.293	ppbv	98
72) 1,4-Dichlorobenzene	11.571	146	253511	5.506	ppbv	99
73) sec-Butylbenzene	11.586	105	393821	5.395	ppbv#	95
74) 4-Isopropyltoluene	11.682	119	399166	5.634	ppbv	93
75) 1,2-Dichlorobenzene	11.786	146	247233	5.569	ppbv	99
76) n-Butylbenzene	11.949	91	318009	5.633	ppbv	96
77) 1,2,4-Trichlorobenzene	12.913	180	160030	5.742	ppbv	97
79) Hexachlorobutadiene	13.224	225	228043	5.028	ppbv	98
81] Dichlorodifluoromethan...	3.670	85	478205	5.646	ppbv	97
82] 1,2-Dichlorotetrafluor...	3.935	85	324254	5.536	ppbv	94
83] Vinyl Chloride(sim)	4.035	62	127017	5.562	ppbv	98
84] Bromomethane(sim)	4.405	94	100338	5.581	ppbv#	91
85] Trichlorofluoromethane...	5.179	101	569195	5.543	ppbv	100
86] 1,2-Dichloroethane(sim)	7.398	62	190037	5.531	ppbv	98
87] 1,1,1-Trichloroethane(...	7.525	97	338985	5.645	ppbv#	96
88] Carbon Tetrachloride(sim)	7.807	117	331977	5.647	ppbv	99
89] 1,1-Dichloroethene(sim)	5.646	61	277738	5.654	ppbv#	85
90] Carbon Disulfide(sim)	5.941	76	233944	5.721	ppbv	98
91] Trichlorotrifluoroetha...	5.902	101	310834	5.543	ppbv	99
92] Trans-1,2-Dichloroethe...	6.319	61	175116	5.597	ppbv	90
93] 1,1-Dichloroethane(sim)	6.441	63	245463	6.710	ppbv	97
94] Cis-1,2-Dichloroethene...	6.886	61	125887	5.939	ppbv	92
95] Chloroform(sim)	7.037	83	284075	5.584	ppbv#	91
96] Benzene(sim)	7.740	78	196023	5.855	ppbv#	87
98] 1,2-dichloropropane(sim)	8.114	63	63939	5.741	ppbv#	29
99] Bromodichloromethane(sim)	8.116	85	621	5.931	ppbv#	54
100] Trichloroethene(sim)	8.213	130	124324	5.633	ppbv	96
101] 1,4-Dioxane(sim)	8.208	88	45398	6.045	ppbv#	85
102] cis-1,3-Dichloropropen...	8.594	75	116778	6.154	ppbv#	97
103] 1,1,2-Trichloroethane(...	8.925	97	113334	5.579	ppbv	96
104] Dibromochloromethane(sim)	9.266	129	286971	5.535	ppbv	99
105] 1,2-Dibromoethane(EDB)...	9.389	107	222548	5.763	ppbv	100
106] Tetrachloroethene(sim)	9.611	166	161098	5.592	ppbv	97
108] Bromoform(sim)	10.282	173	302182	5.283	ppbv	100
109] Chlorobenzene(sim)	9.945	112	247852	5.251	ppbv#	94
110] Ethylbenzene(sim)	10.127	91	283882	5.701	ppbv	95
111] m,p-Xylene(sim)	10.218	91	552457	11.117	ppbv	95
112] Styrene(sim)	10.408	104	162260	5.892	ppbv#	88
113] 1,1,2,2-Tetrachloroeth...	10.463	83	230900	5.297	ppbv#	97

Quantitation Report (QT Reviewed)

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Data File : 0405_10.D
Acq On : 05 Apr 2017 04:22 pm
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Client ID : ICAL 5
Lab ID : 5.0ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:00 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:41:47 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	251433	5.450	ppbv	98
115] Isopropylbenzene(sim)	10.774	105	345643	5.449	ppbv#	68
117] 4-Ethyltoluene(sim)	11.137	105	383118	5.559	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.178	105	305367	5.327	ppbv	98
119] 1,2,4-Trimethylbenzene...	11.426	105	342194	5.707	ppbv#	93
121] Benzyl chloride(sim)	11.515	91	311515	5.757	ppbv	97
122] 1,3-Dichlorobenzene(sim)	11.534	146	257046	5.233	ppbv	98
123] 1,4-Dichlorobenzene(sim)	11.574	146	329734	5.413	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	317469	5.742	ppbv	82
125] 4-Isopropyltoluene(sim)	11.678	119	413161	5.513	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	247233	5.510	ppbv	99
127] n-Butylbenzene(sim)	11.945	91	350154	5.509	ppbv#	47
128] 1,2,4-Trichlorobenzene...	12.913	180	160030	5.677	ppbv	97
130] Hexachlorobutadiene(sim)	13.224	225	227825	4.965	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

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Data File : 0405_10.D
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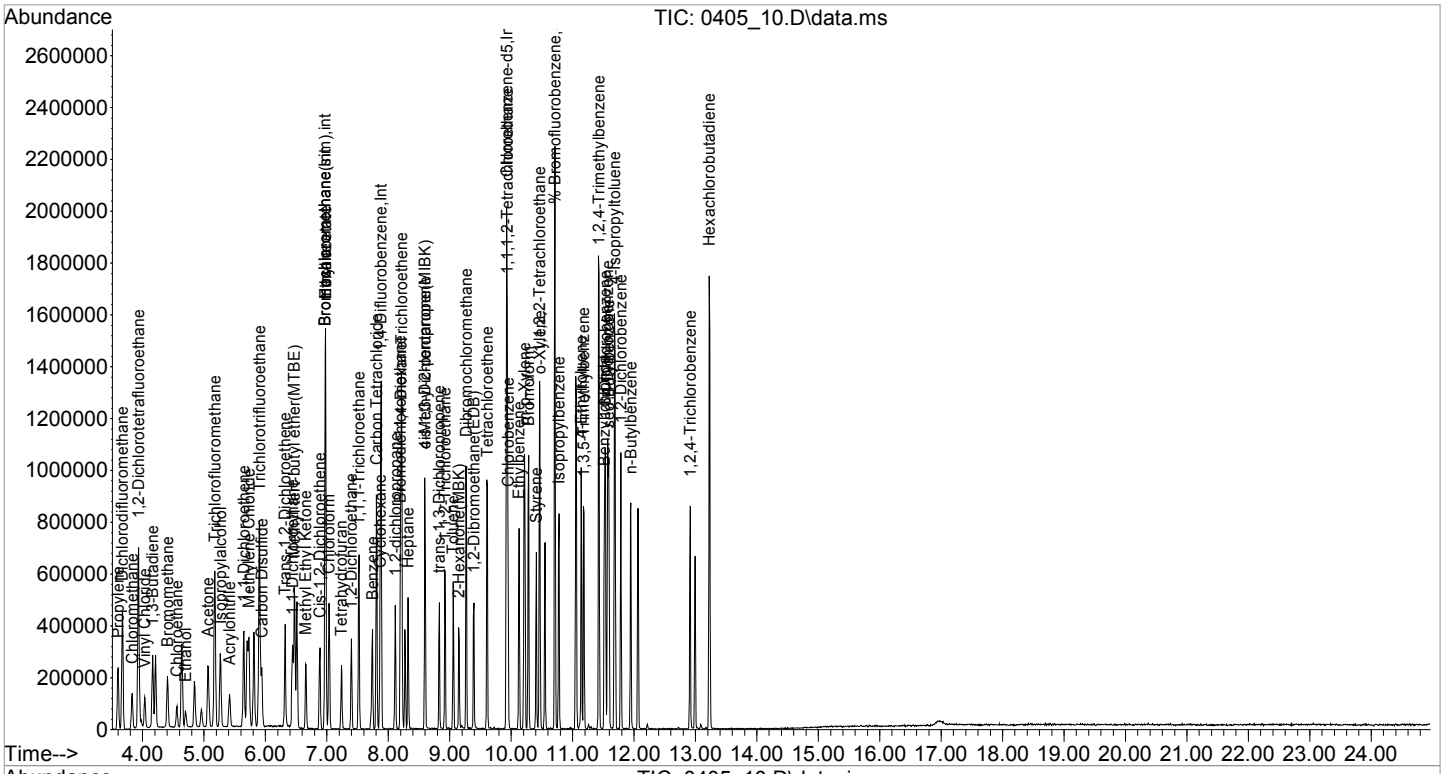
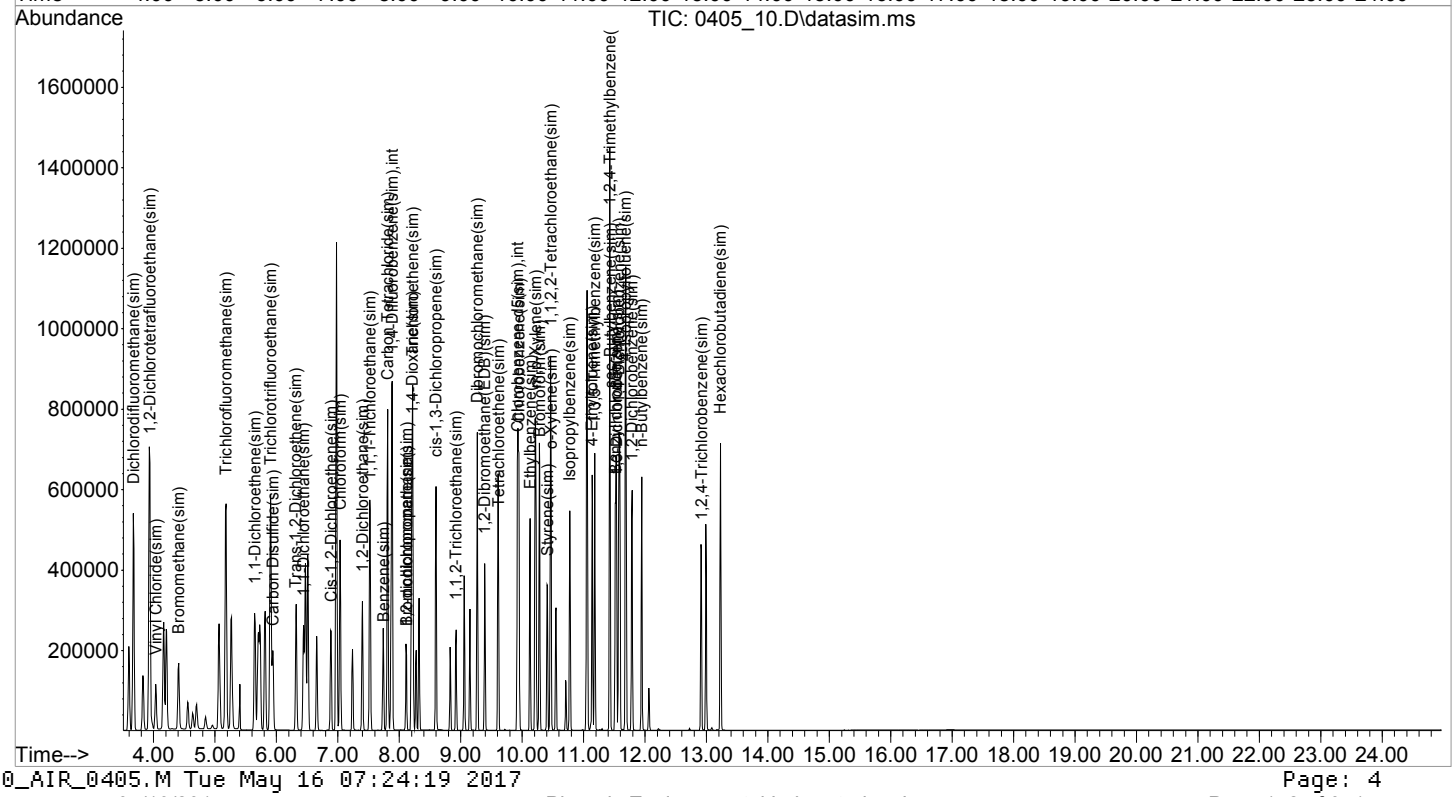
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:41:47 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_11.D
Acq On : 05 Apr 2017 04:58 pm
Operator : CORTEX\ms
Client ID : ICAL 10
Lab ID : 10ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:00:58 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.987	130	200144	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.890	114	538896	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	254110	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.987	130	200144	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	644606	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	270526	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.712	95	333919	9.662	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.60%				
Target Compounds							Qvalue
2) Propylene	3.627	41	224954	10.785	ppbv		92
3) Dichlorodifluoromethane	3.708	85	748804	10.400	ppbv#		96
4) Chloromethane	3.862	50	247222	9.917	ppbv#		1
5) 1,2-Dichlorotetrafluor...	3.967	85	626128	10.132	ppbv		95
6) Vinyl Chloride	4.073	62	200435	9.973	ppbv		95
7) 1,3-Butadiene	4.194	54	168379	9.770	ppbv#		36
8) Bromomethane	4.438	94	192313	9.716	ppbv#		92
9) Chloroethane	4.592	64	87961	9.533	ppbv#		73
11) Ethanol	4.722	45	126286	9.342	ppbv		96
12) Acetone	5.087	43	616586	9.941	ppbv#		73
13) Trichlorofluoromethane	5.200	101	867048	10.187	ppbv		99
14) Isopropylalcohol	5.281	45	586317	9.599	ppbv#		86
15) Acrylonitrile	5.435	53	196742	10.187	ppbv		85
16) 1,1-Dichloroethene	5.667	61	452499	10.424	ppbv#		83
17) Methylene Chloride	5.751	49	384252	8.697	ppbv#		74
20) Carbon Disulfide	5.959	76	456631	10.133	ppbv		98
21) Trichlorotrifluoroethane	5.917	101	469565	9.943	ppbv#		90
22) Trans-1,2-Dichloroethene	6.334	61	342058	10.122	ppbv		89
23) 1,1-Dichloroethane	6.454	63	350517	9.723	ppbv		97
24) Methyl tert-butyl ethe...	6.480	73	432421	10.441	ppbv#		82
25) Methyl Ethyl Ketone	6.663	43	473402	10.965	ppbv#		86
26) Cis-1,2-Dichloroethene	6.894	61	251810	10.655	ppbv		91
27) Hexane	6.987	57	198705	11.404	ppbv#		52
28) Chloroform	7.049	83	437646	10.406	ppbv		89
29) Ethyl acetate	6.987	61	45344	11.282	ppbv#		5
30) Tetrahydrofuran	7.243	42	186793	10.972	ppbv#		79
31) 1,2-Dichloroethane	7.406	62	376094	10.574	ppbv		99
32) 1,1,1-Trichloroethane	7.530	97	518728	10.475	ppbv#		94
33) Benzene	7.740	78	383209	10.306	ppbv#		86
34) Carbon Tetrachloride	7.815	117	644228	10.356	ppbv		100
35) Cyclohexane	7.873	41	166702	10.738	ppbv#		52
37) 1,2-dichloropropane	8.114	63	127383	10.534	ppbv#		36
38) Bromodichloromethane	8.205	83	470448	10.499	ppbv		98
39) Trichloroethene	8.221	130	240437	10.482	ppbv		95
41) 1,4-Dioxane	8.205	88	83560	10.758	ppbv#		85
43) Heptane	8.329	43	220389	11.042	ppbv#		77
44) cis-1,3-Dichloropropene	8.594	75	235540	11.191	ppbv		97
45) 4-Methyl-2-pentanone(M...	8.594	43	375583	11.726	ppbv#		87
46) trans-1,3-Dichloropropene	8.830	75	245323	11.438	ppbv		97
47) 1,1,2-Trichloroethane	8.922	97	174870	10.375	ppbv		97
48) Toluene	9.062	91	418713	11.112	ppbv		97
49) Dibromochloromethane	9.267	129	572147	10.481	ppbv		99

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_11.D
Acq On : 05 Apr 2017 04:58 pm
Operator : CORTEX\ms
Client ID : ICAL 10
Lab ID : 10ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:00:58 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.147	43	362342	12.122	ppbv#	79
51)	1,2-Dibromoethane(EDB)	9.393	107	345920	10.716	ppbv	100
52)	Tetrachloroethene	9.611	166	322887	10.577	ppbv	97
54)	1,1,1,2-Tetrachloroethane	9.934	131	314904	10.207	ppbv	98
55)	Chlorobenzene	9.949	112	410405	10.027	ppbv	97
56)	Ethylbenzene	10.127	91	601081	11.401	ppbv	99
57)	m,p-Xylene	10.216	91	1000144	23.244	ppbv	96
58)	Bromoform	10.282	173	597235	10.230	ppbv	100
59)	Styrene	10.408	104	335240	11.608	ppbv#	87
60)	1,1,2,2-Tetrachloroethane	10.460	83	362527	9.858	ppbv	95
61)	o-Xylene	10.467	91	502583	11.336	ppbv	96
64)	Isopropylbenzene	10.778	105	646425	10.954	ppbv#	96
66)	4-Ethyltoluene	11.141	105	706724	11.627	ppbv	98
67)	1,3,5-Trimethylbenzene	11.186	105	614743	11.288	ppbv	96
68)	1,2,4-Trimethylbenzene	11.430	105	641862	11.639	ppbv#	95
70)	Benzyl chloride	11.519	91	573813	11.881	ppbv	97
71)	1,3-Dichlorobenzene	11.534	146	518448	11.087	ppbv	99
72)	1,4-Dichlorobenzene	11.571	146	491465	11.220	ppbv	99
73)	sec-Butylbenzene	11.586	105	810589	11.522	ppbv#	95
74)	4-Isopropyltoluene	11.682	119	806316	11.881	ppbv	94
75)	1,2-Dichlorobenzene	11.786	146	492759	10.731	ppbv	100
76)	n-Butylbenzene	11.949	91	679843	12.399	ppbv	96
77)	1,2,4-Trichlorobenzene	12.913	180	384806	13.685	ppbv	99
79)	Hexachlorobutadiene	13.232	225	457985	10.292	ppbv	98
81]	Dichlorodifluoromethan...	3.703	85	921110	10.259	ppbv	97
82]	1,2-Dichlorotetrafluor...	3.967	85	626128	9.632	ppbv	95
83]	Vinyl Chloride(sim)	4.068	62	242294	9.603	ppbv	97
84]	Bromomethane(sim)	4.438	94	192210	8.147	ppbv#	92
85]	Trichlorofluoromethane...	5.203	101	1076158	9.696	ppbv	100
86]	1,2-Dichloroethane(sim)	7.406	62	376094	10.397	ppbv	99
87]	1,1,1-Trichloroethane(...	7.525	97	647997	10.193	ppbv#	95
88]	Carbon Tetrachloride(sim)	7.815	117	644228	10.231	ppbv	100
89]	1,1-Dichloroethene(sim)	5.670	61	535820	10.242	ppbv#	85
90]	Carbon Disulfide(sim)	5.959	76	456631	9.647	ppbv	98
91]	Trichlorotrifluoroetha...	5.920	101	591255	9.620	ppbv	99
92]	Trans-1,2-Dichloroethe...	6.334	61	342252	9.330	ppbv	89
93]	1,1-Dichloroethane(sim)	6.457	63	413336	9.036	ppbv	97
94]	Cis-1,2-Dichloroethene...	6.894	61	251810	11.046	ppbv	91
95]	Chloroform(sim)	7.044	83	545265	10.109	ppbv#	91
96]	Benzene(sim)	7.740	78	383209	9.639	ppbv#	86
98]	1,2-dichloropropane(sim)	8.114	63	127383	9.914	ppbv#	36
99]	Bromodichloromethane(sim)	8.208	85	371820	10.504	ppbv#	41
100]	Trichloroethene(sim)	8.221	130	240437	10.249	ppbv	97
101]	1,4-Dioxane(sim)	8.208	88	92007	11.482	ppbv#	86
102]	cis-1,3-Dichloropropen...	8.594	75	235540	12.645	ppbv	97
103]	1,1,2-Trichloroethane(...	8.925	97	223896	10.117	ppbv	95
104]	Dibromochloromethane(sim)	9.267	129	572147	10.575	ppbv	99
105]	1,2-Dibromoethane(EDB)...	9.396	107	442714	11.167	ppbv	100
106]	Tetrachloroethene(sim)	9.611	166	322836	10.915	ppbv	97
108]	Bromoform(sim)	10.282	173	597457	9.049	ppbv	99
109]	Chlorobenzene(sim)	9.952	112	486767	8.536	ppbv#	93
110]	Ethylbenzene(sim)	10.127	91	601081	10.820	ppbv	99
111]	m,p-Xylene(sim)	10.219	91	1097502	22.663	ppbv	95
112]	Styrene(sim)	10.408	104	335240	11.839	ppbv#	88
113]	1,1,2,2-Tetrachloroeth...	10.463	83	451786	9.015	ppbv#	97

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Lab ID : 10ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

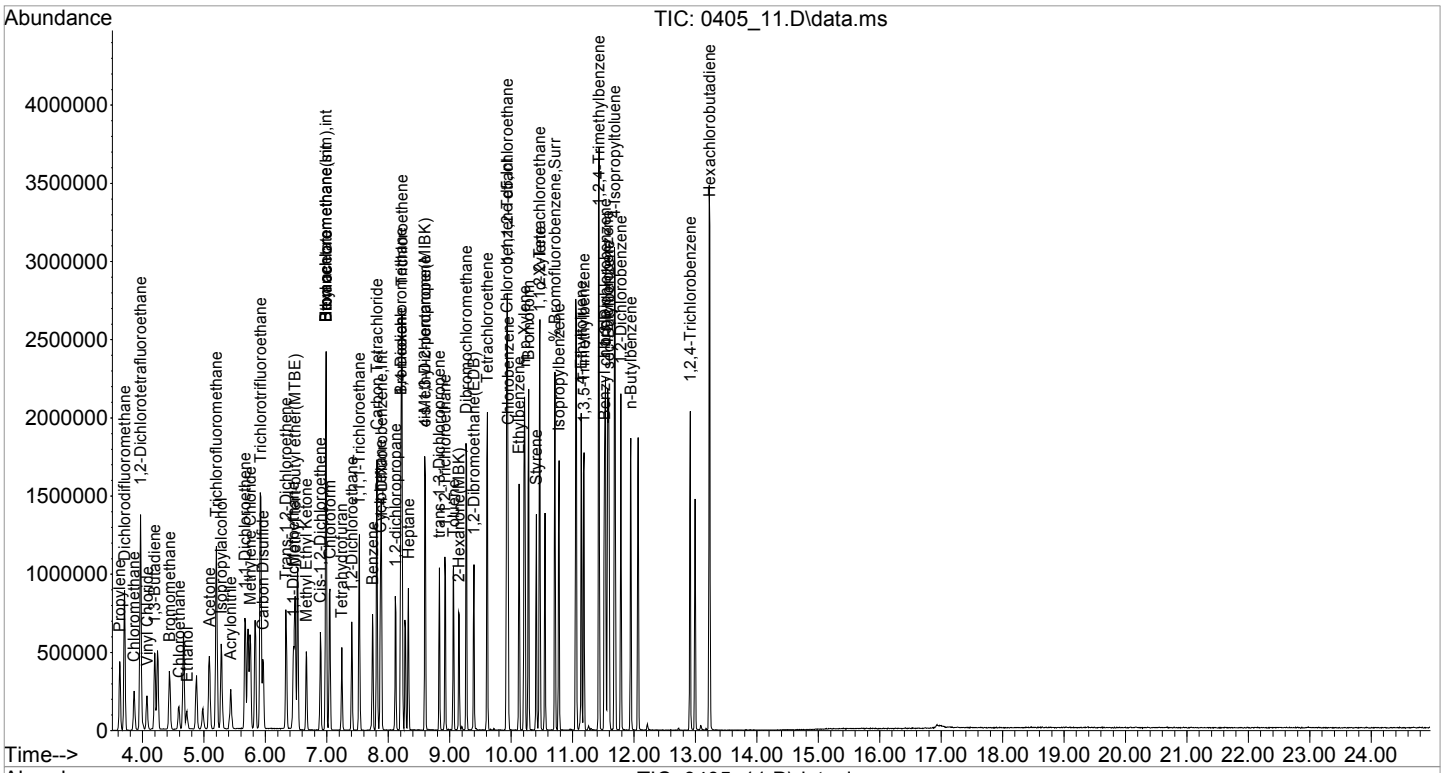
Quant Time: Apr 06 09:00:58 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

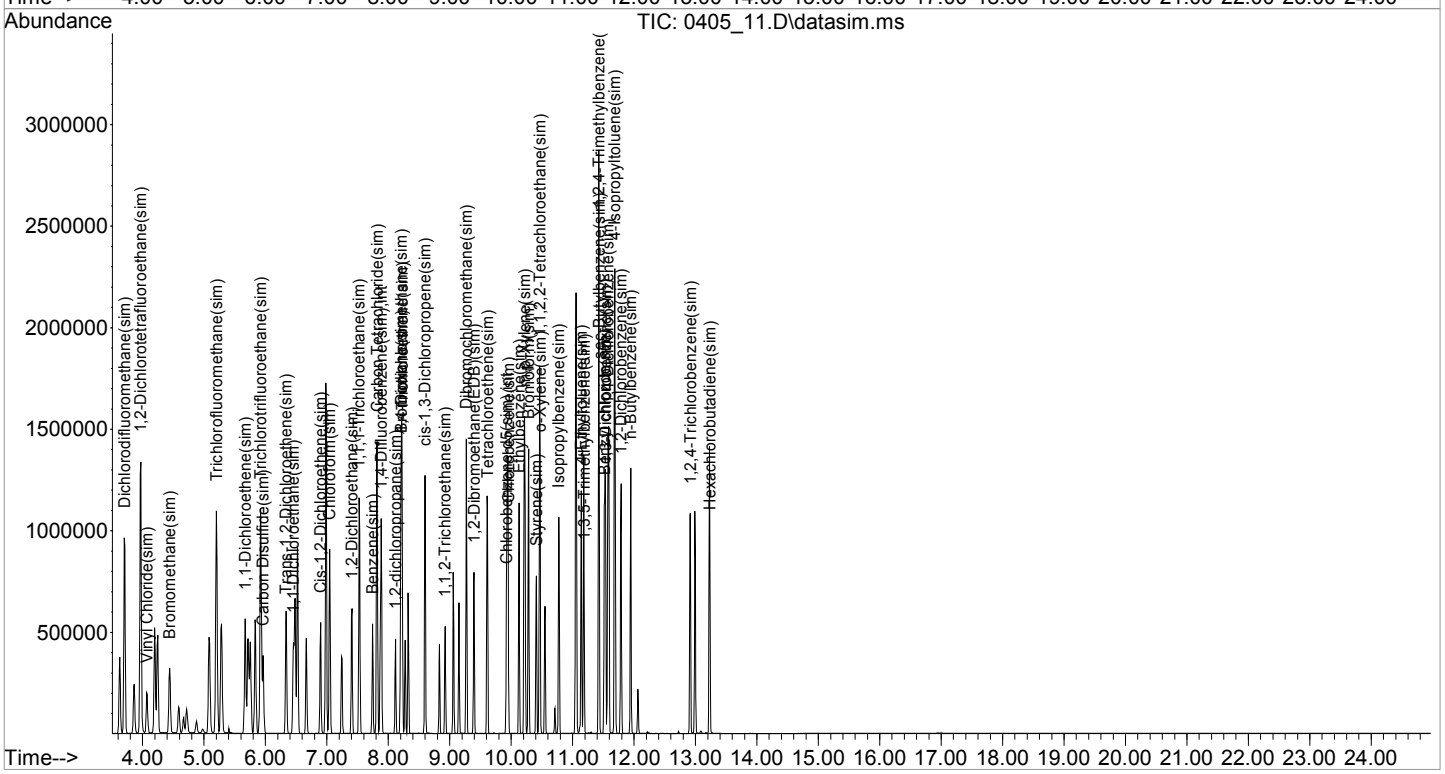
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	502583	11.596	ppbv	98
115] Isopropylbenzene(sim)	10.774	105	695922	10.145	ppbv#	68
117] 4-Ethyltoluene(sim)	11.144	105	758843	11.860	ppbv	97
118] 1,3,5-Trimethylbenzene...	11.186	105	614743	11.172	ppbv	99
119] 1,2,4-Trimethylbenzene...	11.426	105	687023	12.659	ppbv#	92
121] Benzyl chloride(sim)	11.515	91	641339	13.919	ppbv	96
122] 1,3-Dichlorobenzene(sim)	11.534	146	518448	10.804	ppbv	99
123] 1,4-Dichlorobenzene(sim)	11.574	146	653697	12.259	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	641338	13.286	ppbv	81
125] 4-Isopropyltoluene(sim)	11.685	119	838105	12.786	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	492759	10.440	ppbv	99
127] n-Butylbenzene(sim)	11.945	91	741767	13.738	ppbv#	47
128] 1,2,4-Trichlorobenzene...	12.913	180	384806	16.056	ppbv	99
130] Hexachlorobutadiene(sim)	13.232	225	457943	9.122	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_11.D
Acq On : 05 Apr 2017 04:58 pm
Operator : CORTEX\ms
Client ID : ICAL 10
Lab ID : 10ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:00:58 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_12.D
Acq On : 05 Apr 2017 05:37 pm
Operator : CORTEX\ms
Client ID : ICAL 25
Lab ID : 25ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:49 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:32 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	6.987	130	203657	10.000	ng	0.00
36) 1,4-Difluorobenzene	7.890	114	540629	10.000	ng	0.00
53) Chlorobenzene-d5	9.927	82	308508	10.000	ng	0.00
80) Bromochloromethane(sim)	6.987	130	203657	10.000	ng	0.00
97) 1,4-Difluorobenzene(sim)	7.893	114	653069	10.000	ng	0.00
107) Chlorobenzene-d5(sim)	9.930	82	336052	10.000	ng	0.00
System Monitoring Compounds						
62) % Bromofluorobenzene	10.712	95	349838	8.064	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.60%			
Target Compounds						Qvalue
2) Propylene	3.635	41	532670	23.459	ppbv	94
3) Dichlorodifluoromethane	3.708	85	1819623	24.218	ppbv#	97
4) Chloromethane	3.870	50	566010	21.309	ppbv#	1
5) 1,2-Dichlorotetrafluor...	3.967	85	1509431	23.763	ppbv	97
6) Vinyl Chloride	4.073	62	475239	22.944	ppbv	97
7) 1,3-Butadiene	4.202	54	406306	22.674	ppbv#	42
8) Bromomethane	4.446	94	464160	23.734	ppbv#	91
9) Chloroethane	4.592	64	213266	23.160	ppbv#	76
11) Ethanol	4.722	45	279582	21.880	ppbv	95
12) Acetone	5.087	43	1463663	22.903	ppbv#	72
13) Trichlorofluoromethane	5.208	101	2050522	23.220	ppbv	99
14) Isopropylalcohol	5.289	45	1407845	23.138	ppbv#	88
15) Acrylonitrile	5.441	53	491633	27.930	ppbv#	91
16) 1,1-Dichloroethene	5.673	61	1094470	24.100	ppbv#	82
17) Methylene Chloride	5.756	49	908321	22.838	ppbv#	74
20) Carbon Disulfide	5.965	76	1082695	23.776	ppbv	100
21) Trichlorotrifluoroethane	5.923	101	1140202	23.722	ppbv#	90
22) Trans-1,2-Dichloroethene	6.339	61	836779	24.382	ppbv	88
23) 1,1-Dichloroethane	6.459	63	868747	23.662	ppbv	97
24) Methyl tert-butyl ethe...	6.480	73	1096267	23.549	ppbv#	84
25) Methyl Ethyl Ketone	6.668	43	1161948	25.356	ppbv#	86
26) Cis-1,2-Dichloroethene	6.902	61	642571	26.305	ppbv	90
27) Hexane	6.987	57	487623	25.254	ppbv#	52
28) Chloroform	7.049	83	1043509	23.613	ppbv	89
29) Ethyl acetate	6.987	61	105174	24.390	ppbv#	1
30) Tetrahydrofuran	7.243	42	466143	26.523	ppbv#	76
31) 1,2-Dichloroethane	7.406	62	914550	24.357	ppbv	99
32) 1,1,1-Trichloroethane	7.530	97	1274813	24.500	ppbv#	94
33) Benzene	7.749	78	904470	23.865	ppbv#	87
34) Carbon Tetrachloride	7.815	117	1584312	24.473	ppbv	99
35) Cyclohexane	7.873	41	407795	25.062	ppbv#	51
37) 1,2-dichloropropane	8.122	63	320916	26.006	ppbv#	36
38) Bromodichloromethane	8.205	83	1180726	25.664	ppbv	99
39) Trichloroethene	8.221	130	598782	25.061	ppbv	97
41) 1,4-Dioxane	8.205	88	212863	27.325	ppbv#	86
43) Heptane	8.329	43	560379	26.107	ppbv#	76
44) cis-1,3-Dichloropropene	8.603	75	602353	27.141	ppbv	97
45) 4-Methyl-2-pentanone(M...	8.594	43	964049	27.356	ppbv#	87
46) trans-1,3-Dichloropropene	8.830	75	637494	28.013	ppbv	98
47) 1,1,2-Trichloroethane	8.929	97	434673	25.171	ppbv	96
48) Toluene	9.062	91	1049845	26.678	ppbv	96
49) Dibromochloromethane	9.274	129	1418391	25.312	ppbv	99

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_12.D
Acq On : 05 Apr 2017 05:37 pm
Operator : CORTEX\ms
Client ID : ICAL 25
Lab ID : 25ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:49 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:32 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.147	43	915114	27.462	ppbv#	80
51) 1,2-Dibromoethane(EDB)	9.393	107	868451	25.854	ppbv	100
52) Tetrachloroethene	9.611	166	807956	25.728	ppbv	96
54) 1,1,1,2-Tetrachloroethane	9.934	131	780564	19.596	ppbv	98
55) Chlorobenzene	9.949	112	1021776	19.861	ppbv	97
56) Ethylbenzene	10.127	91	1518848	21.437	ppbv	98
57) m,p-Xylene	10.216	91	2473780	40.004	ppbv	96
58) Bromoform	10.282	173	1510037	19.995	ppbv	99
59) Styrene	10.408	104	856829	21.550	ppbv#	86
60) 1,1,2,2-Tetrachloroethane	10.460	83	939144	20.313	ppbv	97
61) o-Xylene	10.467	91	1305539	20.912	ppbv	95
64) Isopropylbenzene	10.778	105	1633694	20.486	ppbv	97
66) 4-Ethyltoluene	11.141	105	1795996	20.528	ppbv	99
67) 1,3,5-Trimethylbenzene	11.186	105	1548943	20.232	ppbv	96
68) 1,2,4-Trimethylbenzene	11.430	105	1663711	21.353	ppbv	94
70) Benzyl chloride	11.519	91	1521542	21.916	ppbv	98
71) 1,3-Dichlorobenzene	11.534	146	1277786	19.700	ppbv	99
72) 1,4-Dichlorobenzene	11.571	146	1262023	20.240	ppbv	99
73) sec-Butylbenzene	11.593	105	2032958	20.448	ppbv#	96
74) 4-Isopropyltoluene	11.682	119	2014021	20.391	ppbv	93
75) 1,2-Dichlorobenzene	11.786	146	1219463	19.948	ppbv	100
76) n-Butylbenzene	11.949	91	1720116	21.445	ppbv	97
77) 1,2,4-Trichlorobenzene	12.913	180	1015658	24.267	ppbv	98
79) Hexachlorobutadiene	13.232	225	1120743	19.170	ppbv	99
81] Dichlorodifluoromethan...	3.711	85	2185600	23.585	ppbv	96
82] 1,2-Dichlorotetrafluor...	3.967	85	1509359	23.797	ppbv	97
83] Vinyl Chloride(sim)	4.076	62	566816	22.866	ppbv	98
84] Bromomethane(sim)	4.446	94	464160	23.742	ppbv#	91
85] Trichlorofluoromethane...	5.211	101	2537824	22.809	ppbv	99
86] 1,2-Dichloroethane(sim)	7.406	62	914550	24.593	ppbv	99
87] 1,1,1-Trichloroethane(...	7.532	97	1565601	23.829	ppbv#	95
88] Carbon Tetrachloride(sim)	7.815	117	1584312	24.628	ppbv	99
89] 1,1-Dichloroethene(sim)	5.676	61	1291983	24.020	ppbv#	84
90] Carbon Disulfide(sim)	5.965	76	1082763	24.030	ppbv	100
91] Trichlorotrifluoroetha...	5.926	101	1412597	23.247	ppbv	99
92] Trans-1,2-Dichloroethe...	6.339	61	836779	24.556	ppbv	88
93] 1,1-Dichloroethane(sim)	6.457	63	1010704	22.957	ppbv	97
94] Cis-1,2-Dichloroethene...	6.902	61	642571	26.964	ppbv	90
95] Chloroform(sim)	7.052	83	1296836	23.433	ppbv#	90
96] Benzene(sim)	7.749	78	904470	24.215	ppbv#	87
98] 1,2-dichloropropane(sim)	8.122	63	320916	26.222	ppbv#	36
99] Bromodichloromethane(sim)	8.116	85	2615	24.410	ppbv#	42
100] Trichloroethene(sim)	8.221	130	598782	24.940	ppbv	98
101] 1,4-Dioxane(sim)	8.208	88	237074	30.856	ppbv#	87
102] cis-1,3-Dichloropropen...	8.603	75	602353	31.027	ppbv	97
103] 1,1,2-Trichloroethane(...	8.924	97	546128	24.839	ppbv	96
104] Dibromochloromethane(sim)	9.274	129	1418391	25.381	ppbv	99
105] 1,2-Dibromoethane(EDB)...	9.396	107	1089334	25.618	ppbv	99
106] Tetrachloroethene(sim)	9.611	166	807956	25.474	ppbv	96
108] Bromoform(sim)	10.282	173	1510037	19.572	ppbv	99
109] Chlorobenzene(sim)	9.952	112	1194621	18.306	ppbv#	93
110] Ethylbenzene(sim)	10.127	91	1518848	21.134	ppbv	99
111] m,p-Xylene(sim)	10.218	91	2676504	37.820	ppbv	95
112] Styrene(sim)	10.408	104	856829	23.069	ppbv#	86
113] 1,1,2,2-Tetrachloroeth...	10.463	83	1130763	19.231	ppbv#	97

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_12.D
Acq On : 05 Apr 2017 05:37 pm
Operator : CORTEX\ms
Client ID : ICAL 25
Lab ID : 25ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:49 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:32 2017
Response via : Initial Calibration

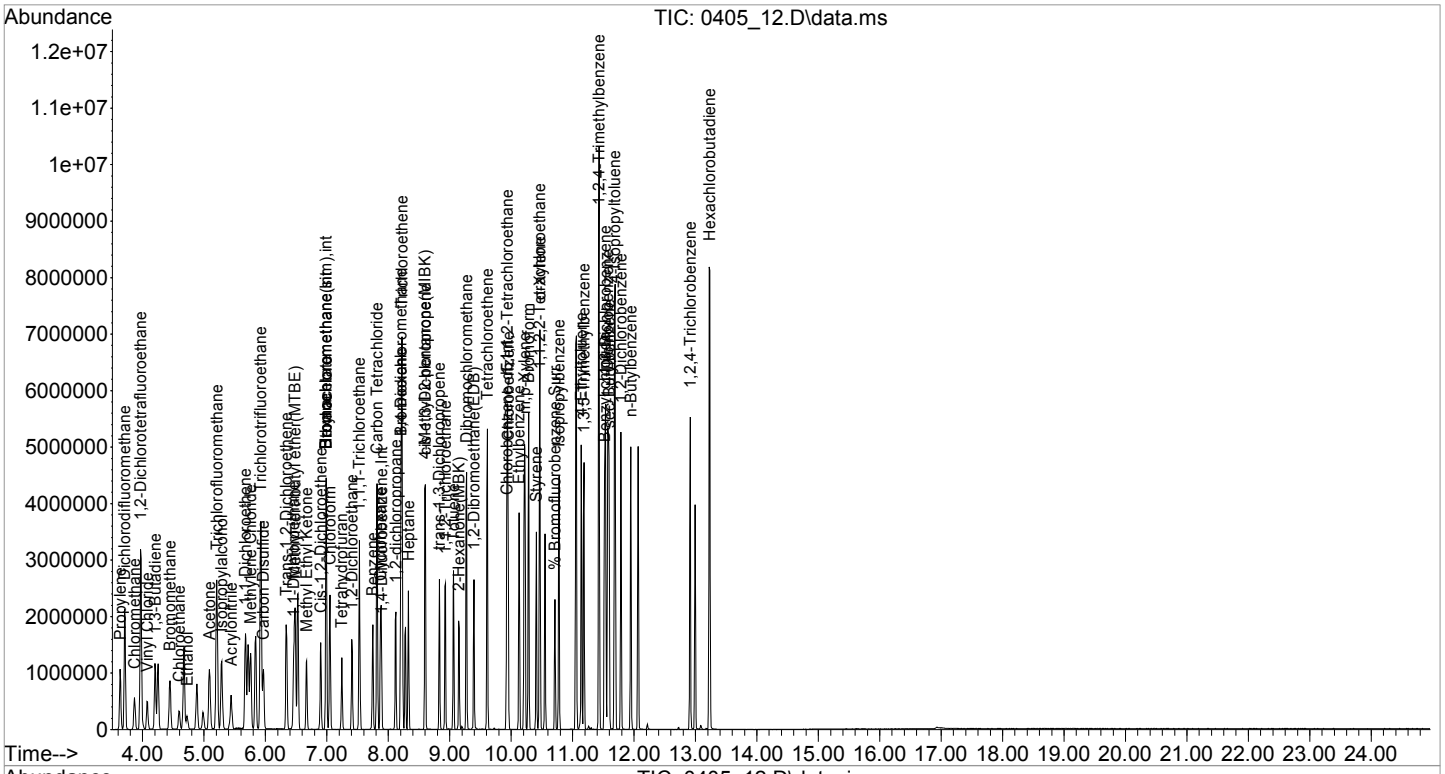
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	1305539	20.983	ppbv	97
115] Isopropylbenzene(sim)	10.781	105	1740205	19.466	ppbv#	68
117] 4-Ethyltoluene(sim)	11.144	105	1894352	19.301	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.186	105	1548943	19.400	ppbv	98
119] 1,2,4-Trimethylbenzene...	11.426	105	1772043	20.465	ppbv#	92
121] Benzyl chloride(sim)	11.515	91	1656600	21.101	ppbv	96
122] 1,3-Dichlorobenzene(sim)	11.534	146	1277786	18.848	ppbv	98
123] 1,4-Dichlorobenzene(sim)	11.574	146	1612350	19.625	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	1663347	22.305	ppbv	81
125] 4-Isopropyltoluene(sim)	11.685	119	2074094	20.519	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	1219463	19.172	ppbv	99
127] n-Butylbenzene(sim)	11.945	91	1866771	20.722	ppbv#	47
128] 1,2,4-Trichlorobenzene...	12.913	180	1015695	25.020	ppbv	98
130] Hexachlorobutadiene(sim)	13.232	225	1120812	18.174	ppbv	99

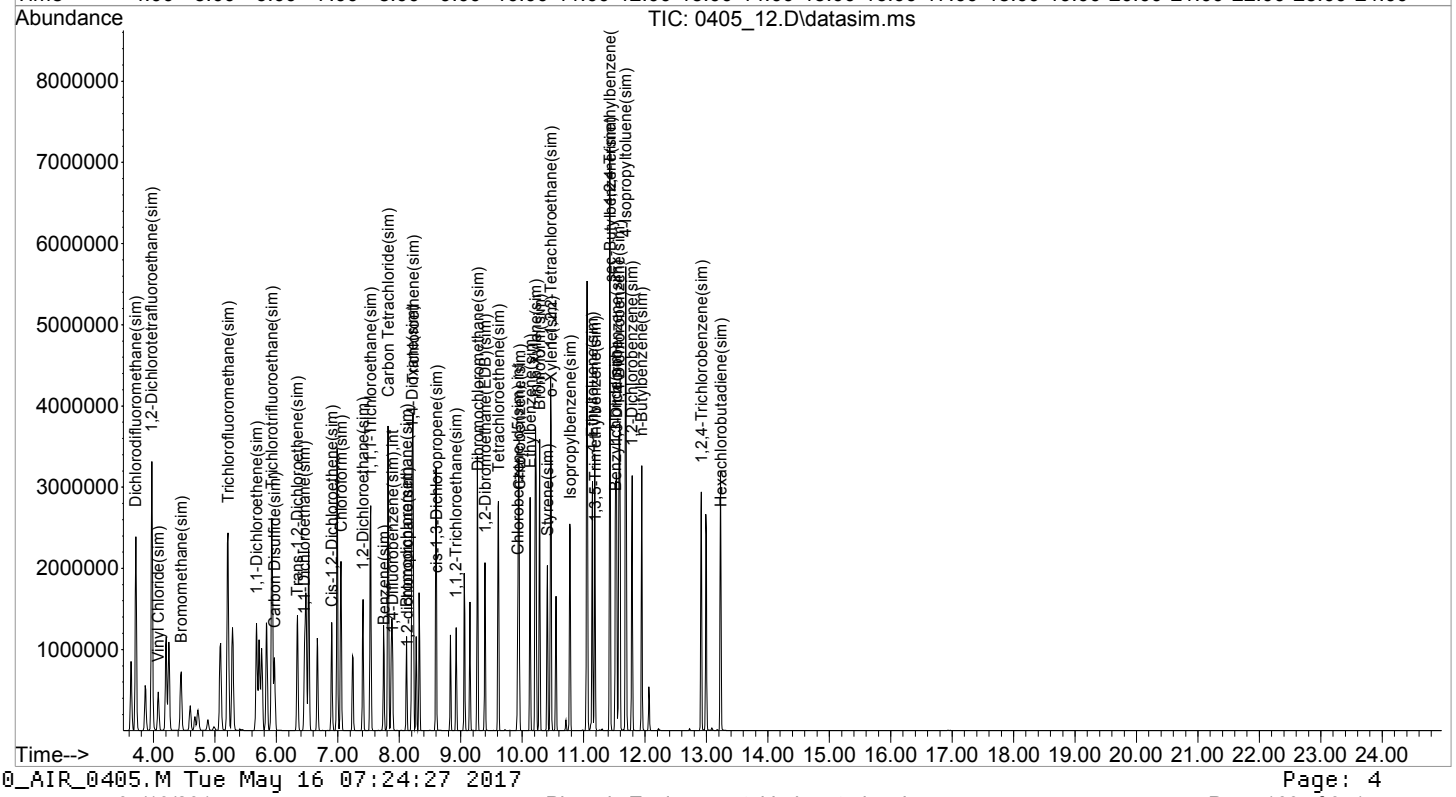
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_12.D
Acq On : 05 Apr 2017 05:37 pm
Operator : CORTEX\ms
Client ID : ICAL 25
Lab ID : 25ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:42:49 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:32 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_13.D
Acq On : 05 Apr 2017 06:16 pm
Operator : CORTEX\ms
Client ID : ICAL 40
Lab ID : 40ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:43:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	6.995	130	193676	10.000	ng	0.00
36) 1,4-Difluorobenzene	7.890	114	536031	10.000	ng	0.00
53) Chlorobenzene-d5	9.927	82	348206	10.000	ng	0.00
80) Bromochloromethane(sim)	6.995	130	193676	10.000	ng	0.00
97) 1,4-Difluorobenzene(sim)	7.893	114	631752	10.000	ng	0.00
107) Chlorobenzene-d5(sim)	9.930	82	382219	10.000	ng	0.00
System Monitoring Compounds						
62) % Bromofluorobenzene	10.712	95	333607	7.160	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 71.60%			
Target Compounds						Qvalue
2) Propylene	3.635	41	774275	36.417	ppbv	93
3) Dichlorodifluoromethane	3.716	85	2831130	39.934	ppbv#	97
4) Chloromethane	3.870	50	824991	33.911	ppbv#	1
5) 1,2-Dichlorotetrafluor...	3.975	85	2359972	39.557	ppbv	98
6) Vinyl Chloride	4.081	62	717419	37.186	ppbv	98
7) 1,3-Butadiene	4.211	54	596451	35.834	ppbv#	49
8) Bromomethane	4.454	94	743518	40.491	ppbv#	92
9) Chloroethane	4.608	64	314219	36.555	ppbv#	73
11) Ethanol	4.738	45	405662	34.458	ppbv	96
12) Acetone	5.095	43	2125765	35.727	ppbv#	72
13) Trichlorofluoromethane	5.216	101	3266923	39.606	ppbv	99
14) Isopropylalcohol	5.298	45	2060704	36.288	ppbv#	89
15) Acrylonitrile	5.453	53	734831	42.648	ppbv	93
16) 1,1-Dichloroethene	5.679	61	1669879	39.016	ppbv#	83
17) Methylene Chloride	5.768	49	1351421	36.519	ppbv#	75
20) Carbon Disulfide	5.971	76	1654792	38.686	ppbv	100
21) Trichlorotrifluoroethane	5.929	101	1792104	39.713	ppbv#	88
22) Trans-1,2-Dichloroethene	6.345	61	1293302	39.872	ppbv	88
23) 1,1-Dichloroethane	6.465	63	1221084	35.447	ppbv	97
24) Methyl tert-butyl ethe...	6.486	73	1664209	38.144	ppbv#	86
25) Methyl Ethyl Ketone	6.673	43	1710888	39.119	ppbv#	87
26) Cis-1,2-Dichloroethene	6.902	61	997193	42.373	ppbv	90
27) Hexane	6.995	57	764639	41.535	ppbv#	51
28) Chloroform	7.057	83	1621134	39.117	ppbv	90
29) Ethyl acetate	6.995	61	163070	40.009	ppbv#	1
30) Tetrahydrofuran	7.243	42	713449	42.046	ppbv#	78
31) 1,2-Dichloroethane	7.413	62	1424245	40.145	ppbv	99
32) 1,1,1-Trichloroethane	7.530	97	1987108	40.359	ppbv#	94
33) Benzene	7.749	78	1491472	41.857	ppbv#	87
34) Carbon Tetrachloride	7.815	117	2493313	40.713	ppbv	99
35) Cyclohexane	7.873	41	638718	41.251	ppbv#	51
37) 1,2-dichloropropane	8.122	63	504598	40.831	ppbv#	34
38) Bromodichloromethane	8.205	83	1947653	42.415	ppbv	97
39) Trichloroethene	8.221	130	950345	40.092	ppbv	98
41) 1,4-Dioxane	8.213	88	346770	43.877	ppbv#	86
43) Heptane	8.329	43	875379	40.682	ppbv#	76
44) cis-1,3-Dichloropropene	8.603	75	976687	43.455	ppbv	97
45) 4-Methyl-2-pentanone(M...	8.603	43	1537783	42.997	ppbv#	88
46) trans-1,3-Dichloropropene	8.830	75	1034893	44.524	ppbv	97
47) 1,1,2-Trichloroethane	8.929	97	690234	40.244	ppbv	97
48) Toluene	9.062	91	1659831	41.839	ppbv	97
49) Dibromochloromethane	9.274	129	2282933	40.962	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_13.D
Acq On : 05 Apr 2017 06:16 pm
Operator : CORTEX\ms
Client ID : ICAL 40
Lab ID : 40ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:43:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:55 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 2-Hexanone(MBK)	9.154	43	1435088	42.392 ppbv#	81
51) 1,2-Dibromoethane(EDB)	9.393	107	1400729	41.702 ppbv	98
52) Tetrachloroethene	9.611	166	1307886	41.702 ppbv	97
54) 1,1,1,2-Tetrachloroethane	9.934	131	1248210	29.349 ppbv	98
55) Chlorobenzene	9.949	112	1654179	30.032 ppbv	97
56) Ethylbenzene	10.127	91	2464366	31.955 ppbv	98
57) m,p-Xylene	10.223	91	4152961	62.632 ppbv	97
58) Bromoform	10.282	173	2448184	30.235 ppbv	99
59) Styrene	10.408	104	1397842	32.261 ppbv#	86
60) 1,1,2,2-Tetrachloroethane	10.460	83	1571012	31.586 ppbv	96
61) o-Xylene	10.467	91	2166727	32.061 ppbv	96
64) Isopropylbenzene	10.778	105	2611791	30.389 ppbv	97
66) 4-Ethyltoluene	11.141	105	2915524	30.907 ppbv	99
67) 1,3,5-Trimethylbenzene	11.186	105	2426100	29.482 ppbv	95
68) 1,2,4-Trimethylbenzene	11.430	105	2765196	32.634 ppbv#	93
70) Benzyl chloride	11.519	91	2528253	33.292 ppbv	98
71) 1,3-Dichlorobenzene	11.534	146	2030539	29.289 ppbv	97
72) 1,4-Dichlorobenzene	11.571	146	2046444	30.532 ppbv	98
73) sec-Butylbenzene	11.593	105	3273580	30.564 ppbv#	95
74) 4-Isopropyltoluene	11.682	119	3342932	31.436 ppbv	93
75) 1,2-Dichlorobenzene	11.786	146	1946349	29.710 ppbv	99
76) n-Butylbenzene	11.949	91	2772268	31.751 ppbv	97
77) 1,2,4-Trichlorobenzene	12.913	180	1724818	36.782 ppbv	98
79) Hexachlorobutadiene	13.232	225	1787579	28.768 ppbv	99
81] Dichlorodifluoromethan...	3.719	85	3350295	38.016 ppbv	96
82] 1,2-Dichlorotetrafluor...	3.975	85	2359892	39.125 ppbv	98
83] Vinyl Chloride(sim)	4.084	62	845139	35.850 ppbv	98
84] Bromomethane(sim)	4.454	94	743518	39.990 ppbv#	92
85] Trichlorofluoromethane...	5.219	101	3930161	37.143 ppbv	99
86] 1,2-Dichloroethane(sim)	7.413	62	1424245	40.274 ppbv	99
87] 1,1,1-Trichloroethane(...	7.533	97	2421113	38.750 ppbv#	95
88] Carbon Tetrachloride(sim)	7.815	117	2493313	40.755 ppbv	99
89] 1,1-Dichloroethene(sim)	5.682	61	1953218	38.184 ppbv#	86
90] Carbon Disulfide(sim)	5.971	76	1654792	38.617 ppbv	100
91] Trichlorotrifluoroetha...	5.932	101	2186249	37.833 ppbv	99
92] Trans-1,2-Dichloroethe...	6.345	61	1292974	39.898 ppbv	88
93] 1,1-Dichloroethane(sim)	6.468	63	1415245	33.803 ppbv#	96
94] Cis-1,2-Dichloroethene...	6.902	61	997193	44.002 ppbv	90
95] Chloroform(sim)	7.052	83	1987859	37.771 ppbv#	90
96] Benzene(sim)	7.749	78	1491472	41.988 ppbv#	87
98] 1,2-dichloropropane(sim)	8.122	63	504598	42.622 ppbv#	34
99] Bromodichloromethane(sim)	8.125	85	4134	39.892 ppbv#	44
100] Trichloroethene(sim)	8.221	130	950224	40.913 ppbv	99
101] 1,4-Dioxane(sim)	8.208	88	386183	51.960 ppbv#	87
102] cis-1,3-Dichloropropen...	8.603	75	976687	52.006 ppbv	97
103] 1,1,2-Trichloroethane(...	8.925	97	862951	40.573 ppbv	96
104] Dibromochloromethane(sim)	9.274	129	2282552	42.224 ppbv	97
105] 1,2-Dibromoethane(EDB)...	9.396	107	1727381	41.994 ppbv	98
106] Tetrachloroethene(sim)	9.611	166	1307886	42.628 ppbv	97
108] Bromoform(sim)	10.282	173	2448072	27.897 ppbv	99
109] Chlorobenzene(sim)	9.952	112	1912535	25.767 ppbv#	94
110] Ethylbenzene(sim)	10.127	91	2464366	30.148 ppbv	99
111] m,p-Xylene(sim)	10.219	91	4393169	54.578 ppbv	95
112] Styrene(sim)	10.408	104	1397842	33.089 ppbv#	86
113] 1,1,2,2-Tetrachloroeth...	10.463	83	1877206	28.070 ppbv#	97

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_13.D
Acq On : 05 Apr 2017 06:16 pm
Operator : CORTEX\ms
Client ID : ICAL 40
Lab ID : 40ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:43:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:55 2017
Response via : Initial Calibration

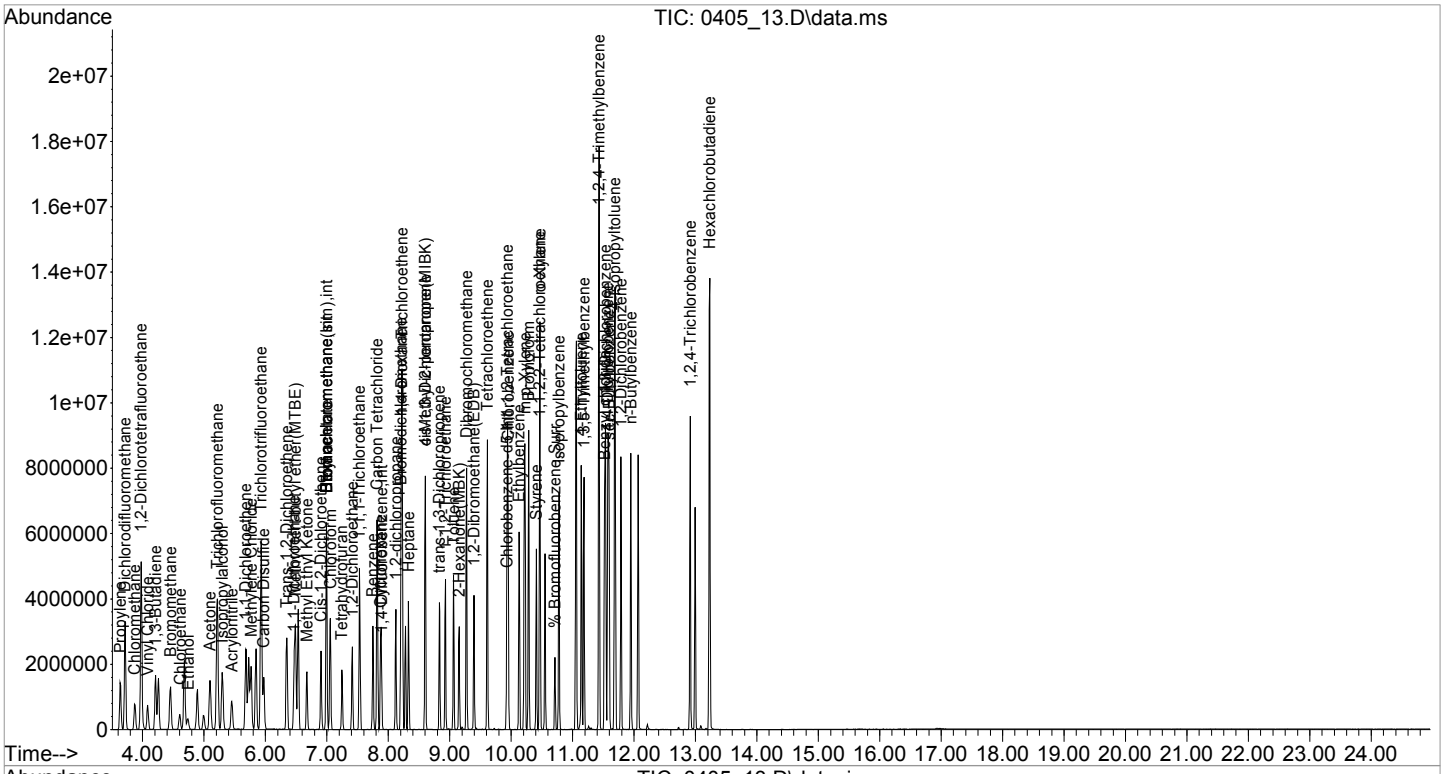
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	2166727	30.618	ppbv	98
115] Isopropylbenzene(sim)	10.781	105	2756417	27.109	ppbv#	67
117] 4-Ethyltoluene(sim)	11.144	105	3066576	27.470	ppbv	97
118] 1,3,5-Trimethylbenzene...	11.186	105	2426100	26.716	ppbv	98
119] 1,2,4-Trimethylbenzene...	11.433	105	2830467	28.740	ppbv#	91
121] Benzyl chloride(sim)	11.522	91	2716273	30.420	ppbv	95
122] 1,3-Dichlorobenzene(sim)	11.534	146	2030539	26.333	ppbv	98
123] 1,4-Dichlorobenzene(sim)	11.574	146	2492967	26.678	ppbv	98
124] sec-Butylbenzene(sim)	11.430	105	2763418	32.581	ppbv	80
125] 4-Isopropyltoluene(sim)	11.685	119	3331662	28.979	ppbv#	90
126] 1,2-Dichlorobenzene(sim)	11.786	146	1946349	26.904	ppbv	98
127] n-Butylbenzene(sim)	11.945	91	2975815	29.042	ppbv#	47
128] 1,2,4-Trichlorobenzene...	12.913	180	1725067	37.361	ppbv	99
130] Hexachlorobutadiene(sim)	13.232	225	1787776	25.488	ppbv	100

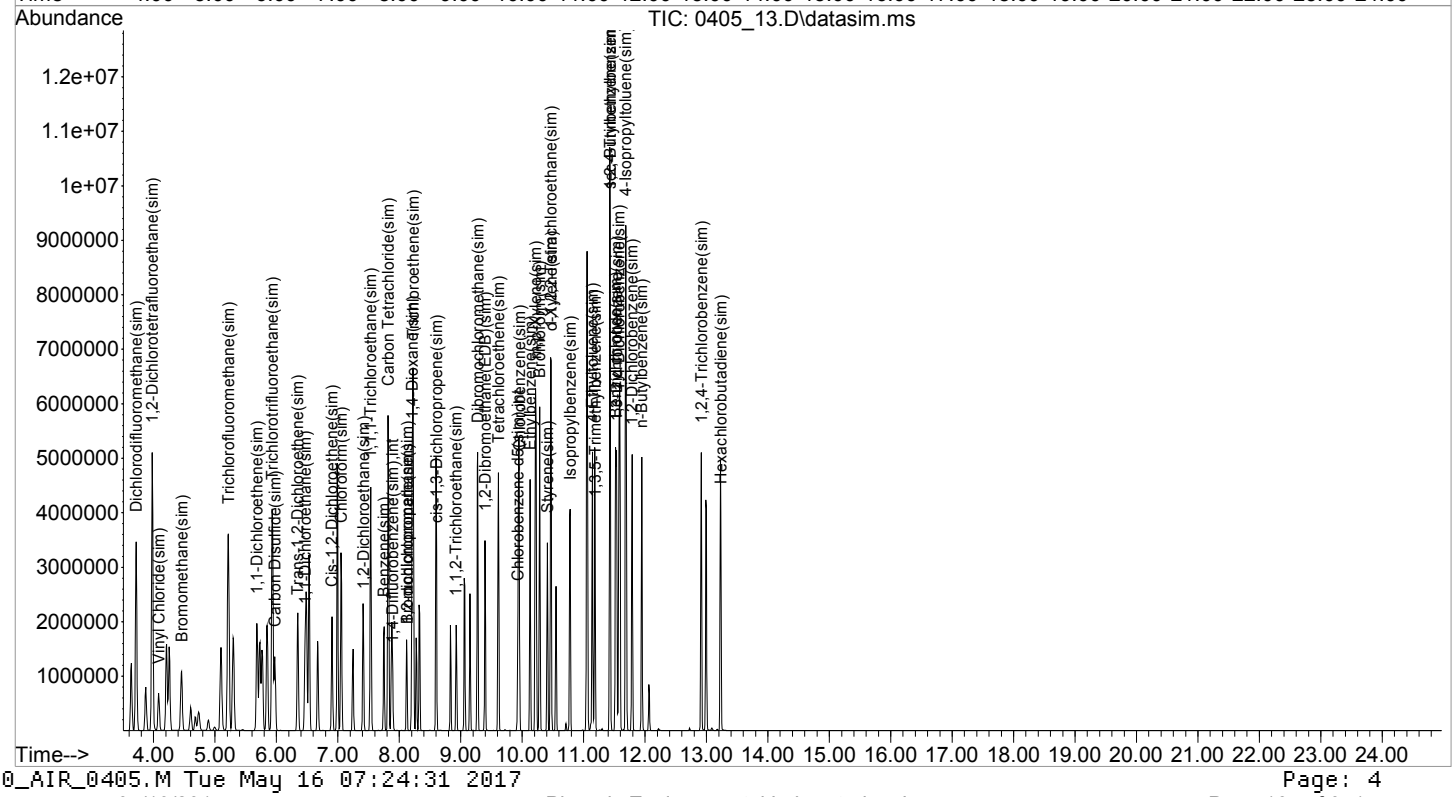
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\05\
Data File : 0405_13.D
Acq On : 05 Apr 2017 06:16 pm
Operator : CORTEX\ms
Client ID : ICAL 40
Lab ID : 40ppb;air03w
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 08:43:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:42:55 2017
Response via : Initial Calibration





6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM24 | Calibration Date From: 04/11/17 20:45

Heated Purge (Y/N): Y | Calibration Date Thru: 04/12/17 02:00

GC Column: zb-1ms | Method File: 24AIR_0411.M

Laboratory File Ids

RRF1 0411_03.D RRF2 0411_04.D RRF3 0411_05.D RRF4 0411_06.D RRF5 0411_07.D RRF6 0411_08.D
RRF7 0411_09.D RRF8 0411_10.D RRF9 0411_11.D RRF10 0411_12.D RRF11 0411_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
Propylene				0.499	0.532	0.451	0.562	0.452	0.598	0.652	0.645		0.549	14.51
Dichlorodifluoromethane				3.874	4.346	3.491	4.241	3.148	4.074	4.149	3.895		3.902	10.34
Chloromethane				0.251	0.286	0.212	0.273	0.220	0.273	0.277	0.261		0.257	10.58
1,2-Dichlorotetrafluoroethane				2.716	3.549	2.854	3.618	2.558	3.363	3.546	3.226		3.179	13.06
Vinyl Chloride				0.944	0.973	0.847	1.058	0.861	1.046	1.066	0.945		0.967	8.82
1,3-Butadiene				0.500	0.642	0.538	0.664	0.534	0.676	0.635	0.583		0.597	11.20
Bromomethane				1.156	1.279	1.136	1.323	1.075	1.323	1.352	1.223		1.233	8.27
Chloroethane				0.433	0.423	0.424	0.454	0.364	0.451	0.461	0.432		0.430	7.08
Ethanol					0.554	0.386	0.386	0.269	0.308	0.355	0.342		0.371	24.44
Acetone					2.549	1.608	1.824	1.192	1.634	1.614	1.596		1.717	24.05
Trichlorofluoromethane				4.162	4.843	3.974	4.711	3.657	4.188	4.432	4.153		4.265	9.06
Isopropylalcohol				1.698	1.796	1.275	1.681	1.259	1.322	1.609	1.566		1.526	13.81
Acrylonitrile				0.427	0.564	0.475	0.578	0.445	0.588	0.624	0.623		0.540	14.67
1,1-Dichloroethene				1.847	1.970	1.827	1.971	1.607	1.934	1.990	1.932		1.885	6.72
Methylene Chloride					1.742	1.420	1.333	1.041	1.149	1.170	1.097		1.279	19.04
Carbon Disulfide				2.593	2.928	2.599	2.939	2.425	2.865	2.924	2.874		2.768	7.18
Trichlorotrifluoroethane				2.769	2.910	2.561	2.920	2.295	2.552	2.819	2.752		2.697	7.92
Trans-1,2-Dichloroethene				1.420	1.535	1.466	1.651	1.237	1.624	1.688	1.632		1.532	9.90
1,1-Dichloroethane				1.932	2.104	1.858	2.057	1.547	2.012	2.038	1.994		1.943	9.11
Methyl tert-butyl ether(MTBE)				2.031	2.983	2.136	3.118	2.035	2.941	3.253	3.256		2.719	20.30
Methyl Ethyl Ketone				1.467	1.795	1.358	1.858	1.134	1.689	1.840	1.801		1.618	16.56
Cis-1,2-Dichloroethene				1.374	1.519	1.365	1.613	1.295	1.607	1.651	1.629		1.506	9.39
Hexane				1.174	1.187	1.074	1.143	0.955	1.144	1.225	1.187		1.136	7.55
Chloroform				2.769	3.124	2.763	3.095	2.509	2.873	3.060	2.852		2.881	7.22
Ethyl acetate					1.849	1.399	1.927	1.330	1.766	2.088	2.469		1.833	21.42
Tetrahydrofuran				0.561	0.708	0.543	0.790	0.518	0.760	0.883	0.908		0.709	21.64
1,2-Dichloroethane				1.848	2.296	2.107	2.330	1.775	2.269	2.427	2.337		2.174	11.12

(#) The maximum %RSD was not met for this compound

AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM24 | Calibration Date From: 04/11/17 20:45

Heated Purge (Y/N): Y | Calibration Date Thru: 04/12/17 02:00

GC Column: zb-1ms | Method File: 24AIR_0411.M

Laboratory File Ids

RRF1 0411_03.D RRF2 0411_04.D RRF3 0411_05.D RRF4 0411_06.D RRF5 0411_07.D RRF6 0411_08.D

RRF7 0411_09.D RRF8 0411_10.D RRF9 0411_11.D RRF10 0411_12.D RRF11 0411_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
1,1,1-Trichloroethane				3.095	3.346	3.026	3.451	2.819	3.170	3.585	3.427		3.240	7.90
Benzene				2.813	2.990	2.766	3.061	2.531	3.020	3.369	3.180		2.966	8.77
Carbon Tetrachloride				3.462	3.769	3.432	3.858	3.184	3.655	4.041	3.889		3.661	7.77
Cyclohexane				0.922	1.085	0.986	1.224	1.030	1.226	1.362	1.376		1.151	14.85
1,2-dichloropropane				0.222	0.239	0.202	0.229	0.194	0.225	0.251	0.273		0.230	11.11
Bromodichloromethane				0.817	0.972	0.862	0.973	0.817	0.985	1.046	1.028		0.938	9.82
Trichloroethene				0.436	0.460	0.412	0.455	0.392	0.482	0.522	0.515		0.459	10.01
1,4-Dioxane					0.190	0.162	0.220	0.181	0.189	0.235	0.221		0.200	13.04
Heptane				0.190	0.241	0.217	0.259	0.210	0.260	0.287	0.282		0.243	14.47
cis-1,3-Dichloropropene				0.437	0.522	0.476	0.590	0.500	0.655	0.695	0.693		0.571	17.77
4-Methyl-2-pentanone(MIBK)				0.474	0.576	0.460	0.660	0.584	0.612	0.710	0.660		0.592	15.03
trans-1,3-Dichloropropene				0.451	0.523	0.510	0.618	0.563	0.752	0.734	0.718		0.609	18.85
1,1,2-Trichloroethane				0.351	0.464	0.352	0.455	0.366	0.461	0.493	0.488		0.429	14.32
Toluene				0.880	1.098	0.930	1.151	0.915	1.180	1.272	1.206		1.079	13.93
Dibromochloromethane				0.762	0.982	0.835	1.099	0.845	1.116	1.189	1.149		0.997	16.48
2-Hexanone(MBK)				0.405	0.499	0.486	0.652	0.578	0.599	0.682	0.655		0.570	17.10
1,2-Dibromoethane(EDB)				0.663	0.780	0.718	0.845	0.697	0.850	0.894	0.898		0.793	11.56
Tetrachloroethene				0.529	0.649	0.555	0.667	0.493	0.685	0.775	0.798		0.644	17.33
1,1,1,2-Tetrachloroethane				0.811	1.219	0.855	1.196	0.854	1.045	1.072	0.990		1.005	15.57
Chlorobenzene				1.689	1.954	1.597	1.905	1.473	1.666	1.672	1.557		1.689	9.75
Ethylbenzene				2.308	3.034	2.224	3.139	2.261	2.770	2.686	2.406		2.604	13.73
m,p-Xylene				2.069	2.716	1.694	2.775	2.174	2.333	2.258	2.023		2.255	15.89
Bromoform				1.498	1.958	1.537	1.982	1.624	1.819	1.910	1.706		1.754	10.85
Styrene				1.020	1.410	1.262	1.595	1.421	1.550	1.548	1.477		1.410	13.45
1,1,2,2-Tetrachloroethane				1.638	2.061	1.649	1.952	1.603	1.504	1.501	1.366		1.659	14.14
o-Xylene				1.806	2.573	2.008	2.658	1.975	2.064	2.151	1.928		2.145	14.33
Isopropylbenzene				2.591	3.300	2.604	3.258	2.456	2.636	2.807	2.581		2.779	11.64

(#) The maximum %RSD was not met for this compound

6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM24 | Calibration Date From: 04/11/17 20:45

Heated Purge (Y/N): Y | Calibration Date Thru: 04/12/17 02:00

GC Column: zb-1ms | Method File: 24AIR_0411.M

Laboratory File Ids

RRF1 0411_03.D RRF2 0411_04.D RRF3 0411_05.D RRF4 0411_06.D RRF5 0411_07.D RRF6 0411_08.D
RRF7 0411_09.D RRF8 0411_10.D RRF9 0411_11.D RRF10 0411_12.D RRF11 0411_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
4-Ethyltoluene				2.588	3.379	2.947	3.470	2.974	3.040	3.006	2.658		3.008	10.18
1,3,5-Trimethylbenzene				2.294	3.075	2.747	3.000	2.592	2.612	2.567	2.321		2.651	10.66
1,2,4-Trimethylbenzene				2.184	2.959	2.603	3.064	2.770	2.654	2.565	2.290		2.636	11.43
Benzyl chloride				1.517	1.961	1.883	2.386	2.178	2.352	2.343	2.115		2.092	14.19
1,3-Dichlorobenzene				1.588	1.971	1.711	1.913	1.699	1.792	1.813	1.675		1.770	7.21
1,4-Dichlorobenzene				1.506	1.750	1.655	1.908	1.580	1.700	1.785	1.611		1.687	7.54
sec-Butylbenzene				3.139	4.179	3.590	4.027	3.598	3.468	3.420	3.075		3.562	10.84
4-Isopropyltoluene				2.850	3.683	3.319	3.806	3.309	3.329	3.258	2.915		3.309	9.93
1,2-Dichlorobenzene				1.630	1.922	1.645	1.827	1.631	1.710	1.703	1.553		1.703	7.02
n-Butylbenzene				2.363	3.007	2.804	3.368	3.031	2.982	2.899	2.484		2.867	11.16
1,2,4-Trichlorobenzene					0.700	0.695	0.937	0.866	1.099	1.147	1.114		0.937	20.49
Hexachlorobutadiene				1.573	1.852	1.593	1.708	1.533	1.611	1.613	1.361		1.605	8.72
1,2-Dichlorotetrafluoroethane(sim)	2.829	2.120	2.824	3.065	3.903	3.072	3.909	2.773					3.062	19.54
Vinyl Chloride(sim)	0.566	0.614	0.750	0.944	0.973	0.847	1.058	0.861					0.827	20.94
Bromomethane(sim)	1.369	1.073	1.217	1.280	1.402	1.252	1.428	1.161					1.273	9.68
Trichlorofluoromethane(sim)	5.041	4.046	4.336	4.162	4.832	3.974	4.708	3.657					4.345	10.96
Trans-1,2-Dichloroethene(sim)	1.476	1.248	1.342	1.630	1.735	1.590	1.789						1.544	12.94
1,1-Dichloroethene(sim)	1.715	1.486	1.529	1.847	1.970	1.827	1.971	1.607					1.744	10.89
1,1-Dichloroethane(sim)	1.629	1.547	1.672	2.116	2.297	2.053	2.232	1.639					1.898	16.13
Cis-1,2-Dichloroethene(sim)	1.212	0.885	1.031	1.374	1.519	1.365	1.613	1.295					1.287	18.72
1,2-Dichloroethane(sim)	2.299	1.333	1.905	2.234	2.342	2.063	2.304	1.913					2.049	16.50
1,1,1-Trichloroethane(sim)	2.416	2.494	2.248	3.095	3.346	3.026	3.451	2.819					2.862	15.49
Carbon Tetrachloride(sim)	3.107	2.852	3.006	3.739	4.000	3.677	4.115	3.387					3.485	13.48
Trichlorotrifluoroethane(sim)	2.712	2.254	2.399	2.769	2.910	2.561	2.920	2.295					2.603	10.21
1,2-dichloropropane(sim)		0.165	0.131	0.203	0.220	0.184	0.209	0.177					0.184	16.49
Bromodichloromethane(sim)		0.415	0.627	0.795	0.952	0.834	0.959	0.807					0.770	24.95
Trichloroethene(sim)	0.334	0.272	0.226	0.398	0.422	0.376	0.416	0.358					0.350	19.96

(#) The maximum %RSD was not met for this compound

6B
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs | Client: AIRTEK

Lab Code: Phoenix | SDG No.: GBY03105

Instrument ID: CHEM24 | Calibration Date From: 04/11/17 20:45

Heated Purge (Y/N): Y | Calibration Date Thru: 04/12/17 02:00

GC Column: zb-1ms | Method File: 24AIR_0411.M

Laboratory File Ids

RRF1 0411_03.D RRF2 0411_04.D RRF3 0411_05.D RRF4 0411_06.D RRF5 0411_07.D RRF6 0411_08.D
RRF7 0411_09.D RRF8 0411_10.D RRF9 0411_11.D RRF10 0411_12.D RRF11 0411_13.D

COMPOUND	RRF1 0.035	RRF2 0.05	RRF3 0.1	RRF4 0.2	RRF5 0.5	RRF6 1	RRF7 2.5	RRF8 5	RRF9 10	RRF10 25	RRF11 40		$\overline{RRF}$	% RSD
1,4-Dioxane(sim)			0.162	0.166	0.206	0.167	0.217	0.180	0.184				0.183	11.57
cis-1,3-Dichloropropene(sim)			0.329	0.399	0.479	0.434	0.539	0.456					0.439	16.33
1,1,2-Trichloroethane(sim)			0.346	0.380	0.472	0.364	0.458						0.404	14.18
Dibromochloromethane(sim)			0.707	0.696	0.901	0.761	1.004	0.770					0.807	15.03
1,2-Dibromoethane(EDB)(sim)	0.667	0.427	0.642	0.683	0.801	0.728	0.844	0.704					0.687	18.25
Tetrachloroethene(sim)	0.467	0.247	0.451	0.476	0.591	0.506	0.609	0.449					0.475	23.35
Bromoform(sim)		0.805	1.273	1.418	1.798	1.440	1.883						1.436	27.08
1,1,1,2-Tetrachloroethane(sim)			0.851	0.887	1.258	0.877	1.256	0.883					1.002	19.75
m,p-Xylene(sim)		1.157	1.865	1.959	2.503	1.991	2.637	2.057					2.024	23.77
1,1,2,2-Tetrachloroethane(sim)		1.377	1.768	1.754	2.106	1.700	2.024	1.664					1.771	13.61
Benzyl chloride(sim)			1.260	1.436	1.807	1.771	2.267	2.061					1.767	21.25
1,3-Dichlorobenzene(sim)		1.563	1.643	1.710	2.053	1.846	2.096	1.836					1.821	11.00
1,4-Dichlorobenzene(sim)		1.354	1.325	1.426	1.613	1.557	1.813	1.495					1.512	11.14
sec-Butylbenzene(sim)	3.406	2.350	2.990	3.272	4.133	3.640	4.118	3.643					3.444	17.15
4-Isopropyltoluene(sim)	2.665	2.021	2.354	2.698	3.394	3.122	3.617	3.131					2.875	18.70
1,2-Dichlorobenzene(sim)	2.388	1.674	1.648	1.794	2.045	1.753	1.983	1.734					1.877	13.31
n-Butylbenzene(sim)		1.601	1.859	2.237	2.771	2.638	3.200	2.868					2.453	23.48
1,2,4-Trichlorobenzene(sim)		0.929	0.578	0.638	0.765	0.776	1.024						0.785	21.51
Hexachlorobutadiene(sim)		1.778	1.711	1.735	1.898	1.681	1.777	1.583					1.738	5.59
% Bromofluorobenzene				1.389	1.458	1.361	1.312	1.406	1.340	1.185	1.063		1.314	9.84

(#) The maximum %RSD was not met for this compound

Response Factor Report Chem24

Method Path : H:\AIR2017\CHEM24\METHODS\
Method File : 24AIR_0411.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Apr 17 08:55:54 2017
Response Via : Initial Calibration

Calibration Files (Note: Curves (l,lf,q,qf) display calculated conc and corr. coefficient.)
.035=0411_03.D 0.05=0411_04.D 0.10=0411_05.D 0.2 =0411_06.D 0.5 =0411_07.D 1.0 =0411_08.D 2.5 =0411_09.D 5.0 =0411_10.D
10 =0411_11.D 25 =0411_12.D 40 =0411_13.D

	Compound	.035	0.05	0.10	0.2	0.5	1.0	2.5	5.0	10	25	40	Avg	%RSD
1)	Int Bromochloromethane	----------ISTD----------												
2)	Propylene				0.499	0.532	0.451	0.562	0.452	0.598	0.652	0.645	0.549	14.51
3)	Dichlorodifluo...				3.874	4.346	3.491	4.241	3.148	4.074	4.149	3.895	3.902	10.34
4)	Chloromethane				0.251	0.286	0.212	0.273	0.220	0.273	0.277	0.261	0.257	10.58
5)	1,2-Dichlorote...				2.716	3.549	2.854	3.618	2.558	3.363	3.546	3.226	3.179	13.06
6)	Vinyl Chloride				0.944	0.973	0.847	1.058	0.861	1.046	1.066	0.945	0.967	8.82
7)	1,3-Butadiene				0.500	0.642	0.538	0.664	0.534	0.676	0.635	0.583	0.597	11.20
8)	Bromomethane				1.156	1.279	1.136	1.323	1.075	1.323	1.352	1.223	1.233	8.27
9)	Chloroethane				0.433	0.423	0.424	0.454	0.364	0.451	0.461	0.432	0.430	7.08
10)	Ethanol					0.554	0.386	0.386	0.269	0.308	0.355	0.342	0.371	24.44
12)	Acetone					2.549	1.608	1.824	1.192	1.634	1.614	1.596	1.717	24.05
13)	Trichlorofluor...				4.162	4.843	3.974	4.711	3.657	4.188	4.432	4.153	4.265	9.06
14)	Isopropylalcohol				1.698	1.796	1.275	1.681	1.259	1.322	1.609	1.566	1.526	13.81
15)	Acrylonitrile				0.427	0.564	0.475	0.578	0.445	0.588	0.624	0.623	0.540	14.67
16)	1,1-Dichloroet...				1.847	1.970	1.827	1.971	1.607	1.934	1.990	1.932	1.885	6.72
17)	Methylene Chlo...					1.742	1.420	1.333	1.041	1.149	1.170	1.097	1.279	19.04
20)	Carbon Disulfide				2.593	2.928	2.599	2.939	2.425	2.865	2.924	2.874	2.768	7.18
21)	Trichlorotrifl...				2.769	2.910	2.561	2.920	2.295	2.552	2.819	2.752	2.697	7.92
22)	Trans-1,2-Dich...				1.420	1.535	1.466	1.651	1.237	1.624	1.688	1.632	1.532	9.90
23)	1,1-Dichloroet...				1.932	2.104	1.858	2.057	1.547	2.012	2.038	1.994	1.943	9.11
24)	Methyl tert-bu...				2.031	2.983	2.136	3.118	2.035	2.941	3.253	3.256	2.719	20.30
25)	Methyl Ethyl K...				1.467	1.795	1.358	1.858	1.134	1.689	1.840	1.801	1.618	16.56
26)	Cis-1,2-Dichlo...				1.374	1.519	1.365	1.613	1.295	1.607	1.651	1.629	1.506	9.39
27)	Hexane				1.174	1.187	1.074	1.143	0.955	1.144	1.225	1.187	1.136	7.55
28)	Chloroform				2.769	3.124	2.763	3.095	2.509	2.873	3.060	2.852	2.881	7.22
29)	Ethyl acetate					1.849	1.399	1.927	1.330	1.766	2.088	2.469	1.833	21.42
30)	Tetrahydrofuran				0.561	0.708	0.543	0.790	0.518	0.760	0.883	0.908	0.709	21.64
31)	1,2-Dichloroet...				1.848	2.296	2.107	2.330	1.775	2.269	2.427	2.337	2.174	11.12
32)	1,1,1-Trichlor...				3.095	3.346	3.026	3.451	2.819	3.170	3.585	3.427	3.240	7.90
33)	Benzene				2.813	2.990	2.766	3.061	2.531	3.020	3.369	3.180	2.966	8.77
34)	Carbon Tetrach...				3.462	3.769	3.432	3.858	3.184	3.655	4.041	3.889	3.661	7.77
35)	Cyclohexane				0.922	1.085	0.986	1.224	1.030	1.226	1.362	1.376	1.151	14.85
36)	Int 1,4-Difluorobenzene	----------ISTD----------												
37)	1,2-dichloropr...				0.222	0.239	0.202	0.229	0.194	0.225	0.251	0.273	0.230	11.11
38)	Bromodichlorom...				0.817	0.972	0.862	0.973	0.817	0.985	1.046	1.028	0.938	9.82
39)	Trichloroethene				0.436	0.460	0.412	0.455	0.392	0.482	0.522	0.515	0.459	10.01
41)	1,4-Dioxane					0.190	0.162	0.220	0.181	0.189	0.235	0.221	0.200	13.04
43)	Heptane				0.190	0.241	0.217	0.259	0.210	0.260	0.287	0.282	0.243	14.47
44)	cis-1,3-Dichlo...				0.437	0.522	0.476	0.590	0.500	0.655	0.695	0.693	0.571	17.77

Method Path : H:\AIR2017\CHEM24\METHODS\
Method File : 24AIR_0411.M
Title : VOA Standards for 5 point calibration

45)	4-Methyl-2-pen...			0.474	0.576	0.460	0.660	0.584	0.612	0.710	0.660	0.592	15.03
46)	trans-1,3-Dich...			0.451	0.523	0.510	0.618	0.563	0.752	0.734	0.718	0.609	18.85
47)	1,1,2-Trichlor...			0.351	0.464	0.352	0.455	0.366	0.461	0.493	0.488	0.429	14.32
48)	Toluene			0.880	1.098	0.930	1.151	0.915	1.180	1.272	1.206	1.079	13.93
49)	Dibromochlorom...			0.762	0.982	0.835	1.099	0.845	1.116	1.189	1.149	0.997	16.48
50)	2-Hexanone(MBK)			0.405	0.499	0.486	0.652	0.578	0.599	0.682	0.655	0.570	17.10
51)	1,2-Dibromoeth...			0.663	0.780	0.718	0.845	0.697	0.850	0.894	0.898	0.793	11.56
52)	Tetrachloroethene			0.529	0.649	0.555	0.667	0.493	0.685	0.775	0.798	0.644	17.33
53)	Int Chlorobenzene-d5	----------ISTD----------											
54)	1,1,1,2-Tetrac...			0.811	1.219	0.855	1.196	0.854	1.045	1.072	0.990	1.005	15.57
55)	Chlorobenzene			1.689	1.954	1.597	1.905	1.473	1.666	1.672	1.557	1.689	9.75
56)	Ethylbenzene			2.308	3.034	2.224	3.139	2.261	2.770	2.686	2.406	2.604	13.73
57)	m,p-Xylene			2.069	2.716	1.694	2.775	2.174	2.333	2.258	2.023	2.255	15.89
58)	Bromoform			1.498	1.958	1.537	1.982	1.624	1.819	1.910	1.706	1.754	10.85
59)	Styrene			1.020	1.410	1.262	1.595	1.421	1.550	1.548	1.477	1.410	13.45
60)	1,1,2,2-Tetrac...			1.638	2.061	1.649	1.952	1.603	1.504	1.501	1.366	1.659	14.14
61)	o-Xylene			1.806	2.573	2.008	2.658	1.975	2.064	2.151	1.928	2.145	14.33
62)	Surr% Bromofluorob...			1.389	1.458	1.361	1.312	1.406	1.340	1.185	1.063	1.314	9.84
64)	Isopropylbenzene			2.591	3.300	2.604	3.258	2.456	2.636	2.807	2.581	2.779	11.64
66)	4-Ethyltoluene			2.588	3.379	2.947	3.470	2.974	3.040	3.006	2.658	3.008	10.18
67)	1,3,5-Trimethy...			2.294	3.075	2.747	3.000	2.592	2.612	2.567	2.321	2.651	10.66
68)	1,2,4-Trimethy...			2.184	2.959	2.603	3.064	2.770	2.654	2.565	2.290	2.636	11.43
70)	Benzyl chloride			1.517	1.961	1.883	2.386	2.178	2.352	2.343	2.115	2.092	14.19
71)	1,3-Dichlorobe...			1.588	1.971	1.711	1.913	1.699	1.792	1.813	1.675	1.770	7.21
72)	1,4-Dichlorobe...			1.506	1.750	1.655	1.908	1.580	1.700	1.785	1.611	1.687	7.54
73)	sec-Butylbenzene			3.139	4.179	3.590	4.027	3.598	3.468	3.420	3.075	3.562	10.84
74)	4-Isopropyltol...			2.850	3.683	3.319	3.806	3.309	3.329	3.258	2.915	3.309	9.93
75)	1,2-Dichlorobe...			1.630	1.922	1.645	1.827	1.631	1.710	1.703	1.553	1.703	7.02
76)	n-Butylbenzene			2.363	3.007	2.804	3.368	3.031	2.982	2.899	2.484	2.867	11.16
77)	1,2,4-Trichlor...				0.700	0.695	0.937	0.866	1.099	1.147	1.114	0.937	20.49
79)	Hexachlorobuta...			1.573	1.852	1.593	1.708	1.533	1.611	1.613	1.361	1.605	8.72
80)	int Bromochloromethane...	----------ISTD----------											
81)	1,2-Dichlorote...	2.829	2.120	2.824	3.065	3.903	3.072	3.909	2.773			3.062	19.54
82)	Vinyl Chloride...	0.566	0.614	0.750	0.944	0.973	0.847	1.058	0.861			0.827	20.94
83)	Bromomethane(sim)	1.369	1.073	1.217	1.280	1.402	1.252	1.428	1.161			1.273	9.68
84)	Trichlorofluor...	5.041	4.046	4.336	4.162	4.832	3.974	4.708	3.657			4.345	10.96
85)	Trans-1,2-Dich...	1.476	1.248	1.342	1.630	1.735	1.590	1.789				1.544	12.94
86)	1,1-Dichloroet...	1.715	1.486	1.529	1.847	1.970	1.827	1.971	1.607			1.744	10.89
87)	1,1-Dichloroet...	1.629	1.547	1.672	2.116	2.297	2.053	2.232	1.639			1.898	16.13
88)	Cis-1,2-Dichlo...	1.212	0.885	1.031	1.374	1.519	1.365	1.613	1.295			1.287	18.72
89)	1,2-Dichloroet...	2.299	1.333	1.905	2.234	2.342	2.063	2.304	1.913			2.049	16.50
90)	1,1,1-Trichlor...	2.416	2.494	2.248	3.095	3.346	3.026	3.451	2.819			2.862	15.49
91)	Carbon Tetrach...	3.107	2.852	3.006	3.739	4.000	3.677	4.115	3.387			3.485	13.48
92)	Trichlorotrifl...	2.712	2.254	2.399	2.769	2.910	2.561	2.920	2.295			2.603	10.21
93)	int 1,4-Difluorobenzen...	----------ISTD----------											
94)	1,2-dichloropr...		0.165	0.131	0.203	0.220	0.184	0.209	0.177			0.184	16.49
95)	Bromodichlorom...		0.415	0.627	0.795	0.952	0.834	0.959	0.807			0.770	24.95

Method Path : H:\AIR2017\CHEM24\METHODS\
Method File : 24AIR_0411.M
Title : VOA Standards for 5 point calibration

96)	Trichloroethen...	0.334	0.272	0.226	0.398	0.422	0.376	0.416	0.358			0.350	19.96
97)	1,4-Dioxane(sim)			0.162	0.166	0.206	0.167	0.217	0.180	0.184		0.183	11.57
98)	cis-1,3-Dichlo...			0.329	0.399	0.479	0.434	0.539	0.456			0.439	16.33
99)	1,1,2-Trichlor...			0.346	0.380	0.472	0.364	0.458				0.404	14.18
100)	Dibromochlorom...			0.707	0.696	0.901	0.761	1.004	0.770			0.807	15.03
101)	1,2-Dibromoeth...	0.667	0.427	0.642	0.683	0.801	0.728	0.844	0.704			0.687	18.25
102)	Tetrachloroeth...	0.467	0.247	0.451	0.476	0.591	0.506	0.609	0.449			0.475	23.35
103)	int Chlorobenzene-d5(sim)	----------ISTD----------											
104)	Bromoform(sim)		0.805	1.273	1.418	1.798	1.440	1.883				1.436	27.08
105)	1,1,1,2-Tetrac...			0.851	0.887	1.258	0.877	1.256	0.883			1.002	19.75
106)	m,p-Xylene(sim)		1.157	1.865	1.959	2.503	1.991	2.637	2.057			2.024	23.77
107)	1,1,2,2-Tetrac...		1.377	1.768	1.754	2.106	1.700	2.024	1.664			1.771	13.61
110)	Benzyl chlorid...			1.260	1.436	1.807	1.771	2.267	2.061			1.767	21.25
111)	1,3-Dichlorobe...		1.563	1.643	1.710	2.053	1.846	2.096	1.836			1.821	11.00
112)	1,4-Dichlorobe...		1.354	1.325	1.426	1.613	1.557	1.813	1.495			1.512	11.14
113)	sec-Butylbenze...	3.406	2.350	2.990	3.272	4.133	3.640	4.118	3.643			3.444	17.15
114)	4-Isopropyltol...	2.665	2.021	2.354	2.698	3.394	3.122	3.617	3.131			2.875	18.70
115)	1,2-Dichlorobe...	2.388	1.674	1.648	1.794	2.045	1.753	1.983	1.734			1.877	13.31
116)	n-Butylbenzene...		1.601	1.859	2.237	2.771	2.638	3.200	2.868			2.453	23.48
117)	1,2,4-Trichlor...		0.929	0.578	0.638	0.765	0.776	1.024				0.785	21.51
119)	Hexachlorobuta...		1.778	1.711	1.735	1.898	1.681	1.777	1.583			1.738	5.59

(#,$,@)=Out of Range l=linear lf=linear(0,0) q=Quadratic qf=Quadratic(0,0)

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_03.D
Acq On : 11 Apr 2017 7:43 pm
Operator : Keith
Client ID : ICAL 0.035
Lab ID : 0.035 ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 08:55:47 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:34 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	3.945	130	141908	10.000	ng	-0.02
36) 1,4-Difluorobenzene	5.934	114	472460	10.000	ng	-0.02
53) Chlorobenzene-d5	9.215	82	250623	10.000	ng	0.00
80) Bromochloromethane(sim)	3.945	130	141908	10.000	ng	-0.02
93) 1,4-Difluorobenzene(sim)	5.937	114	519889	10.000	ng	#-0.01
103) Chlorobenzene-d5(sim)	9.210	82	267966	10.000	ng	0.00
System Monitoring Compounds						
62) % Bromofluorobenzene	10.125	95	332501	10.519	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.20%			
Target Compounds						Qvalue
2) Propylene	1.528	41	238	0.029	ppbv#	52
3) Dichlorodifluoromethane	1.554	85	2060	0.037	ppbv	94
4) Chloromethane	1.622	52	84	0.023	ppbv#	1
5) 1,2-Dichlorotetrafluor...	1.656	85	1219	0.026	ppbv	97
6) Vinyl Chloride	1.706	62	281	0.020	ppbv#	43
7) 1,3-Butadiene	1.757	54	100	0.011	ppbv#	1
8) Bromomethane	1.859	94	629	0.035	ppbv#	76
9) Chloroethane	1.927	64	79	0.013	ppbv#	40
10) Ethanol	2.020	45	3207	0.681	ppbv#	96
12) Acetone	2.223	43	7994	0.358	ppbv	97
13) Trichlorofluoromethane	2.240	101	2504	0.042	ppbv#	95
14) Isopropylalcohol	2.376	45	2348	0.111	ppbv#	40
15) Acrylonitrile	2.393	53	162	0.020	ppbv#	18
16) 1,1-Dichloroethene	2.528	61	852	0.032	ppbv#	79
17) Methylene Chloride	2.587	49	6191	0.377	ppbv#	85
20) Carbon Disulfide	2.732	76	1412	0.035	ppbv#	84
21) Trichlorotrifluoroethane	2.732	101	1347	0.036	ppbv	86
22) Trans-1,2-Dichloroethene	3.098	61	714	0.032	ppbv#	65
23) 1,1-Dichloroethane	3.224	63	825	0.030	ppbv#	61
24) Methyl tert-butyl ethe...	3.391	73	977	0.024	ppbv#	53
25) Methyl Ethyl Ketone	3.591	43	1018	0.043	ppbv#	69
26) Cis-1,2-Dichloroethene	3.818	61	380	0.017	ppbv#	52
27) Hexane	4.031	57	800	0.050	ppbv#	94
28) Chloroform	4.071	83	863	0.021	ppbv#	85
29) Ethyl acetate	4.025	43	307	0.011	ppbv#	67
31) 1,2-Dichloroethane	4.768	62	492	0.016	ppbv#	62
32) 1,1,1-Trichloroethane	5.042	97	871	0.019	ppbv#	88
33) Benzene	5.519	78	1378	0.032	ppbv#	68
34) Carbon Tetrachloride	5.660	117	1264	0.024	ppbv	90
35) Cyclohexane	5.786	56	223	0.013	ppbv#	56
38) Bromodichloromethane	6.480	83	852	0.019	ppbv	81
39) Trichloroethene	6.513	130	475	0.021	ppbv#	71
43) Heptane	6.853	71	65	0.005	ppbv#	70
44) cis-1,3-Dichloropropene	7.247	75	534	0.018	ppbv#	57
45) 4-Methyl-2-pentanone(M...	7.420	43	685	0.022	ppbv#	59
46) trans-1,3-Dichloropropene	7.668	75	591	0.018	ppbv#	45
47) 1,1,2-Trichloroethane	7.771	97	377	0.018	ppbv#	81
48) Toluene	7.970	91	1453	0.027	ppbv#	81
49) Dibromochloromethane	8.251	129	1073	0.021	ppbv#	94
50) 2-Hexanone(MBK)	8.306	43	551	0.018	ppbv#	58
51) 1,2-Dibromoethane(EDB)	8.423	107	980	0.025	ppbv	94
52) Tetrachloroethene	8.773	166	735	0.023	ppbv#	82

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_03.D
Acq On : 11 Apr 2017 7:43 pm
Operator : Keith
Client ID : ICAL 0.035
Lab ID : 0.035 ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 08:55:47 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:34 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
54)	1,1,1,2-Tetrachloroethane	9.238	131	605	0.023	ppbv#	81
55)	Chlorobenzene	9.245	112	1503	0.036	ppbv#	1
56)	Ethylbenzene	9.510	91	2140	0.032	ppbv	97
57)	m,p-Xylene	9.617	91	4010	0.069	ppbv#	92
58)	Bromoform	9.624	173	1269	0.028	ppbv	89
59)	Styrene	9.821	104	887	0.023	ppbv#	81
60)	1,1,2,2-Tetrachloroethane	9.882	83	1732	0.044	ppbv#	85
61)	o-Xylene	9.882	91	1825	0.034	ppbv#	86
64)	Isopropylbenzene	10.208	105	2530	0.037	ppbv	93
66)	4-Ethyltoluene	10.546	105	2341	0.031	ppbv	93
67)	1,3,5-Trimethylbenzene	10.584	105	2288	0.035	ppbv#	84
68)	1,2,4-Trimethylbenzene	10.784	105	2002	0.030	ppbv#	83
70)	Benzyl chloride	10.848	91	1513	0.027	ppbv#	87
71)	1,3-Dichlorobenzene	10.848	146	1743	0.039	ppbv	96
72)	1,4-Dichlorobenzene	10.886	146	1539	0.036	ppbv#	94
73)	sec-Butylbenzene	10.919	105	2765	0.031	ppbv#	91
74)	4-Isopropyltoluene	11.000	119	2499	0.030	ppbv#	88
75)	1,2-Dichlorobenzene	11.049	146	1879	0.045	ppbv#	90
76)	n-Butylbenzene	11.205	91	2189	0.030	ppbv#	90
77)	1,2,4-Trichlorobenzene	11.889	180	1021	0.039	ppbv	87
79)	Hexachlorobutadiene	12.118	225	1849	0.047	ppbv	97
81]	1,2-Dichlorotetrafluor...	1.658	85	1405	0.030	ppbv	88
82]	Vinyl Chloride(sim)	1.706	62	281	0.021	ppbv#	43
83]	Bromomethane(sim)	1.862	94	680	0.037	ug/l	93
84]	Trichlorofluoromethane...	2.240	101	2504	0.042	ppbv	96
85]	Trans-1,2-Dichloroethe...	3.101	61	733	0.029	ppbv	94
86]	1,1-Dichloroethene(sim)	2.528	61	852	0.034	ppbv#	79
87]	1,1-Dichloroethane(sim)	3.221	63	809	0.029	ppbv	99
88]	Cis-1,2-Dichloroethene...	3.821	61	602m	0.029	ppbv	
89]	1,2-Dichloroethane(sim)	4.771	62	1142	0.038	ppbv#	56
90]	1,1,1-Trichloroethane(...	5.038	97	1200m	0.027	ppbv	
91]	Carbon Tetrachloride(sim)	5.670	117	1543	0.029	ppbv	100
92]	Trichlorotrifluoroetha...	2.732	101	1347	0.036	ppbv#	68
95]	Bromodichloromethane(sim)	6.476	83	959	0.021	ppbv	95
96]	Trichloroethene(sim)	6.523	130	607m	0.030	ppbv	
97]	1,4-Dioxane(sim)	6.776	88	388m	0.038	ppbv	
98]	cis-1,3-Dichloropropen...	7.250	75	743m	0.029	ppbv	
99]	1,1,2-Trichloroethane(...	7.774	97	603	0.025	ppbv	97
100]	Dibromochloromethane(sim)	8.251	129	1073	0.023	ppbv	99
101]	1,2-Dibromoethane(EDB)...	8.426	107	1214	0.030	ppbv	96
102]	Tetrachloroethene(sim)	8.775	166	850m	0.031	ppbv	
104]	Bromoform(sim)	9.624	173	1269	0.025	ppbv	83
105]	1,1,1,2-Tetrachloroeth...	9.240	131	759	0.026	ppbv	92
106]	m,p-Xylene(sim)	9.617	91	4010	0.064	ppbv#	92
107]	1,1,2,2-Tetrachloroeth...	9.877	83	1904	0.039	ppbv	95
110]	Benzyl chloride(sim)	10.848	91	1513	0.026	ppbv	87
111]	1,3-Dichlorobenzene(sim)	10.851	146	1953	0.037	ppbv#	95
112]	1,4-Dichlorobenzene(sim)	10.886	146	1539	0.035	ppbv	94
113]	sec-Butylbenzene(sim)	10.922	105	3194	0.031	ppbv	92
114]	4-Isopropyltoluene(sim)	11.000	119	2499	0.028	ppbv#	88
115]	1,2-Dichlorobenzene(sim)	11.051	146	2240	0.045	ppbv	94
116]	n-Butylbenzene(sim)	11.205	91	2189	0.027	ppbv	90
117]	1,2,4-Trichlorobenzene...	11.892	180	1229	0.045	ppbv	95
119]	Hexachlorobutadiene(sim)	12.116	225	2121	0.047	ppbv	97

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_03.D
Acq On : 11 Apr 2017 7:43 pm
Operator : Keith
Client ID : ICAL 0.035
Lab ID : 0.035 ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 08:55:47 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:34 2017
Response via : Initial Calibration

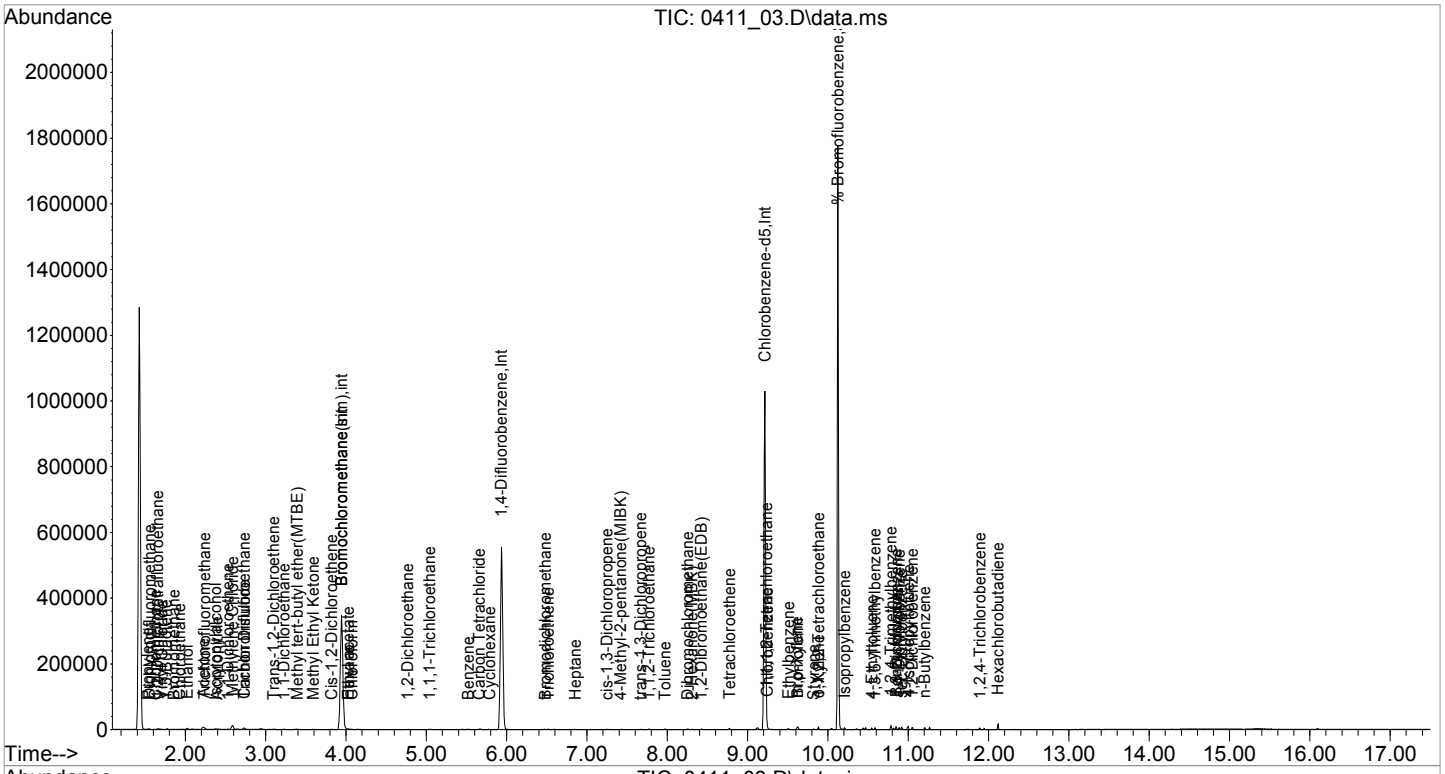
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

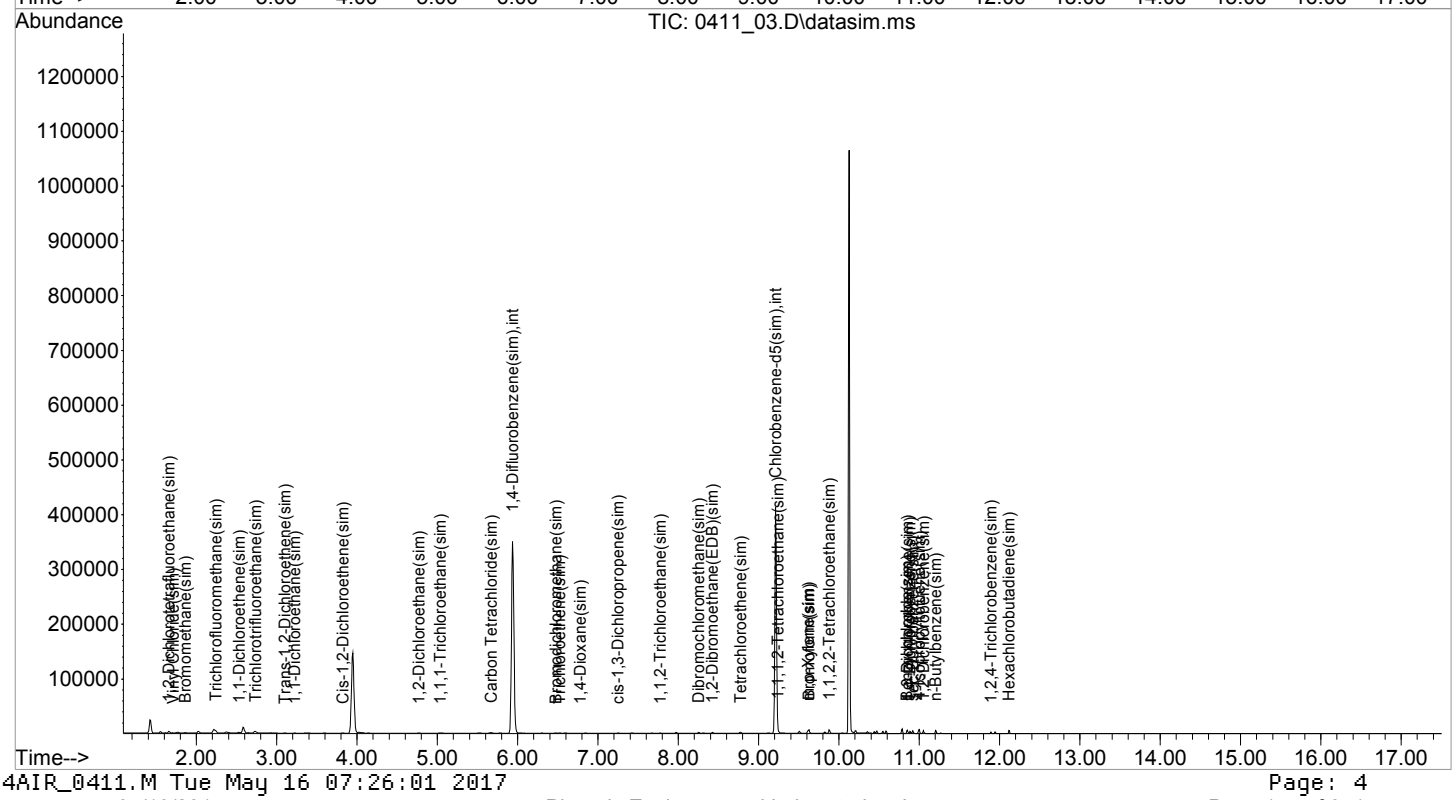
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_03.D
Acq On : 11 Apr 2017 7:43 pm
Operator : Keith
Client ID : ICAL 0.035
Lab ID : 0.035 ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 08:55:47 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:34 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_04.D
Acq On : 11 Apr 2017 8:14 pm
Operator : Keith
Client ID : ICAL 0.05
Lab ID : 0.05 ppb
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 08:49:41 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:48:49 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	138493	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	452106	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	232943	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	138493	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	497953	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	247463	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.124	95	321928	10.958	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.60%				
Target Compounds							Qvalue
2) Propylene	1.528	41	342	0.042	ppbv	#	76
3) Dichlorodifluoromethane	1.554	85	1931	0.036	ppbv	#	91
5) 1,2-Dichlorotetrafluor...	1.655	85	1385	0.031	ppbv	#	83
6) Vinyl Chloride	1.698	62	425	0.031	ppbv	#	43
7) 1,3-Butadiene	1.749	54	301	0.035	ppbv	#	23
8) Bromomethane	1.859	94	600	0.034	ppbv	#	92
10) Ethanol	2.020	45	1971	0.429	ppbv		94
12) Acetone	2.215	43	4583	0.210	ppbv		93
13) Trichlorofluoromethane	2.240	101	2802	0.048	ppbv		93
14) Isopropylalcohol	2.367	45	1168	0.057	ppbv	#	20
16) 1,1-Dichloroethene	2.528	61	1029	0.039	ppbv	#	69
17) Methylene Chloride	2.579	49	7299	0.455	ppbv		88
20) Carbon Disulfide	2.723	76	1525	0.039	ppbv	#	69
21) Trichlorotrifluoroethane	2.731	101	1561	0.042	ppbv		88
22) Trans-1,2-Dichloroethene	3.098	61	661	0.030	ppbv	#	66
23) 1,1-Dichloroethane	3.224	63	862	0.032	ppbv		78
24) Methyl tert-butyl ethe...	3.398	73	281	0.007	ppbv	#	53
25) Methyl Ethyl Ketone	3.591	43	559	0.024	ppbv	#	60
26) Cis-1,2-Dichloroethene	3.825	61	613	0.028	ppbv	#	57
27) Hexane	4.025	57	1089	0.070	ppbv	#	92
28) Chloroform	4.071	83	1433	0.036	ppbv	#	69
29) Ethyl acetate	4.025	43	577	0.022	ppbv	#	67
31) 1,2-Dichloroethane	4.775	62	720	0.023	ppbv	#	45
32) 1,1,1-Trichloroethane	5.049	97	1258	0.028	ppbv	#	86
33) Benzene	5.519	78	1525	0.036	ppbv	#	83
34) Carbon Tetrachloride	5.667	117	1702	0.033	ppbv		96
35) Cyclohexane	5.786	56	272	0.016	ppbv	#	58
37) 1,2-dichloropropane	6.292	63	110	0.010	ppbv	#	27
38) Bromodichloromethane	6.473	83	934	0.021	ppbv	#	73
39) Trichloroethene	6.526	130	550	0.026	ppbv	#	80
43) Heptane	6.847	71	129	0.011	ppbv	#	62
44) cis-1,3-Dichloropropene	7.253	75	434	0.015	ppbv	#	44
45) 4-Methyl-2-pentanone(M...	7.420	43	421	0.014	ppbv	#	47
46) trans-1,3-Dichloropropene	7.668	75	580	0.019	ppbv	#	45
47) 1,1,2-Trichloroethane	7.771	97	150	0.007	ppbv	#	49
48) Toluene	7.977	91	1120	0.022	ppbv	#	89
49) Dibromochloromethane	8.258	129	784	0.016	ppbv	#	83
50) 2-Hexanone(MBK)	8.299	43	456	0.016	ppbv	#	74
51) 1,2-Dibromoethane(EDB)	8.430	107	872	0.023	ppbv		80
52) Tetrachloroethene	8.766	166	427	0.014	ppbv	#	71
54) 1,1,1,2-Tetrachloroethane	9.237	131	235	0.010	ppbv	#	50
55) Chlorobenzene	9.245	112	1246	0.032	ppbv	#	1

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_04.D
Acq On : 11 Apr 2017 8:14 pm
Operator : Keith
Client ID : ICAL 0.05
Lab ID : 0.05 ppb
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 08:49:41 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:48:49 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) Ethylbenzene	9.510	91	1438	0.023	ppbv	83
57) m,p-Xylene	9.624	91	2863	0.053	ppbv	93
58) Bromoform	9.624	173	996	0.024	ppbv#	87
59) Styrene	9.829	104	901	0.025	ppbv#	96
60) 1,1,2,2-Tetrachloroethane	9.882	83	1426	0.039	ppbv#	80
61) o-Xylene	9.882	91	1229	0.024	ppbv#	81
64) Isopropylbenzene	10.208	105	1843	0.029	ppbv	92
66) 4-Ethyltoluene	10.546	105	2399	0.034	ppbv	91
67) 1,3,5-Trimethylbenzene	10.583	105	2031	0.033	ppbv	90
68) 1,2,4-Trimethylbenzene	10.783	105	1798	0.029	ppbv	93
70) Benzyl chloride	10.848	91	1527	0.029	ppbv#	83
71) 1,3-Dichlorobenzene	10.848	146	1698	0.041	ppbv#	95
72) 1,4-Dichlorobenzene	10.886	146	1675	0.042	ppbv	95
73) sec-Butylbenzene	10.919	105	2776	0.034	ppbv#	86
74) 4-Isopropyltoluene	11.000	119	2500	0.032	ppbv#	91
75) 1,2-Dichlorobenzene	11.048	146	1804	0.046	ppbv#	89
76) n-Butylbenzene	11.205	91	1981	0.029	ppbv#	91
77) 1,2,4-Trichlorobenzene	11.889	180	888	0.037	ppbv	94
79) Hexachlorobutadiene	12.118	225	1925	0.053	ppbv	99
81] 1,2-Dichlorotetrafluor...	1.658	85	1468	0.033	ppbv	90
82] Vinyl Chloride(sim)	1.698	62	425	0.037	ppbv#	43
83] Bromomethane(sim)	1.862	94	743	0.041	ug/l	99
84] Trichlorofluoromethane...	2.240	101	2802	0.045	ppbv	93
85] Trans-1,2-Dichloroethe...	3.094	61	864	0.038	ppbv	91
86] 1,1-Dichloroethene(sim)	2.528	61	1029	0.042	ppbv#	69
87] 1,1-Dichloroethane(sim)	3.221	63	1071	0.042	ppbv	100
88] Cis-1,2-Dichloroethene...	3.825	61	613	0.032	ppbv#	57
89] 1,2-Dichloroethane(sim)	4.771	62	923m	0.031	ppbv	
90] 1,1,1-Trichloroethane(...	5.044	97	1727m	0.043	ppbv	
91] Carbon Tetrachloride(sim)	5.670	117	1975	0.040	ppbv	99
92] Trichlorotrifluoroetha...	2.731	101	1561	0.043	ppbv	97
94] 1,2-dichloropropane(sim)	6.309	63	410m	0.043	ppbv	
95] Bromodichloromethane(sim)	6.476	83	1034	0.024	ppbv	95
96] Trichloroethene(sim)	6.523	130	677m	0.037	ppbv	
97] 1,4-Dioxane(sim)	6.776	88	304	0.031	ppbv#	67
98] cis-1,3-Dichloropropen...	7.253	75	434	0.018	ppbv#	44
99] 1,1,2-Trichloroethane(...	7.774	97	376	0.016	ppbv	99
100] Dibromochloromethane(sim)	8.258	129	784	0.018	ppbv	89
101] 1,2-Dibromoethane(EDB)...	8.426	107	1062	0.029	ppbv	97
102] Tetrachloroethene(sim)	8.775	166	614m	0.023	ppbv	
104] Bromoform(sim)	9.624	173	996	0.021	ppbv	87
105] 1,1,1,2-Tetrachloroeth...	9.240	131	395	0.015	ppbv	80
106] m,p-Xylene(sim)	9.624	91	2863	0.049	ppbv	93
107] 1,1,2,2-Tetrachloroeth...	9.877	83	1704	0.037	ppbv	94
110] Benzyl chloride(sim)	10.848	91	1527	0.029	ppbv	83
111] 1,3-Dichlorobenzene(sim)	10.851	146	1934	0.040	ppbv#	94
112] 1,4-Dichlorobenzene(sim)	10.886	146	1675	0.041	ppbv	95
113] sec-Butylbenzene(sim)	10.922	105	2908	0.032	ppbv	92
114] 4-Isopropyltoluene(sim)	11.000	119	2500	0.032	ppbv#	91
115] 1,2-Dichlorobenzene(sim)	11.051	146	2071	0.041	ppbv	94
116] n-Butylbenzene(sim)	11.205	91	1981	0.026	ppbv	91
117] 1,2,4-Trichlorobenzene...	11.892	180	1150	0.045	ppbv	94
119] Hexachlorobutadiene(sim)	12.121	225	2200	0.053	ppbv	99

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_04.D
Acq On : 11 Apr 2017 8:14 pm
Operator : Keith
Client ID : ICAL 0.05
Lab ID : 0.05 ppb
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 08:49:41 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:48:49 2017
Response via : Initial Calibration

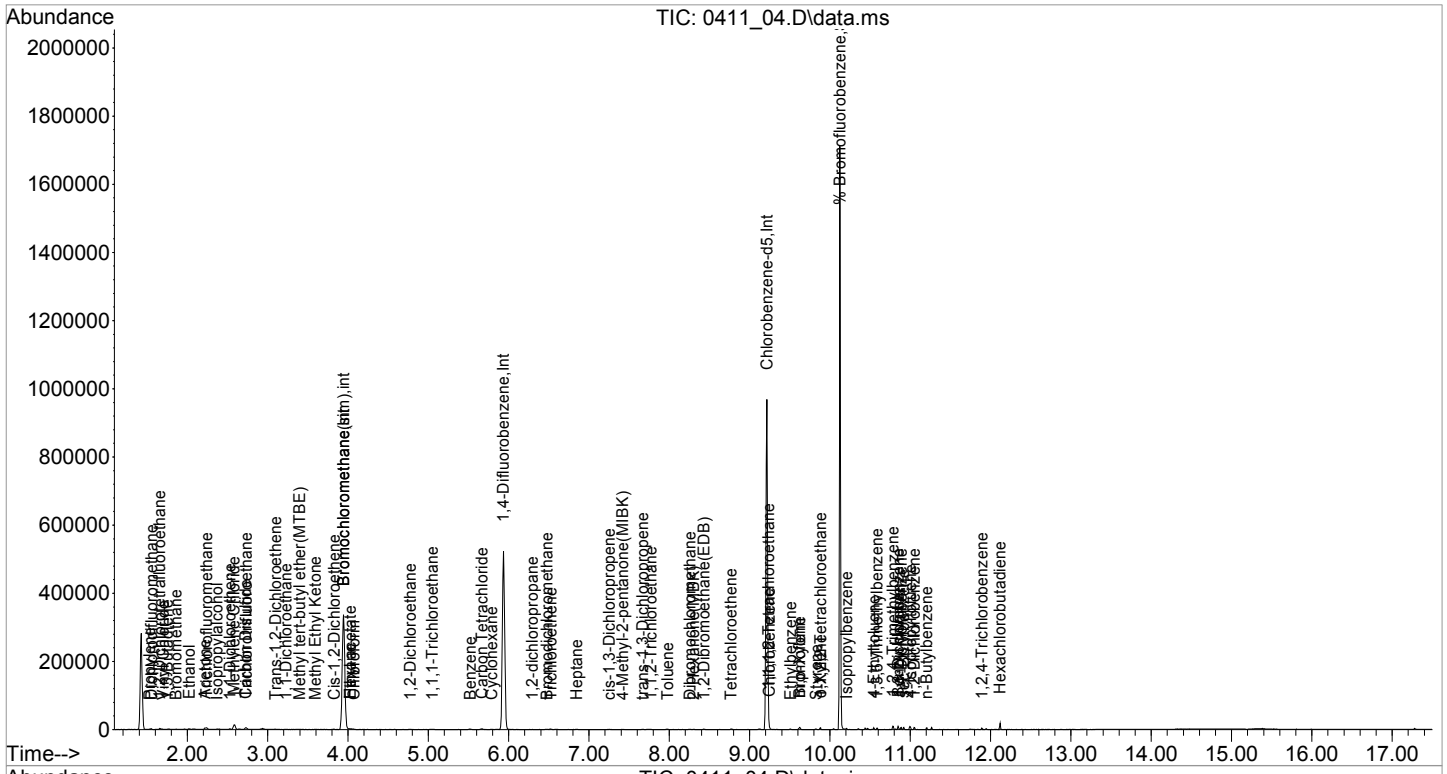
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

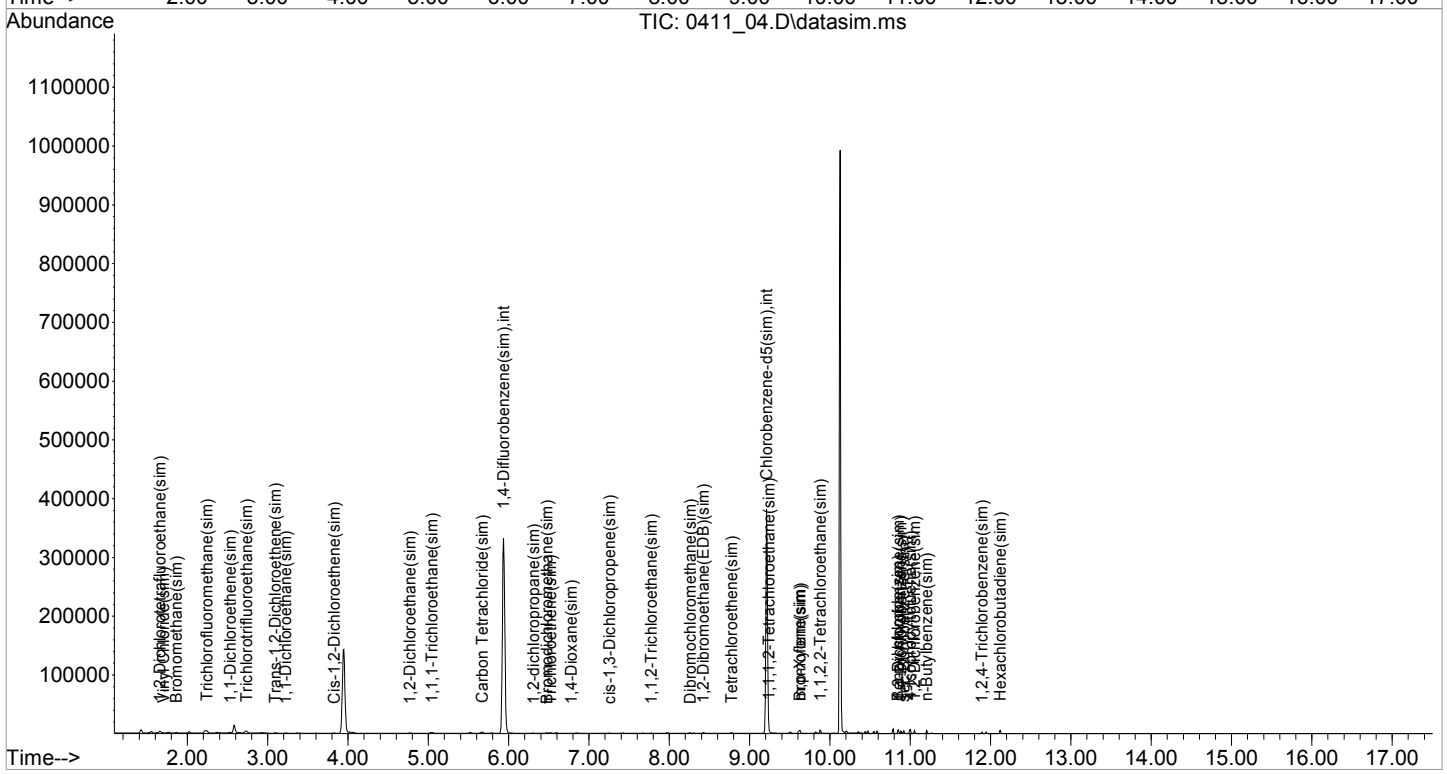
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_04.D
Acq On : 11 Apr 2017 8:14 pm
Operator : Keith
Client ID : ICAL 0.05
Lab ID : 0.05 ppb
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 08:49:41 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:48:49 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_05.D
Acq On : 11 Apr 2017 8:45 pm
Operator : Keith
Client ID : ICAL 0.1
Lab ID : 0.1 ppb
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 17 08:50:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:49:56 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	141705	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	467226	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	242942	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	141705	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	511706	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	258435	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	323680	10.564	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.60%				
Target Compounds							Qvalue
2) Propylene	1.528	41	728	0.088	ppbv		86
3) Dichlorodifluoromethane	1.554	85	4950	0.090	ppbv#		96
4) Chloromethane	1.613	52	316	0.085	ppbv#		70
5) 1,2-Dichlorotetrafluor...	1.656	85	3526	0.076	ppbv		89
6) Vinyl Chloride	1.706	62	1063	0.075	ppbv		86
7) 1,3-Butadiene	1.749	54	802	0.092	ppbv#		82
8) Bromomethane	1.859	94	1568	0.088	ppbv#		92
9) Chloroethane	1.927	64	513	0.084	ppbv#		67
10) Ethanol	2.020	45	2342	0.498	ppbv		94
12) Acetone	2.215	43	8285	0.372	ppbv		97
13) Trichlorofluoromethane	2.240	101	6144	0.103	ppbv		97
14) Isopropylalcohol	2.367	45	2523	0.120	ppbv#		88
15) Acrylonitrile	2.393	53	452	0.056	ppbv#		72
16) 1,1-Dichloroethene	2.528	61	2167	0.081	ppbv		96
17) Methylene Chloride	2.587	49	5937	0.362	ppbv#		84
20) Carbon Disulfide	2.723	76	3102	0.078	ppbv#		92
21) Trichlorotrifluoroethane	2.732	101	3399	0.090	ppbv		88
22) Trans-1,2-Dichloroethene	3.098	61	1662	0.075	ppbv		88
23) 1,1-Dichloroethane	3.224	63	2009	0.073	ppbv		96
24) Methyl tert-butyl ethe...	3.378	73	3083	0.074	ppbv#		92
25) Methyl Ethyl Ketone	3.585	43	2314	0.098	ppbv#		90
26) Cis-1,2-Dichloroethene	3.818	61	1461	0.066	ppbv#		82
27) Hexane	4.025	57	1750	0.109	ppbv#		91
28) Chloroform	4.065	83	2880	0.071	ppbv		97
29) Ethyl acetate	4.025	43	896	0.033	ppbv#		67
30) Tetrahydrofuran	4.558	42	711	0.065	ppbv#		41
31) 1,2-Dichloroethane	4.768	62	1985	0.063	ppbv#		78
32) 1,1,1-Trichloroethane	5.035	97	3185	0.068	ppbv		98
33) Benzene	5.519	78	3033	0.071	ppbv#		89
34) Carbon Tetrachloride	5.660	117	3782	0.072	ppbv		93
35) Cyclohexane	5.786	56	1024	0.058	ppbv		99
37) 1,2-dichloropropane	6.299	63	669	0.061	ppbv		96
38) Bromodichloromethane	6.473	83	2796	0.062	ppbv		97
39) Trichloroethene	6.520	130	1441	0.065	ppbv#		89
43) Heptane	6.853	71	462	0.038	ppbv#		54
44) cis-1,3-Dichloropropene	7.253	75	1682	0.057	ppbv		85
45) 4-Methyl-2-pentanone(M...	7.407	43	1741	0.058	ppbv#		80
46) trans-1,3-Dichloropropene	7.668	75	1888	0.060	ppbv#		85
47) 1,1,2-Trichloroethane	7.771	97	1314	0.062	ppbv		92
48) Toluene	7.970	91	3581	0.067	ppbv#		95
49) Dibromochloromethane	8.251	129	3618	0.072	ppbv		92
50) 2-Hexanone(MBK)	8.299	43	1552	0.052	ppbv#		85

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_05.D
Acq On : 11 Apr 2017 8:45 pm
Operator : Keith
Client ID : ICAL 0.1
Lab ID : 0.1 ppb
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 17 08:50:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:49:56 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51)	1,2-Dibromoethane(EDB)	8.423	107	2915	0.075	ppbv	90
52)	Tetrachloroethene	8.773	166	2310	0.072	ppbv#	89
54)	1,1,1,2-Tetrachloroethane	9.238	131	1871	0.075	ppbv	96
55)	Chlorobenzene	9.245	112	3837	0.095	ppbv#	1
56)	Ethylbenzene	9.503	91	5442	0.084	ppbv	96
57)	m,p-Xylene	9.624	91	9639	0.172	ppbv#	88
58)	Bromoform	9.624	173	3289	0.075	ppbv	96
59)	Styrene	9.821	104	2224	0.060	ppbv	91
60)	1,1,2,2-Tetrachloroethane	9.882	83	4149	0.108	ppbv#	85
61)	o-Xylene	9.882	91	4315	0.082	ppbv	97
64)	Isopropylbenzene	10.208	105	6280	0.094	ppbv	93
66)	4-Ethyltoluene	10.546	105	5629	0.076	ppbv	96
67)	1,3,5-Trimethylbenzene	10.584	105	5170	0.081	ppbv	89
68)	1,2,4-Trimethylbenzene	10.784	105	4645	0.072	ppbv#	90
70)	Benzyl chloride	10.843	91	3256	0.059	ppbv#	89
71)	1,3-Dichlorobenzene	10.848	146	3929	0.091	ppbv	96
72)	1,4-Dichlorobenzene	10.886	146	3425	0.082	ppbv	96
73)	sec-Butylbenzene	10.919	105	7280	0.085	ppbv#	93
74)	4-Isopropyltoluene	11.000	119	6084	0.075	ppbv#	89
75)	1,2-Dichlorobenzene	11.049	146	3562	0.087	ppbv	89
76)	n-Butylbenzene	11.205	91	4804	0.067	ppbv#	89
77)	1,2,4-Trichlorobenzene	11.889	180	1271	0.051	ppbv	96
79)	Hexachlorobutadiene	12.113	225	3777	0.099	ppbv	99
81]	1,2-Dichlorotetrafluor...	1.658	85	4002	0.097	ppbv	89
82]	Vinyl Chloride(sim)	1.706	62	1063	0.097	ppbv#	86
83]	Bromomethane(sim)	1.862	94	1724	0.097	ug/l	98
84]	Trichlorofluoromethane...	2.240	101	6144	0.099	ppbv	98
85]	Trans-1,2-Dichloroethe...	3.101	61	1901	0.089	ppbv	95
86]	1,1-Dichloroethene(sim)	2.528	61	2167	0.090	ppbv	96
87]	1,1-Dichloroethane(sim)	3.221	63	2369	0.095	ppbv	99
88]	Cis-1,2-Dichloroethene...	3.818	61	1461	0.082	ppbv#	82
89]	1,2-Dichloroethane(sim)	4.771	62	2700	0.097	ppbv#	84
90]	1,1,1-Trichloroethane(...	5.035	97	3185	0.080	ppbv#	98
91]	Carbon Tetrachloride(sim)	5.663	117	4259	0.089	ppbv	99
92]	Trichlorotrifluoroetha...	2.732	101	3399	0.094	ppbv	99
94]	1,2-dichloropropane(sim)	6.299	63	669	0.071	ppbv	96
95]	Bromodichloromethane(sim)	6.476	83	3209	0.086	ppbv	95
96]	Trichloroethene(sim)	6.520	130	1158	0.066	ppbv#	71
97]	1,4-Dioxane(sim)	6.743	88	827	0.083	ppbv#	78
98]	cis-1,3-Dichloropropen...	7.253	75	1682	0.084	ppbv#	85
99]	1,1,2-Trichloroethane(...	7.774	97	1768	0.075	ppbv	100
100]	Dibromochloromethane(sim)	8.251	129	3618	0.080	ppbv	91
101]	1,2-Dibromoethane(EDB)...	8.426	107	3284	0.097	ppbv	95
102]	Tetrachloroethene(sim)	8.773	166	2310	0.104	ppbv	89
104]	Bromoform(sim)	9.624	173	3289	0.095	ppbv	96
105]	1,1,1,2-Tetrachloroeth...	9.240	131	2200	0.080	ppbv	97
106]	m,p-Xylene(sim)	9.624	91	9639	0.191	ppbv#	88
107]	1,1,2,2-Tetrachloroeth...	9.877	83	4569	0.105	ppbv	96
110]	Benzyl chloride(sim)	10.843	91	3256	0.058	ppbv	89
111]	1,3-Dichlorobenzene(sim)	10.851	146	4245	0.090	ppbv#	94
112]	1,4-Dichlorobenzene(sim)	10.886	146	3425	0.085	ppbv	96
113]	sec-Butylbenzene(sim)	10.916	105	7726	0.088	ppbv	92
114]	4-Isopropyltoluene(sim)	11.000	119	6084	0.082	ppbv#	89
115]	1,2-Dichlorobenzene(sim)	11.051	146	4260	0.085	ppbv	94
116]	n-Butylbenzene(sim)	11.205	91	4804	0.073	ppbv	89

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_05.D
Acq On : 11 Apr 2017 8:45 pm
Operator : Keith
Client ID : ICAL 0.1
Lab ID : 0.1 ppb
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 17 08:50:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:49:56 2017
Response via : Initial Calibration

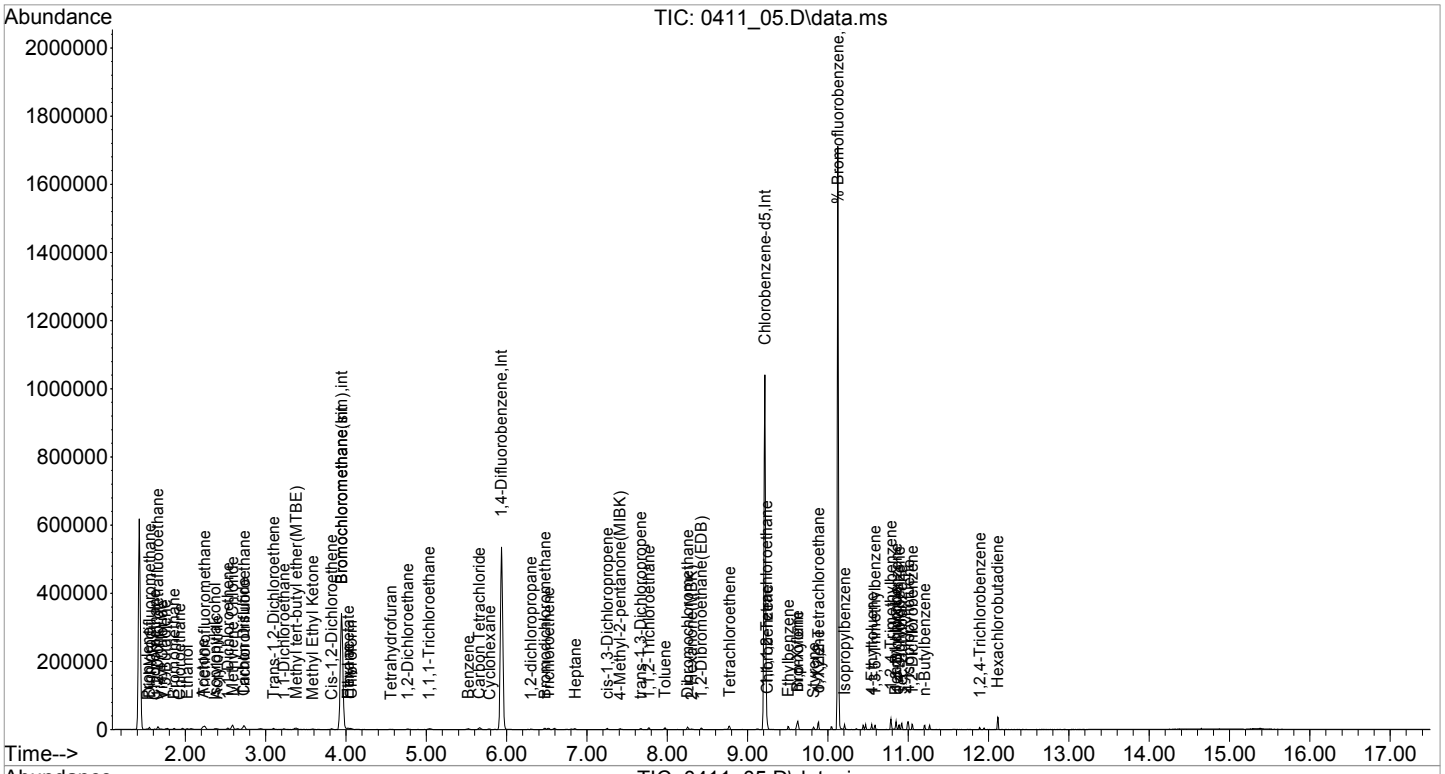
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
117] 1,2,4-Trichlorobenzene...	11.887	180	1495	0.059	ppbv	96
119] Hexachlorobutadiene(sim)	12.116	225	4423	0.100	ppbv	98

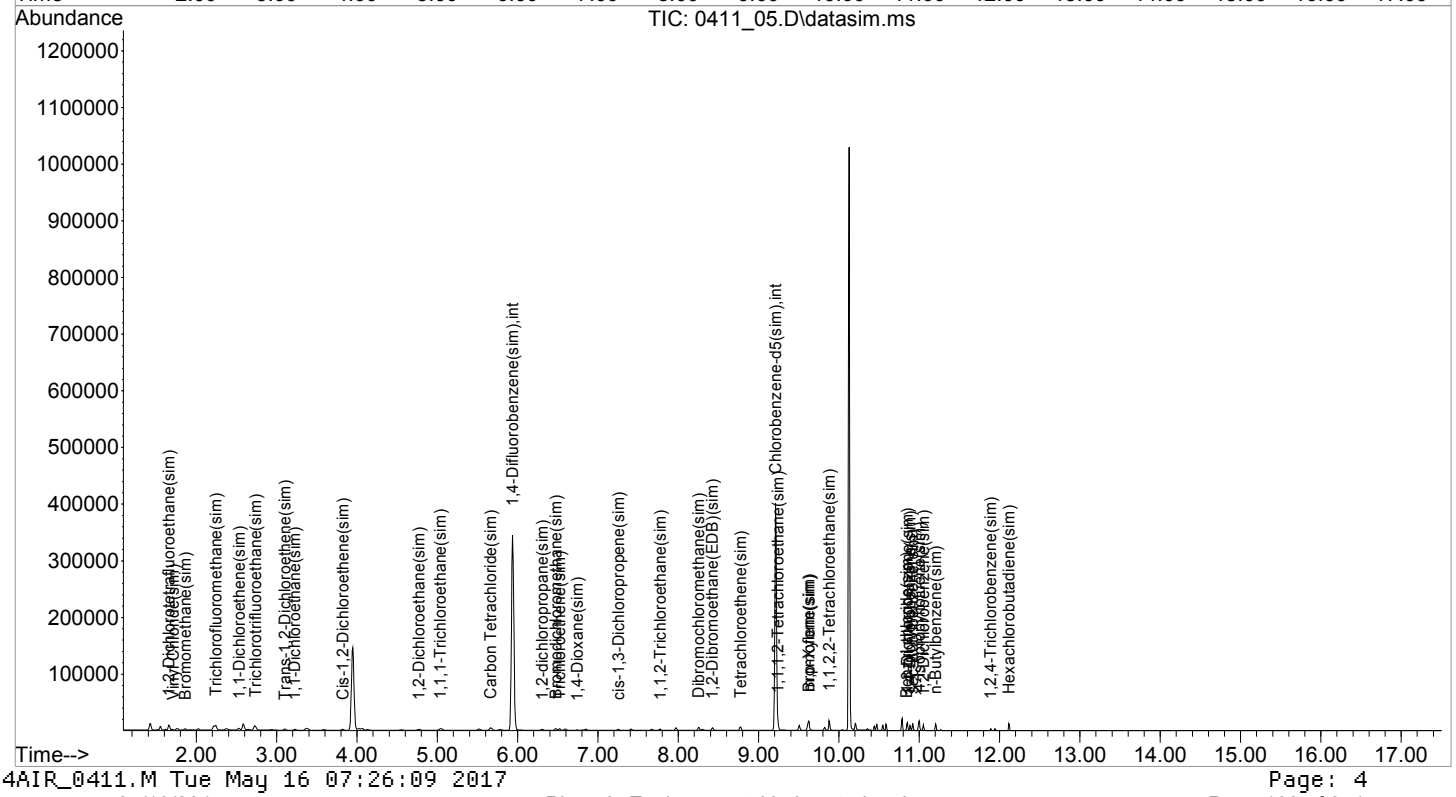
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_05.D
Acq On : 11 Apr 2017 8:45 pm
Operator : Keith
Client ID : ICAL 0.1
Lab ID : 0.1 ppb
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 17 08:50:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:49:56 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_06.D
Acq On : 11 Apr 2017 9:16 pm
Operator : Keith
Client ID : ICAL 0.25
Lab ID : 0.2ppb
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 17 08:54:45 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:50:43 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	138185	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	465366	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	238171	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	138185	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	509686	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	251602	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	330764	11.012	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.10%				
Target Compounds							Qvalue
2) Propylene	1.520	41	1378	0.171	ppbv	#	80
3) Dichlorodifluoromethane	1.554	85	10706	0.199	ppbv		99
4) Chloromethane	1.613	52	694	0.192	ppbv	#	83
5) 1,2-Dichlorotetrafluor...	1.656	85	7505	0.166	ppbv		95
6) Vinyl Chloride	1.698	62	2609	0.190	ppbv		94
7) 1,3-Butadiene	1.749	54	1382	0.162	ppbv		82
8) Bromomethane	1.859	94	3195	0.184	ppbv	#	97
9) Chloroethane	1.927	64	1198	0.201	ppbv		93
10) Ethanol	2.020	45	2489	0.542	ppbv		94
12) Acetone	2.215	43	10075	0.464	ppbv		99
13) Trichlorofluoromethane	2.240	101	11503	0.197	ppbv		97
14) Isopropylalcohol	2.359	45	4692	0.228	ppbv	#	74
15) Acrylonitrile	2.384	53	1181	0.150	ppbv		96
16) 1,1-Dichloroethene	2.528	61	5105	0.196	ppbv		90
17) Methylene Chloride	2.579	49	7028	0.439	ppbv	#	81
20) Carbon Disulfide	2.723	76	7165	0.185	ppbv		100
21) Trichlorotrifluoroethane	2.732	101	7652	0.208	ppbv		87
22) Trans-1,2-Dichloroethene	3.098	61	3925	0.181	ppbv		89
23) 1,1-Dichloroethane	3.225	63	5340	0.200	ppbv		96
24) Methyl tert-butyl ethe...	3.378	73	5613	0.139	ppbv		95
25) Methyl Ethyl Ketone	3.571	43	4053	0.176	ppbv	#	95
26) Cis-1,2-Dichloroethene	3.818	61	3797	0.176	ppbv		87
27) Hexane	4.025	57	3245	0.208	ppbv	#	91
28) Chloroform	4.058	83	7654	0.192	ppbv		99
29) Ethyl acetate	4.125	43	3336m	0.126	ppbv		
30) Tetrahydrofuran	4.532	42	1551	0.145	ppbv	#	81
31) 1,2-Dichloroethane	4.761	62	5107	0.166	ppbv	#	90
32) 1,1,1-Trichloroethane	5.042	97	8553	0.188	ppbv		98
33) Benzene	5.519	78	7775	0.186	ppbv		98
34) Carbon Tetrachloride	5.667	117	9568	0.186	ppbv		99
35) Cyclohexane	5.772	56	2547	0.148	ppbv		100
37) 1,2-dichloropropane	6.299	63	2069	0.190	ppbv		94
38) Bromodichloromethane	6.473	83	7605	0.169	ppbv		94
39) Trichloroethene	6.513	130	4054	0.184	ppbv		90
41) 1,4-Dioxane	6.707	88	1064	0.109	ppbv	#	80
43) Heptane	6.853	71	1766	0.146	ppbv	#	85
44) cis-1,3-Dichloropropene	7.247	75	4067	0.139	ppbv		91
45) 4-Methyl-2-pentanone(M...	7.400	43	4410	0.147	ppbv	#	90
46) trans-1,3-Dichloropropene	7.668	75	4198	0.133	ppbv	#	93
47) 1,1,2-Trichloroethane	7.771	97	3270	0.155	ppbv		97
48) Toluene	7.970	91	8188	0.154	ppbv		93
49) Dibromochloromethane	8.251	129	7096	0.141	ppbv		98

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_06.D
Acq On : 11 Apr 2017 9:16 pm
Operator : Keith
Client ID : ICAL 0.25
Lab ID : 0.2ppb
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 17 08:54:45 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:50:43 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.286	43	3774	0.128	ppbv#	95
51) 1,2-Dibromoethane(EDB)	8.423	107	6174	0.159	ppbv	99
52) Tetrachloroethene	8.766	166	4924	0.155	ppbv#	86
54) 1,1,1,2-Tetrachloroethane	9.238	131	3862	0.157	ppbv	95
55) Chlorobenzene	9.245	112	8044	0.204	ppbv	95
56) Ethylbenzene	9.503	91	10992	0.174	ppbv	96
57) m,p-Xylene	9.617	91	19715	0.358	ppbv	91
58) Bromoform	9.624	173	7136	0.166	ppbv	99
59) Styrene	9.821	104	4857	0.134	ppbv	90
60) 1,1,2,2-Tetrachloroethane	9.874	83	7804	0.207	ppbv	91
61) o-Xylene	9.882	91	8605	0.168	ppbv	96
64) Isopropylbenzene	10.208	105	12340	0.189	ppbv	97
66) 4-Ethyltoluene	10.546	105	12327	0.171	ppbv	94
67) 1,3,5-Trimethylbenzene	10.584	105	10925	0.175	ppbv	93
68) 1,2,4-Trimethylbenzene	10.784	105	10405	0.164	ppbv#	90
70) Benzyl chloride	10.843	91	7225	0.133	ppbv#	87
71) 1,3-Dichlorobenzene	10.849	146	7562	0.179	ppbv#	93
72) 1,4-Dichlorobenzene	10.881	146	7176	0.175	ppbv	94
73) sec-Butylbenzene	10.919	105	14953	0.178	ppbv#	91
74) 4-Isopropyltoluene	11.000	119	13575	0.171	ppbv#	90
75) 1,2-Dichlorobenzene	11.049	146	7764	0.193	ppbv#	94
76) n-Butylbenzene	11.200	91	11255	0.160	ppbv#	88
77) 1,2,4-Trichlorobenzene	11.889	180	2670	0.109	ppbv#	97
79) Hexachlorobutadiene	12.114	225	7492	0.201	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.659	85	8472	0.212	ppbv	89
82] Vinyl Chloride(sim)	1.698	62	2609	0.245	ppbv	94
83] Bromomethane(sim)	1.862	94	3537	0.205	ug/l	100
84] Trichlorofluoromethane...	2.240	101	11503	0.191	ppbv	97
85] Trans-1,2-Dichloroethe...	3.094	61	4505	0.223	ppbv	93
86] 1,1-Dichloroethene(sim)	2.528	61	5105	0.222	ppbv	90
87] 1,1-Dichloroethane(sim)	3.221	63	5848	0.243	ppbv	100
88] Cis-1,2-Dichloroethene...	3.818	61	3797	0.228	ppbv	87
89] 1,2-Dichloroethane(sim)	4.764	62	6175	0.229	ppbv	95
90] 1,1,1-Trichloroethane(...	5.042	97	8553	0.230	ppbv#	98
91] Carbon Tetrachloride(sim)	5.663	117	10334	0.227	ppbv	100
92] Trichlorotrifluoroetha...	2.732	101	7652	0.220	ppbv	93
94] 1,2-dichloropropane(sim)	6.299	63	2069	0.238	ppbv	94
95] Bromodichloromethane(sim)	6.476	83	8102	0.226	ppbv	96
96] Trichloroethene(sim)	6.513	130	4054	0.248	ppbv#	89
97] 1,4-Dioxane(sim)	6.710	88	1694	0.179	ppbv#	79
98] cis-1,3-Dichloropropen...	7.247	75	4067	0.213	ppbv#	91
99] 1,1,2-Trichloroethane(...	7.767	97	3870	0.189	ppbv	100
100] Dibromochloromethane(sim)	8.251	129	7096	0.168	ppbv	98
101] 1,2-Dibromoethane(EDB)...	8.426	107	6965	0.208	ppbv	96
102] Tetrachloroethene(sim)	8.766	166	4857	0.217	ppbv#	84
104] Bromoform(sim)	9.624	173	7136	0.215	ppbv	99
105] 1,1,1,2-Tetrachloroeth...	9.233	131	4463	0.178	ppbv	98
106] m,p-Xylene(sim)	9.617	91	19715	0.406	ppbv#	91
107] 1,1,2,2-Tetrachloroeth...	9.877	83	8827	0.205	ppbv	96
110] Benzyl chloride(sim)	10.843	91	7225	0.154	ppbv	87
111] 1,3-Dichlorobenzene(sim)	10.851	146	8606	0.192	ppbv#	94
112] 1,4-Dichlorobenzene(sim)	10.881	146	7176	0.191	ppbv	94
113] sec-Butylbenzene(sim)	10.916	105	16467	0.198	ppbv	92
114] 4-Isopropyltoluene(sim)	11.000	119	13575	0.196	ppbv#	90
115] 1,2-Dichlorobenzene(sim)	11.052	146	9025	0.190	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_06.D
Acq On : 11 Apr 2017 9:16 pm
Operator : Keith
Client ID : ICAL 0.25
Lab ID : 0.2ppb
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 17 08:54:45 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:50:43 2017
Response via : Initial Calibration

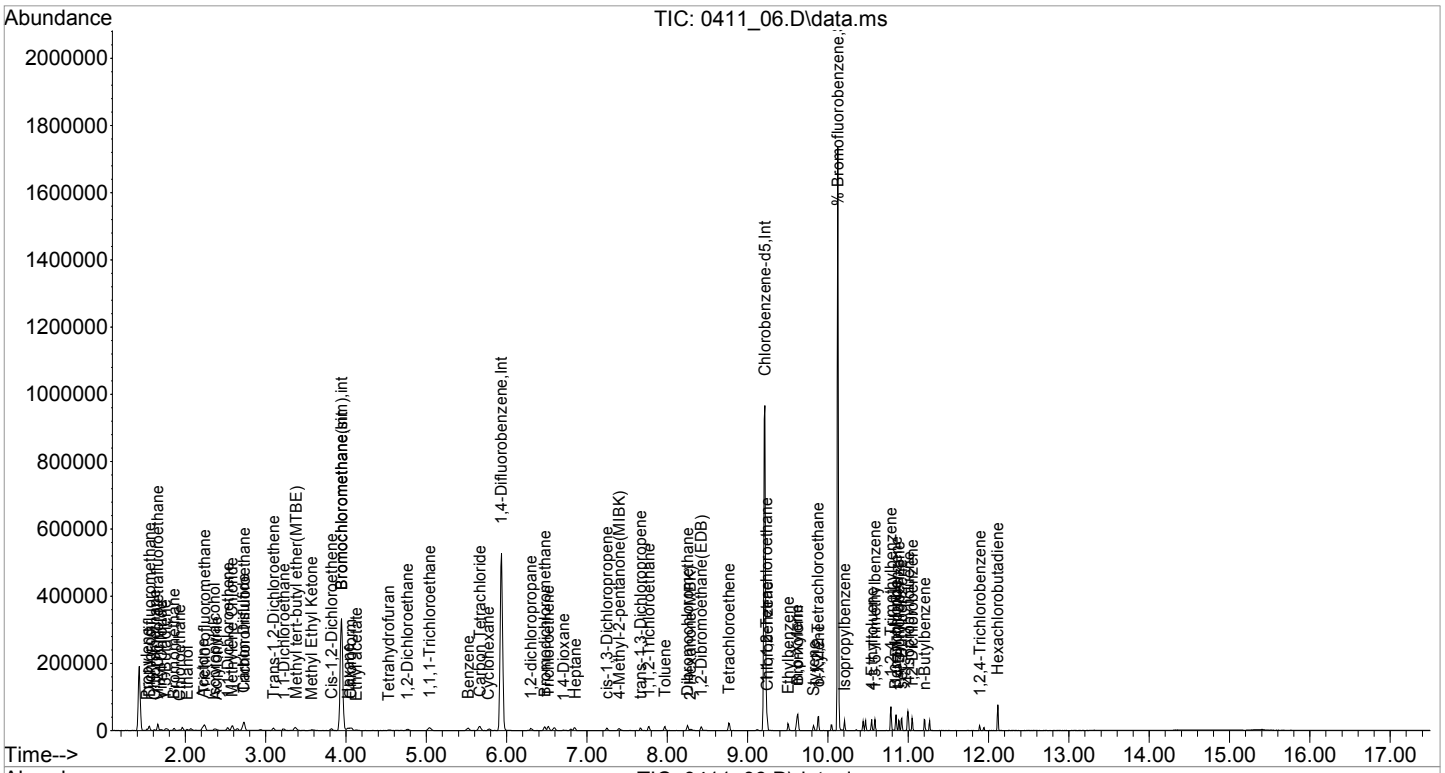
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	11255	0.188	ppbv	88
117] 1,2,4-Trichlorobenzene...	11.887	180	3212	0.151	ppbv	94
119] Hexachlorobutadiene(sim)	12.117	225	8731	0.203	ppbv	98

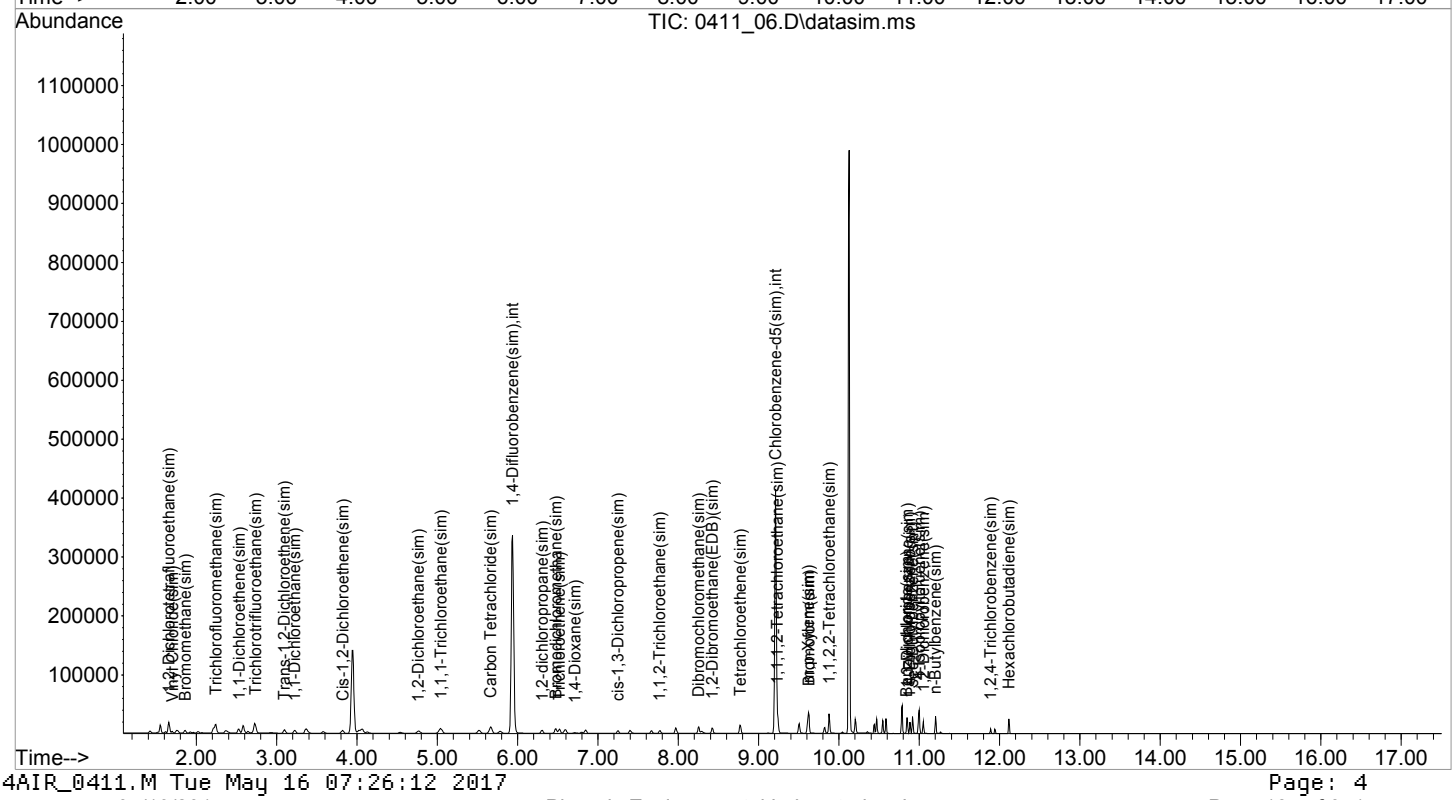
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_06.D
Acq On : 11 Apr 2017 9:16 pm
Operator : Keith
Client ID : ICAL 0.25
Lab ID : 0.2ppb
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 17 08:54:45 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:50:43 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_07.D
Acq On : 11 Apr 2017 9:51 pm
Operator : Keith
Client ID : ICAL 0.5
Lab ID : 0.5ppb
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 17 08:55:03 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:35 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	141334	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	471478	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	230861	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	141334	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	513886	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	250506	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	336554	11.367	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.70%				
Target Compounds							Qvalue
2) Propylene	1.520	41	3756	0.468	ppbv		94
3) Dichlorodifluoromethane	1.545	85	30709	0.558	ppbv		98
4) Chloromethane	1.613	52	2023	0.552	ppbv#		83
5) 1,2-Dichlorotetrafluor...	1.656	85	25083	0.560	ppbv		93
6) Vinyl Chloride	1.698	62	6876	0.493	ppbv		95
7) 1,3-Butadiene	1.749	54	4534	0.536	ppbv		97
8) Bromomethane	1.850	94	9035	0.515	ppbv#		97
9) Chloroethane	1.927	64	2988	0.489	ppbv		97
10) Ethanol	2.011	45	3916	0.649	ppbv#		91
12) Acetone	2.206	43	18015	0.665	ppbv		98
13) Trichlorofluoromethane	2.240	101	34225	0.574	ppbv		98
14) Isopropylalcohol	2.350	45	12695	0.590	ppbv#		83
15) Acrylonitrile	2.376	53	3987	0.515	ppbv		92
16) 1,1-Dichloroethene	2.528	61	13924	0.524	ppbv		91
17) Methylene Chloride	2.579	49	12310	0.627	ppbv#		86
20) Carbon Disulfide	2.723	76	20690	0.528	ppbv		98
21) Trichlorotrifluoroethane	2.723	101	20565	0.542	ppbv		88
22) Trans-1,2-Dichloroethene	3.091	61	10848	0.498	ppbv		91
23) 1,1-Dichloroethane	3.224	63	14867	0.545	ppbv		97
24) Methyl tert-butyl ethe...	3.358	73	21080	0.538	ppbv		97
25) Methyl Ethyl Ketone	3.558	43	12688	0.550	ppbv		96
26) Cis-1,2-Dichloroethene	3.818	61	10733	0.497	ppbv		88
27) Hexane	4.025	57	8388	0.521	ppbv		91
28) Chloroform	4.065	83	22078	0.546	ppbv		95
29) Ethyl acetate	4.111	43	13069	0.483	ppbv		98
30) Tetrahydrofuran	4.505	42	5003	0.480	ppbv		90
31) 1,2-Dichloroethane	4.768	62	16222	0.530	ppbv#		89
32) 1,1,1-Trichloroethane	5.035	97	23643	0.513	ppbv		98
33) Benzene	5.519	78	21128	0.499	ppbv		99
34) Carbon Tetrachloride	5.660	117	26631	0.512	ppbv		99
35) Cyclohexane	5.786	56	7669	0.456	ppbv		97
37) 1,2-dichloropropane	6.299	63	5641	0.515	ppbv		91
38) Bromodichloromethane	6.473	83	22913	0.515	ppbv		96
39) Trichloroethene	6.520	130	10849	0.493	ppbv#		86
41) 1,4-Dioxane	6.667	88	4482	0.454	ppbv#		48
43) Heptane	6.847	71	5684	0.486	ppbv#		95
44) cis-1,3-Dichloropropene	7.247	75	12315	0.439	ppbv		96
45) 4-Methyl-2-pentanone(M...	7.387	43	13578	0.467	ppbv#		95
46) trans-1,3-Dichloropropene	7.661	75	12331	0.409	ppbv		96
47) 1,1,2-Trichloroethane	7.771	97	10935	0.532	ppbv		99
48) Toluene	7.970	91	25882	0.499	ppbv		96
49) Dibromochloromethane	8.251	129	23152	0.478	ppbv		99

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_07.D
Acq On : 11 Apr 2017 9:51 pm
Operator : Keith
Client ID : ICAL 0.5
Lab ID : 0.5ppb
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 17 08:55:03 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:35 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.279	43	11760	0.419	ppbv	95
51) 1,2-Dibromoethane(EDB)	8.423	107	18395	0.483	ppbv	99
52) Tetrachloroethene	8.773	166	15292	0.493	ppbv#	88
54) 1,1,1,2-Tetrachloroethane	9.238	131	14066	0.613	ppbv	96
55) Chlorobenzene	9.245	112	22552	0.588	ppbv#	71
56) Ethylbenzene	9.503	91	35027	0.585	ppbv	96
57) m,p-Xylene	9.624	91	62711	1.195	ppbv	90
58) Bromoform	9.624	173	22597	0.557	ppbv	100
59) Styrene	9.821	104	16272	0.491	ppbv	93
60) 1,1,2,2-Tetrachloroethane	9.874	83	23785	0.646	ppbv	95
61) o-Xylene	9.882	91	29703	0.614	ppbv	92
64) Isopropylbenzene	10.208	105	38097	0.606	ppbv	97
66) 4-Ethyltoluene	10.546	105	39007	0.572	ppbv	95
67) 1,3,5-Trimethylbenzene	10.584	105	35491	0.600	ppbv	90
68) 1,2,4-Trimethylbenzene	10.784	105	34159	0.572	ppbv#	89
70) Benzyl chloride	10.843	91	22636	0.456	ppbv#	90
71) 1,3-Dichlorobenzene	10.848	146	22752	0.564	ppbv#	95
72) 1,4-Dichlorobenzene	10.886	146	20199	0.520	ppbv#	93
73) sec-Butylbenzene	10.919	105	48244	0.605	ppbv#	92
74) 4-Isopropyltoluene	11.000	119	42509	0.568	ppbv#	89
75) 1,2-Dichlorobenzene	11.049	146	22191	0.574	ppbv#	95
76) n-Butylbenzene	11.200	91	34713	0.527	ppbv#	91
77) 1,2,4-Trichlorobenzene	11.889	180	8076	0.339	ppbv	98
79) Hexachlorobutadiene	12.118	225	21373	0.591	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.658	85	27578	0.668	ppbv	90
82] Vinyl Chloride(sim)	1.698	62	6876	0.609	ppbv	95
83] Bromomethane(sim)	1.853	94	9908	0.559	ug/l	100
84] Trichlorofluoromethane...	2.240	101	34143	0.559	ppbv	98
85] Trans-1,2-Dichloroethe...	3.094	61	12263	0.580	ppbv	92
86] 1,1-Dichloroethene(sim)	2.528	61	13924	0.582	ppbv	91
87] 1,1-Dichloroethane(sim)	3.221	63	16235	0.636	ppbv	100
88] Cis-1,2-Dichloroethene...	3.818	61	10733	0.615	ppbv	88
89] 1,2-Dichloroethane(sim)	4.764	62	16547	0.586	ppbv	95
90] 1,1,1-Trichloroethane(...	5.035	97	23643	0.607	ppbv#	98
91] Carbon Tetrachloride(sim)	5.663	117	28264	0.594	ppbv	100
92] Trichlorotrifluoroetha...	2.723	101	20565	0.569	ppbv	100
94] 1,2-dichloropropane(sim)	6.299	63	5641	0.621	ppbv	91
95] Bromodichloromethane(sim)	6.476	83	24470	0.661	ppbv	96
96] Trichloroethene(sim)	6.520	130	10848	0.632	ppbv#	91
97] 1,4-Dioxane(sim)	6.656	88	5282	0.565	ppbv#	71
98] cis-1,3-Dichloropropen...	7.247	75	12315	0.632	ppbv	96
99] 1,1,2-Trichloroethane(...	7.767	97	12117	0.598	ppbv	98
100] Dibromochloromethane(sim)	8.251	129	23152	0.567	ppbv	100
101] 1,2-Dibromoethane(EDB)...	8.426	107	20592	0.606	ppbv	96
102] Tetrachloroethene(sim)	8.773	166	15196	0.662	ppbv	88
104] Bromoform(sim)	9.624	173	22515	0.668	ppbv	100
105] 1,1,1,2-Tetrachloroeth...	9.240	131	15757	0.649	ppbv	99
106] m,p-Xylene(sim)	9.624	91	62711	1.294	ppbv#	90
107] 1,1,2,2-Tetrachloroeth...	9.877	83	26380	0.613	ppbv	95
110] Benzyl chloride(sim)	10.843	91	22636	0.515	ppbv	90
111] 1,3-Dichlorobenzene(sim)	10.851	146	25714	0.580	ppbv#	94
112] 1,4-Dichlorobenzene(sim)	10.886	146	20199	0.544	ppbv	93
113] sec-Butylbenzene(sim)	10.916	105	51766	0.627	ppbv	92
114] 4-Isopropyltoluene(sim)	11.000	119	42509	0.618	ppbv#	89
115] 1,2-Dichlorobenzene(sim)	11.051	146	25612	0.547	ppbv	94

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_07.D
Acq On : 11 Apr 2017 9:51 pm
Operator : Keith
Client ID : ICAL 0.5
Lab ID : 0.5ppb
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 17 08:55:03 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:35 2017
Response via : Initial Calibration

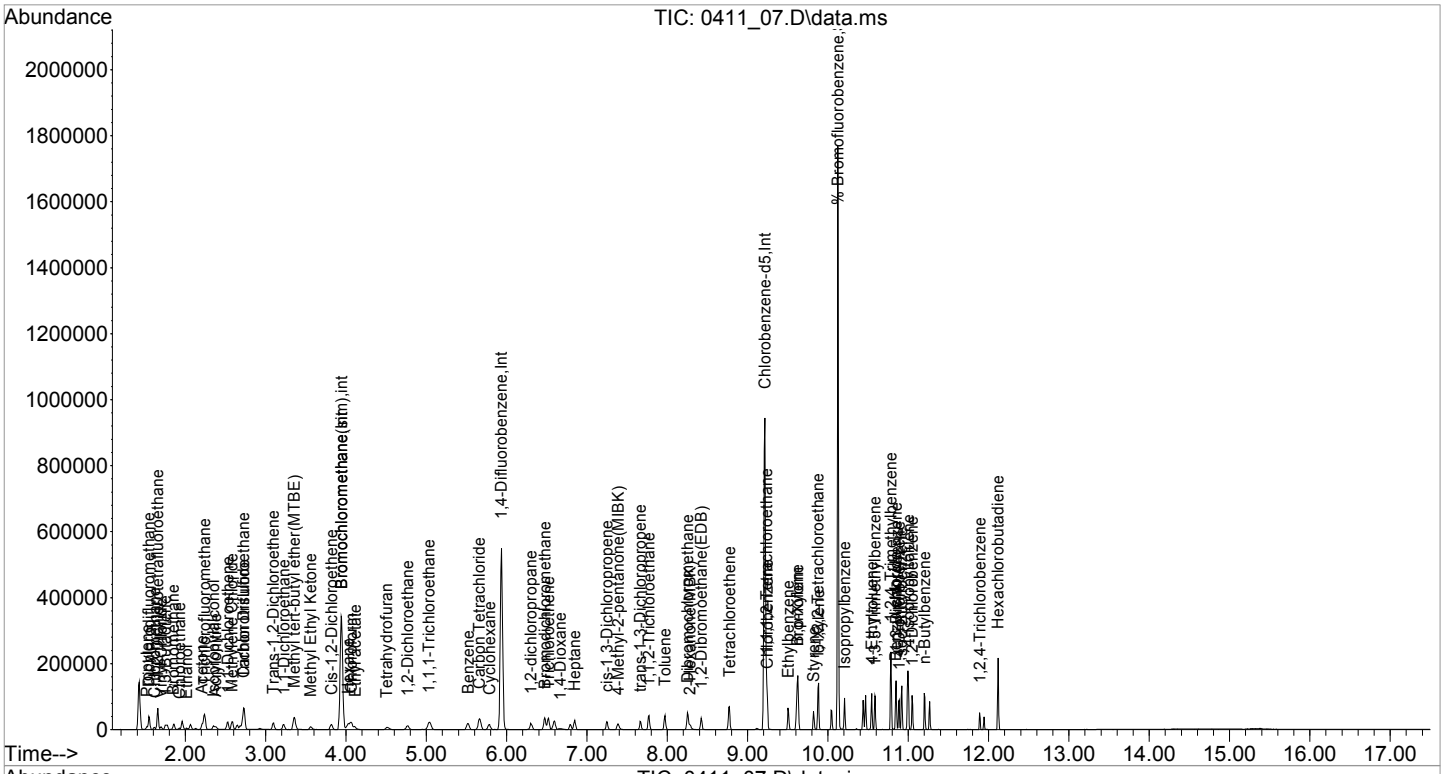
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	34713	0.589	ppbv	91
117] 1,2,4-Trichlorobenzene...	11.892	180	9588	0.483	ppbv	96
119] Hexachlorobutadiene(sim)	12.121	225	23768	0.553	ppbv	98

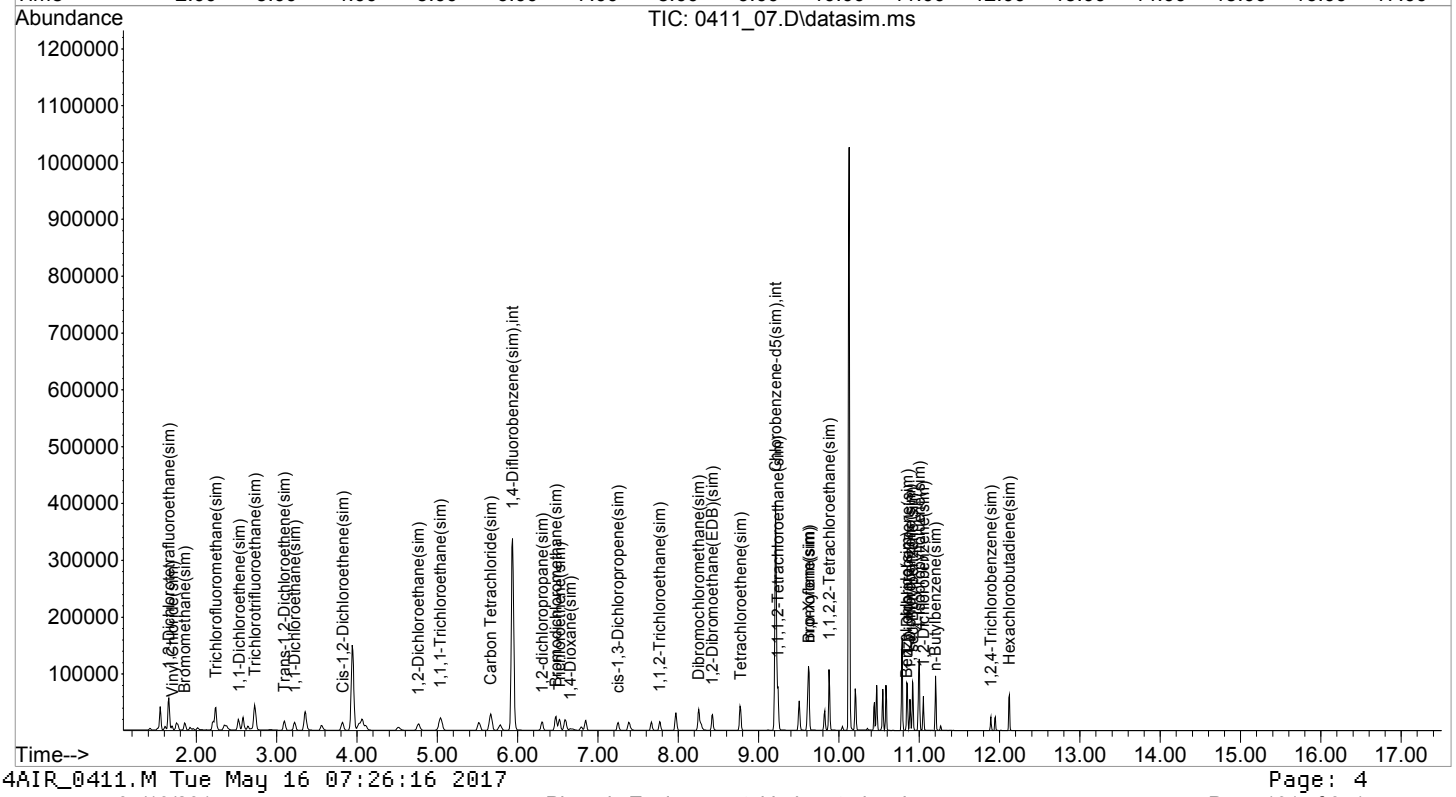
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_07.D
Acq On : 11 Apr 2017 9:51 pm
Operator : Keith
Client ID : ICAL 0.5
Lab ID : 0.5ppb
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 17 08:55:03 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:35 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_08.D
Acq On : 11 Apr 2017 10:23 pm
Operator : Keith
Client ID : ICAL 1
Lab ID : 1 ppb
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 17 08:52:11 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:54 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	138131	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	461008	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	247752	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	138131	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	505840	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	263421	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.124	95	337176	10.409	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.10%				
Target Compounds							Qvalue
2) Propylene	1.520	41	6223	0.801	ppbv		92
3) Dichlorodifluoromethane	1.554	85	48226	0.881	ppbv		99
4) Chloromethane	1.613	52	2935	0.807	ppbv	#	85
5) 1,2-Dichlorotetrafluor...	1.655	85	39425	0.885	ppbv		91
6) Vinyl Chloride	1.698	62	11693	0.860	ppbv		98
7) 1,3-Butadiene	1.749	54	7433	0.890	ppbv	#	89
8) Bromomethane	1.859	94	15693	0.911	ppbv	#	96
9) Chloroethane	1.927	64	5862	0.984	ppbv		97
10) Ethanol	2.020	45	5334	0.868	ppbv		96
12) Acetone	2.206	43	22216	0.801	ppbv		97
13) Trichlorofluoromethane	2.240	101	54896	0.923	ppbv		97
14) Isopropylalcohol	2.350	45	17608	0.816	ppbv	#	84
15) Acrylonitrile	2.376	53	6561	0.864	ppbv		96
16) 1,1-Dichloroethene	2.528	61	25232	0.965	ppbv		90
17) Methylene Chloride	2.579	49	19621	0.987	ppbv		88
20) Carbon Disulfide	2.723	76	35902	0.931	ppbv		99
21) Trichlorotrifluoroethane	2.731	101	35381	0.943	ppbv	#	85
22) Trans-1,2-Dichloroethene	3.098	61	20254	0.951	ppbv		89
23) 1,1-Dichloroethane	3.224	63	25665	0.951	ppbv		97
24) Methyl tert-butyl ethe...	3.344	73	29502	0.762	ppbv		97
25) Methyl Ethyl Ketone	3.558	43	18759	0.821	ppbv		97
26) Cis-1,2-Dichloroethene	3.818	61	18852	0.894	ppbv		88
27) Hexane	4.025	57	14835	0.938	ppbv		96
28) Chloroform	4.065	83	38162	0.953	ppbv		97
29) Ethyl acetate	4.105	43	19325	0.734	ppbv		99
30) Tetrahydrofuran	4.511	42	7498	0.741	ppbv		93
31) 1,2-Dichloroethane	4.768	62	29108	0.965	ppbv	#	92
32) 1,1,1-Trichloroethane	5.042	97	41802	0.925	ppbv		99
33) Benzene	5.519	78	38210	0.924	ppbv		98
34) Carbon Tetrachloride	5.667	117	47408	0.929	ppbv		98
35) Cyclohexane	5.779	56	13626	0.840	ppbv		93
37) 1,2-dichloropropane	6.299	63	9325	0.867	ppbv	#	84
38) Bromodichloromethane	6.473	83	39746	0.909	ppbv		94
39) Trichloroethene	6.520	130	19012	0.885	ppbv	#	88
41) 1,4-Dioxane	6.640	88	7476	0.787	ppbv	#	34
43) Heptane	6.847	71	9996	0.878	ppbv	#	96
44) cis-1,3-Dichloropropene	7.247	75	21932	0.814	ppbv		93
45) 4-Methyl-2-pentanone(M...	7.380	43	21206	0.753	ppbv	#	97
46) trans-1,3-Dichloropropene	7.668	75	23530	0.820	ppbv		93
47) 1,1,2-Trichloroethane	7.771	97	16237	0.801	ppbv		98
48) Toluene	7.970	91	42896	0.846	ppbv		96
49) Dibromochloromethane	8.251	129	38481	0.818	ppbv		99

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_08.D
Acq On : 11 Apr 2017 10:23 pm
Operator : Keith
Client ID : ICAL 1
Lab ID : 1 ppb
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 17 08:52:11 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:54 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.279	43	22418	0.836	ppbv	92
51) 1,2-Dibromoethane(EDB)	8.423	107	33090	0.893	ppbv	96
52) Tetrachloroethene	8.772	166	25592	0.846	ppbv#	89
54) 1,1,1,2-Tetrachloroethane	9.237	131	21176	0.833	ppbv	99
55) Chlorobenzene	9.245	112	39573	0.938	ppbv#	82
56) Ethylbenzene	9.503	91	55107	0.837	ppbv	96
57) m,p-Xylene	9.616	91	104920	1.813	ppbv	90
58) Bromoform	9.624	173	38084	0.861	ppbv	100
59) Styrene	9.821	104	31260	0.881	ppbv	94
60) 1,1,2,2-Tetrachloroethane	9.874	83	40850	0.993	ppbv	92
61) o-Xylene	9.882	91	49758	0.928	ppbv	91
64) Isopropylbenzene	10.208	105	64519	0.929	ppbv#	95
66) 4-Ethyltoluene	10.546	105	73005	0.977	ppbv	94
67) 1,3,5-Trimethylbenzene	10.583	105	68057	1.042	ppbv	91
68) 1,2,4-Trimethylbenzene	10.783	105	64495	0.986	ppbv	88
70) Benzyl chloride	10.843	91	46646	0.887	ppbv#	91
71) 1,3-Dichlorobenzene	10.848	146	42400	0.962	ppbv#	95
72) 1,4-Dichlorobenzene	10.881	146	41005	0.978	ppbv#	95
73) sec-Butylbenzene	10.919	105	88954	1.009	ppbv#	92
74) 4-Isopropyltoluene	11.000	119	82235	1.004	ppbv#	89
75) 1,2-Dichlorobenzene	11.048	146	40755	0.962	ppbv#	94
76) n-Butylbenzene	11.200	91	69479	0.975	ppbv#	90
77) 1,2,4-Trichlorobenzene	11.889	180	17229	0.712	ppbv#	97
79) Hexachlorobutadiene	12.118	225	39479	0.992	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.658	85	42428	1.004	ppbv	90
82] Vinyl Chloride(sim)	1.698	62	11693	1.028	ppbv	98
83] Bromomethane(sim)	1.853	94	17298	0.982	ug/l	99
84] Trichlorofluoromethane...	2.240	101	54896	0.904	ppbv	98
85] Trans-1,2-Dichloroethe...	3.094	61	21965	1.035	ppbv	93
86] 1,1-Dichloroethene(sim)	2.528	61	25232	1.054	ppbv	90
87] 1,1-Dichloroethane(sim)	3.221	63	28360	1.094	ppbv	100
88] Cis-1,2-Dichloroethene...	3.818	61	18852	1.070	ppbv	88
89] 1,2-Dichloroethane(sim)	4.763	62	28491	1.008	ppbv	95
90] 1,1,1-Trichloroethane(...	5.042	97	41802	1.066	ppbv#	99
91] Carbon Tetrachloride(sim)	5.663	117	50785	1.063	ppbv	100
92] Trichlorotrifluoroetha...	2.731	101	35381	0.982	ppbv	100
94] 1,2-dichloropropane(sim)	6.299	63	9325	1.002	ppbv#	84
95] Bromodichloromethane(sim)	6.476	83	42183	1.098	ppbv	96
96] Trichloroethene(sim)	6.520	130	19012	1.085	ppbv#	90
97] 1,4-Dioxane(sim)	6.636	88	8436	0.897	ppbv#	75
98] cis-1,3-Dichloropropen...	7.247	75	21932	1.095	ppbv	93
99] 1,1,2-Trichloroethane(...	7.767	97	18434	0.881	ppbv	99
100] Dibromochloromethane(sim)	8.251	129	38481	0.933	ppbv	99
101] 1,2-Dibromoethane(EDB)...	8.426	107	36801	1.068	ppbv	96
102] Tetrachloroethene(sim)	8.772	166	25592	1.075	ppbv	89
104] Bromoform(sim)	9.624	173	37932	1.003	ppbv	100
105] 1,1,1,2-Tetrachloroeth...	9.240	131	23113	0.854	ppbv	99
106] m,p-Xylene(sim)	9.616	91	104920	1.962	ppbv#	90
107] 1,1,2,2-Tetrachloroeth...	9.877	83	44781	0.954	ppbv	96
110] Benzyl chloride(sim)	10.843	91	46646	1.003	ppbv	91
111] 1,3-Dichlorobenzene(sim)	10.851	146	48628	1.016	ppbv#	94
112] 1,4-Dichlorobenzene(sim)	10.881	146	41005	1.035	ppbv	95
113] sec-Butylbenzene(sim)	10.916	105	95876	1.065	ppbv	92
114] 4-Isopropyltoluene(sim)	11.000	119	82235	1.099	ppbv#	89
115] 1,2-Dichlorobenzene(sim)	11.051	146	46175	0.925	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_08.D
Acq On : 11 Apr 2017 10:23 pm
Operator : Keith
Client ID : ICAL 1
Lab ID : 1 ppb
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 17 08:52:11 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:54 2017
Response via : Initial Calibration

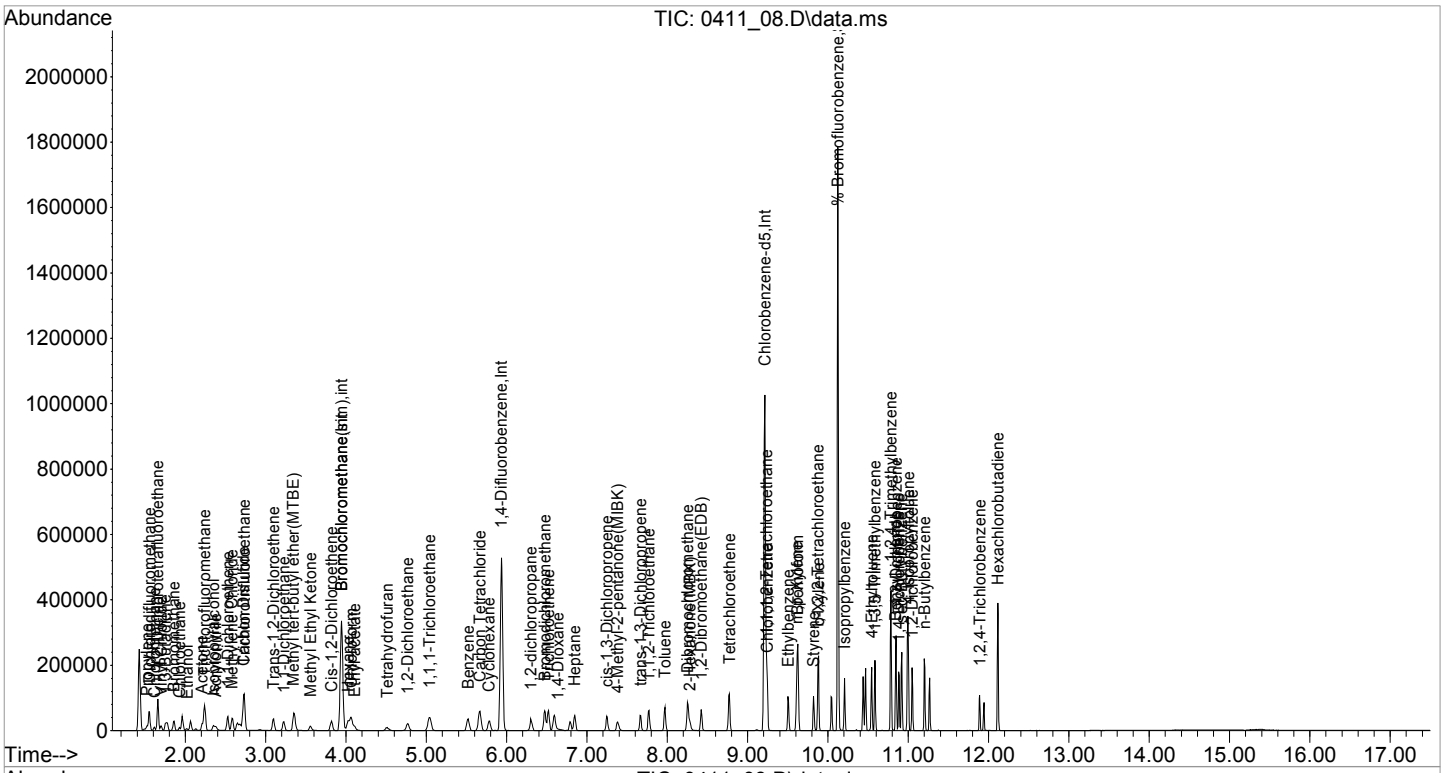
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	69479	1.089	ppbv	90
117] 1,2,4-Trichlorobenzene...	11.887	180	20444	0.986	ppbv	95
119] Hexachlorobutadiene(sim)	12.116	225	44285	0.962	ppbv	98

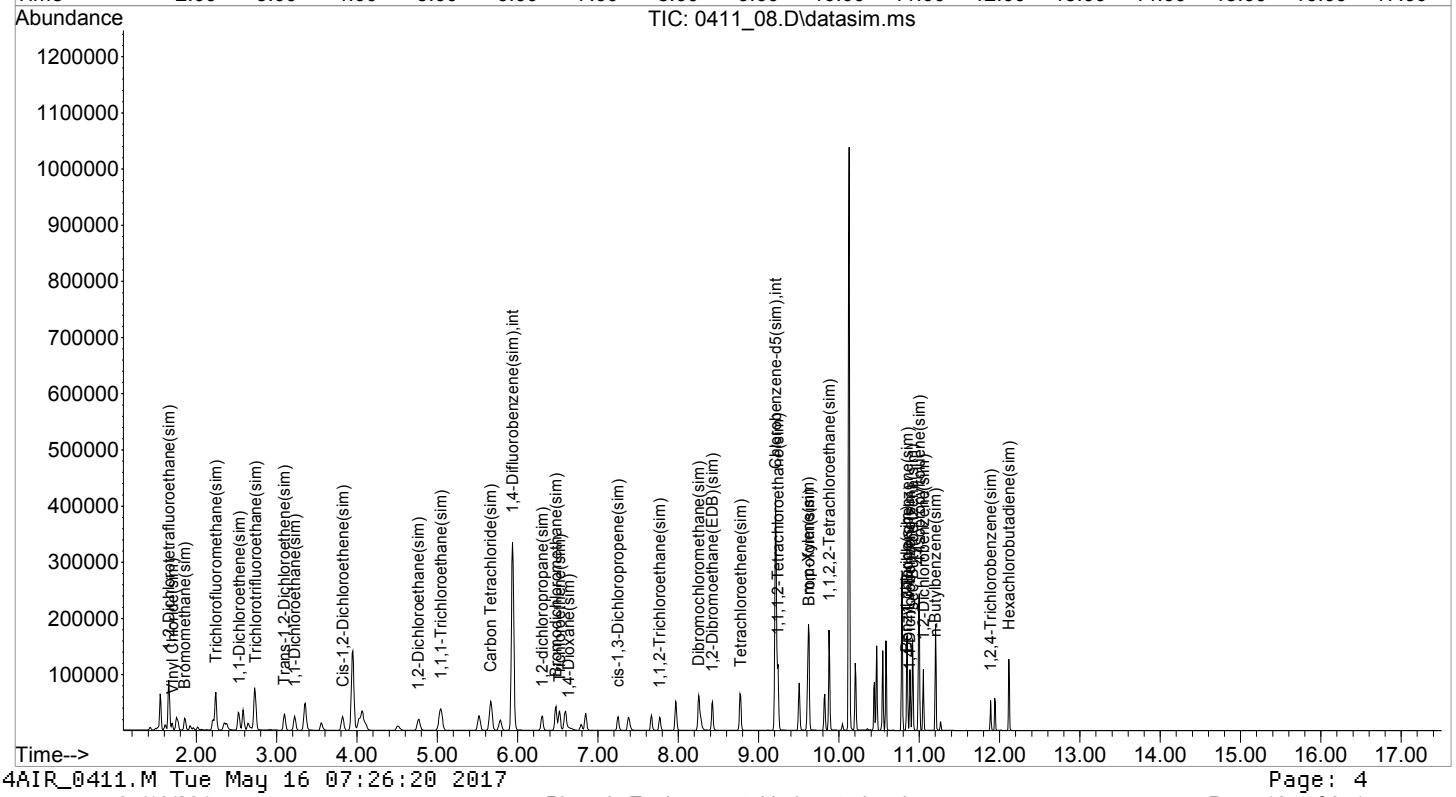
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_08.D
Acq On : 11 Apr 2017 10:23 pm
Operator : Keith
Client ID : ICAL 1
Lab ID : 1 ppb
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 17 08:52:11 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:51:54 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_09.D
Acq On : 11 Apr 2017 10:58 pm
Operator : Keith
Client ID : ICAL 2.5
Lab ID : 2.5ppb
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 03 15:47:23 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	135568	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.941	114	463739	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	248307	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	135568	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	507633	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	261360	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.124	95	325868	9.986	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.90%				
Target Compounds							Qvalue
2) Propylene	1.520	41	19057	2.562	ppbv		93
3) Dichlorodifluoromethane	1.545	85	143722	2.717	ppbv		99
4) Chloromethane	1.613	52	9251	2.657	ppbv	#	81
5) 1,2-Dichlorotetrafluor...	1.656	85	122618	2.845	ppbv		92
6) Vinyl Chloride	1.698	62	35866	2.735	ppbv		100
7) 1,3-Butadiene	1.749	54	22521	2.785	ppbv		94
8) Bromomethane	1.859	94	44829	2.681	ppbv	#	96
9) Chloroethane	1.927	64	15385	2.638	ppbv		98
10) Ethanol	2.011	45	13088	2.599	ppbv	#	95
12) Acetone	2.198	43	61817	2.656	ppbv		97
13) Trichlorofluoromethane	2.240	101	159655	2.761	ppbv		99
14) Isopropylalcohol	2.333	45	56973	2.754	ppbv	#	89
15) Acrylonitrile	2.376	53	19589	2.673	ppbv		94
16) 1,1-Dichloroethene	2.528	61	66810	2.615	ppbv		93
17) Methylene Chloride	2.579	49	45181	2.606	ppbv		87
20) Carbon Disulfide	2.723	76	100604	2.681	ppbv		99
21) Trichlorotrifluoroethane	2.731	101	98979	2.707	ppbv		87
22) Trans-1,2-Dichloroethene	3.098	61	55972	2.695	ppbv		90
23) 1,1-Dichloroethane	3.224	63	69700	2.647	ppbv		99
24) Methyl tert-butyl ethe...	3.324	73	105682	2.867	ppbv		96
25) Methyl Ethyl Ketone	3.538	43	62956	2.871	ppbv		96
26) Cis-1,2-Dichloroethene	3.818	61	54671	2.677	ppbv		89
27) Hexane	4.025	57	38754	2.516	ppbv		93
28) Chloroform	4.065	83	104900	2.686	ppbv		97
29) Ethyl acetate	4.085	43	65314	2.629	ppbv		98
30) Tetrahydrofuran	4.471	42	26784	2.787	ppbv	#	84
31) 1,2-Dichloroethane	4.768	62	78967	2.680	ppbv	#	95
32) 1,1,1-Trichloroethane	5.042	97	116964	2.663	ppbv		99
33) Benzene	5.519	78	103746	2.580	ppbv		98
34) Carbon Tetrachloride	5.667	117	130748	2.634	ppbv		99
35) Cyclohexane	5.779	56	41494	2.658	ppbv		95
37) 1,2-dichloropropane	6.299	63	26546	2.494	ppbv	#	86
38) Bromodichloromethane	6.473	83	112785	2.594	ppbv		97
39) Trichloroethene	6.520	130	52747	2.476	ppbv	#	88
41) 1,4-Dioxane	6.593	88	25449	2.746	ppbv		99
43) Heptane	6.847	71	30025	2.661	ppbv	#	95
44) cis-1,3-Dichloropropene	7.247	75	68408	2.583	ppbv		94
45) 4-Methyl-2-pentanone(M...	7.360	43	76529	2.787	ppbv		98
46) trans-1,3-Dichloropropene	7.668	75	71637	2.538	ppbv		95
47) 1,1,2-Trichloroethane	7.771	97	52715	2.652	ppbv		99
48) Toluene	7.970	91	133487	2.667	ppbv		97
49) Dibromochloromethane	8.251	129	127398	2.755	ppbv		98

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_09.D
Acq On : 11 Apr 2017 10:58 pm
Operator : Keith
Client ID : ICAL 2.5
Lab ID : 2.5ppb
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 03 15:47:23 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.265	43	75539	2.860	ppbv#	92
51) 1,2-Dibromoethane(EDB)	8.423	107	97975	2.664	ppbv	94
52) Tetrachloroethene	8.773	166	77304	2.590	ppbv#	89
54) 1,1,1,2-Tetrachloroethane	9.237	131	74254	2.975	ppbv	99
55) Chlorobenzene	9.245	112	118262	2.820	ppbv	90
56) Ethylbenzene	9.503	91	194876	3.014	ppbv	96
57) m,p-Xylene	9.617	91	344506	6.151	ppbv	91
58) Bromoform	9.624	173	123041	2.825	ppbv	100
59) Styrene	9.821	104	99027	2.828	ppbv	94
60) 1,1,2,2-Tetrachloroethane	9.874	83	121156	2.941	ppbv	96
61) o-Xylene	9.882	91	164973	3.097	ppbv	92
64) Isopropylbenzene	10.208	105	202267	2.931	ppbv#	96
66) 4-Ethyltoluene	10.546	105	215409	2.884	ppbv	94
67) 1,3,5-Trimethylbenzene	10.583	105	186231	2.829	ppbv	92
68) 1,2,4-Trimethylbenzene	10.784	105	190188	2.906	ppbv#	89
70) Benzyl chloride	10.843	91	148128	2.852	ppbv#	91
71) 1,3-Dichlorobenzene	10.848	146	118752	2.701	ppbv#	94
72) 1,4-Dichlorobenzene	10.886	146	118428	2.827	ppbv#	95
73) sec-Butylbenzene	10.919	105	249962	2.826	ppbv	93
74) 4-Isopropyltoluene	11.000	119	236286	2.876	ppbv#	90
75) 1,2-Dichlorobenzene	11.049	146	113404	2.682	ppbv#	95
76) n-Butylbenzene	11.200	91	209078	2.937	ppbv#	92
77) 1,2,4-Trichlorobenzene	11.889	180	58187	2.502	ppbv#	96
79) Hexachlorobutadiene	12.118	225	106010	2.659	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.658	85	132486	3.192	ppbv	90
82] Vinyl Chloride(sim)	1.698	62	35866	3.201	ppbv	100
83] Bromomethane(sim)	1.853	94	48398	2.805	ug/l	99
84] Trichlorofluoromethane...	2.240	101	159552	2.709	ppbv	99
85] Trans-1,2-Dichloroethe...	3.094	61	60622	2.896	ppbv	93
86] 1,1-Dichloroethene(sim)	2.528	61	66810	2.826	ppbv	93
87] 1,1-Dichloroethane(sim)	3.221	63	75639	2.939	ppbv	100
88] Cis-1,2-Dichloroethene...	3.818	61	54671	3.134	ppbv	89
89] 1,2-Dichloroethane(sim)	4.771	62	78020	2.809	ppbv#	95
90] 1,1,1-Trichloroethane(...	5.042	97	116964	3.015	ppbv#	99
91] Carbon Tetrachloride(sim)	5.670	117	139448	2.951	ppbv	100
92] Trichlorotrifluoroetha...	2.731	101	98979	2.805	ppbv	98
94] 1,2-dichloropropane(sim)	6.299	63	26546	2.842	ppbv#	86
95] Bromodichloromethane(sim)	6.476	83	121744	3.115	ppbv	96
96] Trichloroethene(sim)	6.520	130	52748	2.968	ppbv#	90
97] 1,4-Dioxane(sim)	6.596	88	27568	2.965	ppbv	99
98] cis-1,3-Dichloropropen...	7.247	75	68408	3.068	ppbv	94
99] 1,1,2-Trichloroethane(...	7.767	97	58180	2.837	ppbv	98
100] Dibromochloromethane(sim)	8.251	129	127398	3.112	ppbv	99
101] 1,2-Dibromoethane(EDB)...	8.426	107	107164	3.073	ppbv	96
102] Tetrachloroethene(sim)	8.773	166	77304	3.208	ppbv	89
104] Bromoform(sim)	9.624	173	123041	3.278	ppbv	100
105] 1,1,1,2-Tetrachloroeth...	9.240	131	82084	3.134	ppbv	100
106] m,p-Xylene(sim)	9.617	91	344512	6.512	ppbv#	91
107] 1,1,2,2-Tetrachloroeth...	9.877	83	132240	2.858	ppbv	96
110] Benzyl chloride(sim)	10.843	91	148128	3.208	ppbv	91
111] 1,3-Dichlorobenzene(sim)	10.851	146	136915	2.877	ppbv#	94
112] 1,4-Dichlorobenzene(sim)	10.886	146	118428	2.997	ppbv	95
113] sec-Butylbenzene(sim)	10.916	105	269337	2.992	ppbv	92
114] 4-Isopropyltoluene(sim)	11.000	119	236286	3.144	ppbv#	90
115] 1,2-Dichlorobenzene(sim)	11.051	146	129529	2.640	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_09.D
Acq On : 11 Apr 2017 10:58 pm
Operator : Keith
Client ID : ICAL 2.5
Lab ID : 2.5ppb
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 03 15:47:23 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

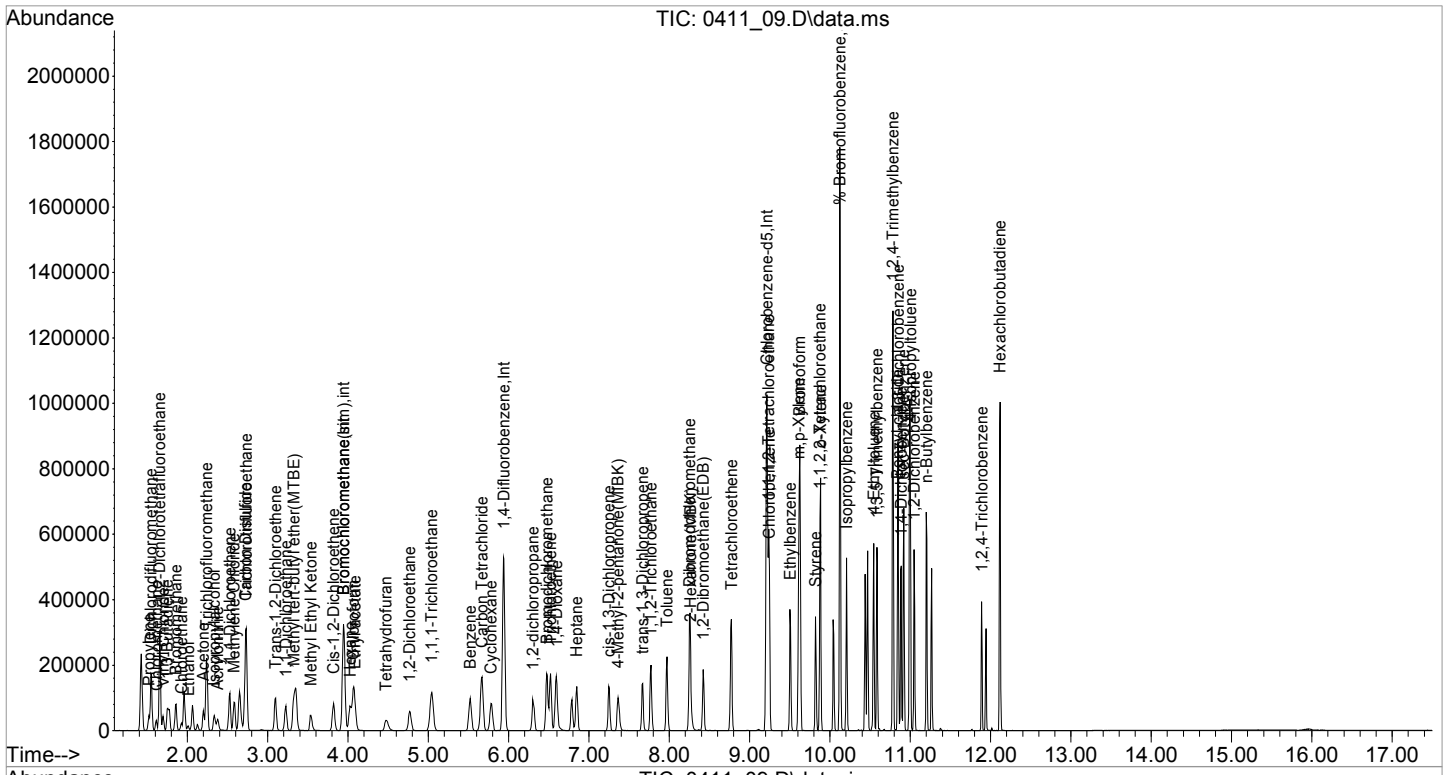
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	209078	3.261	ppbv	92
117] 1,2,4-Trichlorobenzene...	11.887	180	66909	3.260	ppbv	95
119] Hexachlorobutadiene(sim)	12.116	225	116063	2.556	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_09.D
Acq On : 11 Apr 2017 10:58 pm
Operator : Keith
Client ID : ICAL 2.5
Lab ID : 2.5ppb
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 03 15:47:23 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_10.D
Acq On : 11 Apr 2017 11:28 pm
Operator : Keith
Client ID : ICAL 5
Lab ID : 5ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 17 08:46:14 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:03 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.958	130	138356	10.000	ng		0.01
36) 1,4-Difluorobenzene	5.948	114	457295	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	241623	10.000	ng		0.00
80) Bromochloromethane(sim)	3.958	130	138356	10.000	ng		0.01
93) 1,4-Difluorobenzene(sim)	5.944	114	501722	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	255346	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.124	95	339622	10.710	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.10%				
Target Compounds							Qvalue
2) Propylene	1.537	41	31266	4.019	ppbv		93
3) Dichlorodifluoromethane	1.562	85	217785	3.712	ppbv		99
4) Chloromethane	1.630	52	15239	4.035	ppbv#		78
5) 1,2-Dichlorotetrafluor...	1.672	85	176939	3.535	ppbv		93
6) Vinyl Chloride	1.715	62	59584	4.070	ppbv		100
7) 1,3-Butadiene	1.766	54	36964	4.021	ppbv#		95
8) Bromomethane	1.867	94	74354	4.063	ppbv#		97
9) Chloroethane	1.943	64	25148	4.004	ppbv		99
10) Ethanol	2.020	45	18604	3.482	ppbv		96
12) Acetone	2.215	43	82490	3.269	ppbv		97
13) Trichlorofluoromethane	2.257	101	252970	3.881	ppbv		98
14) Isopropylalcohol	2.342	45	87116	3.746	ppbv#		89
15) Acrylonitrile	2.393	53	30810	3.853	ppbv		95
16) 1,1-Dichloroethene	2.537	61	111170	4.076	ppbv		94
17) Methylene Chloride	2.596	49	72014	3.904	ppbv#		79
20) Carbon Disulfide	2.740	76	167779	4.126	ppbv		100
21) Trichlorotrifluoroethane	2.740	101	158729	3.928	ppbv		89
22) Trans-1,2-Dichloroethene	3.111	61	85581	3.745	ppbv		99
23) 1,1-Dichloroethane	3.238	63	107013	3.761	ppbv		98
24) Methyl tert-butyl ethe...	3.344	73	140784	3.263	ppbv		92
25) Methyl Ethyl Ketone	3.551	43	78414	3.051	ppbv#		92
26) Cis-1,2-Dichloroethene	3.838	61	89560	4.013	ppbv		90
27) Hexane	4.038	57	66039	4.174	ppbv		94
28) Chloroform	4.085	83	173570	4.053	ppbv		97
29) Ethyl acetate	4.105	43	92012	3.451	ppbv#		97
30) Tetrahydrofuran	4.491	42	35864	3.280	ppbv#		86
31) 1,2-Dichloroethane	4.789	62	122792	3.809	ppbv#		94
32) 1,1,1-Trichloroethane	5.056	97	194985	4.084	ppbv		99
33) Benzene	5.533	78	175097	4.134	ppbv		99
34) Carbon Tetrachloride	5.674	117	220249	4.126	ppbv		100
35) Cyclohexane	5.793	56	71255	4.207	ppbv		96
37) 1,2-dichloropropane	6.320	63	44286	4.229	ppbv#		88
38) Bromodichloromethane	6.480	83	186843	4.200	ppbv		96
39) Trichloroethene	6.526	130	89736	4.313	ppbv#		87
41) 1,4-Dioxane	6.593	88	41441	4.128	ppbv		100
43) Heptane	6.853	71	47978	4.051	ppbv#		95
44) cis-1,3-Dichloropropene	7.253	75	114398	4.240	ppbv		94
45) 4-Methyl-2-pentanone(M...	7.367	43	133468	4.421	ppbv		98
46) trans-1,3-Dichloropropene	7.668	75	128801	4.558	ppbv		95
47) 1,1,2-Trichloroethane	7.771	97	83631	4.022	ppbv		98
48) Toluene	7.970	91	209171	3.973	ppbv		96
49) Dibromochloromethane	8.258	129	193262	3.846	ppbv		98

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_10.D
Acq On : 11 Apr 2017 11:28 pm
Operator : Keith
Client ID : ICAL 5
Lab ID : 5ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 17 08:46:14 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:03 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.258	43	132270	4.439	ppbv#	90
51) 1,2-Dibromoethane(EDB)	8.423	107	159441	4.126	ppbv	96
52) Tetrachloroethene	8.772	166	112620	3.693	ppbv#	90
54) 1,1,1,2-Tetrachloroethane	9.237	131	103233	3.572	ppbv	100
55) Chlorobenzene	9.245	112	178005	3.867	ppbv	90
56) Ethylbenzene	9.503	91	273215	3.602	ppbv	96
57) m,p-Xylene	9.616	91	525339	7.835	ppbv	91
58) Bromoform	9.624	173	196243	4.098	ppbv	100
59) Styrene	9.821	104	171649	4.453	ppbv	93
60) 1,1,2,2-Tetrachloroethane	9.874	83	193630	4.106	ppbv	93
61) o-Xylene	9.882	91	238612	3.716	ppbv	92
64) Isopropylbenzene	10.208	105	296713	3.769	ppbv	96
66) 4-Ethyltoluene	10.546	105	359295	4.285	ppbv	95
67) 1,3,5-Trimethylbenzene	10.583	105	313193	4.321	ppbv	92
68) 1,2,4-Trimethylbenzene	10.783	105	334646	4.521	ppbv	90
70) Benzyl chloride	10.843	91	263102	4.563	ppbv#	92
71) 1,3-Dichlorobenzene	10.848	146	205319	4.442	ppbv#	95
72) 1,4-Dichlorobenzene	10.886	146	190868	4.141	ppbv#	95
73) sec-Butylbenzene	10.919	105	434650	4.467	ppbv	93
74) 4-Isopropyltoluene	11.000	119	399805	4.347	ppbv#	90
75) 1,2-Dichlorobenzene	11.048	146	197065	4.464	ppbv#	95
76) n-Butylbenzene	11.200	91	366139	4.499	ppbv#	92
77) 1,2,4-Trichlorobenzene	11.884	180	104597	4.618	ppbv#	97
79) Hexachlorobutadiene	12.113	225	185162	4.487	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.667	85	191856	3.547	ppbv	91
82] Vinyl Chloride(sim)	1.715	62	59584	4.070	ppbv	100
83] Bromomethane(sim)	1.870	94	80304	4.065	ug/l	99
84] Trichlorofluoromethane...	2.257	101	252970	3.884	ppbv	99
85] Trans-1,2-Dichloroethe...	3.114	61	91232	3.687	ppbv	98
86] 1,1-Dichloroethene(sim)	2.537	61	111170	4.076	ppbv	94
87] 1,1-Dichloroethane(sim)	3.241	63	113408	3.673	ppbv	99
88] Cis-1,2-Dichloroethene...	3.838	61	89560	4.013	ppbv	90
89] 1,2-Dichloroethane(sim)	4.785	62	132334	4.151	ppbv#	95
90] 1,1,1-Trichloroethane(...	5.056	97	194985	4.084	ppbv#	99
91] Carbon Tetrachloride(sim)	5.677	117	234313	4.116	ppbv	100
92] Trichlorotrifluoroetha...	2.740	101	158729	3.928	ppbv	100
94] 1,2-dichloropropane(sim)	6.320	63	44286	4.219	ppbv#	88
95] Bromodichloromethane(sim)	6.483	83	202522	4.207	ppbv	96
96] Trichloroethene(sim)	6.526	130	89815	4.306	ppbv#	90
97] 1,4-Dioxane(sim)	6.596	88	45236	4.150	ppbv	100
98] cis-1,3-Dichloropropen...	7.253	75	114398	4.229	ppbv	94
99] 1,1,2-Trichloroethane(...	7.774	97	91377	3.972	ppbv	98
100] Dibromochloromethane(sim)	8.258	129	193207	3.836	ppbv	98
101] 1,2-Dibromoethane(EDB)...	8.426	107	176506	4.167	ppbv	96
102] Tetrachloroethene(sim)	8.772	166	112620	3.685	ppbv	90
104] Bromoform(sim)	9.624	173	196243	4.081	ppbv	100
105] 1,1,1,2-Tetrachloroeth...	9.240	131	112780	3.515	ppbv	100
106] m,p-Xylene(sim)	9.616	91	525280	7.802	ppbv#	91
107] 1,1,2,2-Tetrachloroeth...	9.877	83	212466	4.111	ppbv	96
110] Benzyl chloride(sim)	10.843	91	263102	4.544	ppbv	92
111] 1,3-Dichlorobenzene(sim)	10.851	146	234415	4.381	ppbv#	95
112] 1,4-Dichlorobenzene(sim)	10.886	146	190868	4.124	ppbv	95
113] sec-Butylbenzene(sim)	10.916	105	465132	4.423	ppbv	92
114] 4-Isopropyltoluene(sim)	11.000	119	399805	4.329	ppbv#	90
115] 1,2-Dichlorobenzene(sim)	11.051	146	221378	4.373	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_10.D
Acq On : 11 Apr 2017 11:28 pm
Operator : Keith
Client ID : ICAL 5
Lab ID : 5ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 17 08:46:14 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:03 2017
Response via : Initial Calibration

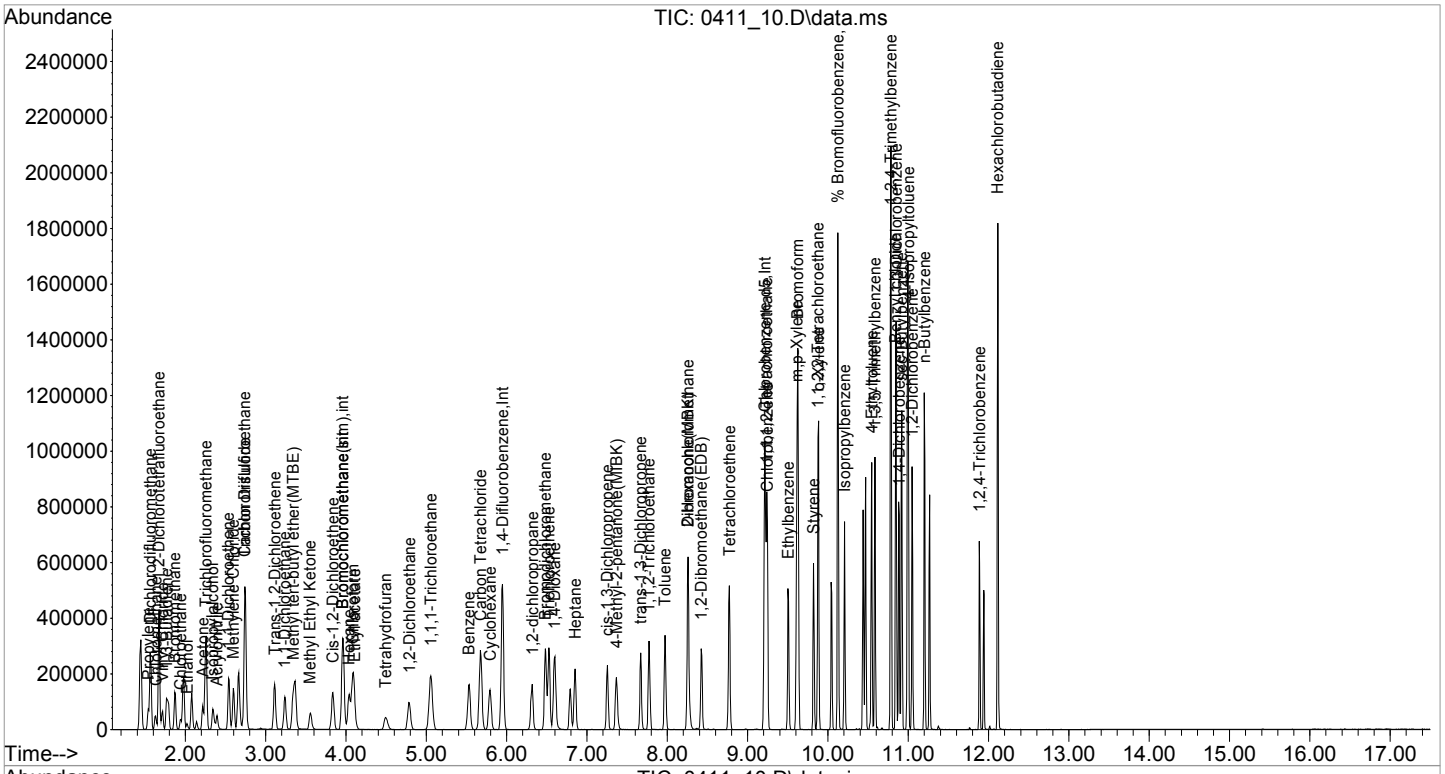
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	366139	4.481	ppbv	92
117] 1,2,4-Trichlorobenzene...	11.887	180	120717	4.616	ppbv	95
119] Hexachlorobutadiene(sim)	12.116	225	202090	4.455	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_10.D
Acq On : 11 Apr 2017 11:28 pm
Operator : Keith
Client ID : ICAL 5
Lab ID : 5ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 17 08:46:14 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:03 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_11.D
Acq On : 12 Apr 2017 12:47 am
Operator : Keith
Client ID : ICAL 10
Lab ID : 10ppb
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 17 08:46:31 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:22 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.951	130	134790	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.941	114	453905	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	272442	10.000	ng		0.00
80) Bromochloromethane(sim)	3.951	130	134790	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.944	114	497538	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.218	82	288112	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	364945	9.857	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.60%				
Target Compounds							Qvalue
2) Propylene	1.520	41	80554	11.785	ppbv		95
3) Dichlorodifluoromethane	1.546	85	549164	11.028	ppbv		99
4) Chloromethane	1.613	52	36839	11.082	ppbv	#	80
5) 1,2-Dichlorotetrafluor...	1.656	85	453366	10.893	ppbv		92
6) Vinyl Chloride	1.698	62	140931	10.894	ppbv		100
7) 1,3-Butadiene	1.749	54	91151	11.282	ppbv		96
8) Bromomethane	1.851	94	178263	11.032	ppbv	#	98
9) Chloroethane	1.927	64	60844	11.044	ppbv		98
10) Ethanol	2.003	45	41582	9.418	ppbv		97
12) Acetone	2.189	43	220272	10.835	ppbv		97
13) Trichlorofluoromethane	2.240	101	564544	10.011	ppbv		99
14) Isopropylalcohol	2.316	45	178206	8.993	ppbv		95
15) Acrylonitrile	2.376	53	79263	11.493	ppbv		94
16) 1,1-Dichloroethene	2.528	61	260626	10.807	ppbv		94
17) Methylene Chloride	2.588	49	154900	9.681	ppbv	#	82
20) Carbon Disulfide	2.723	76	386159	10.681	ppbv		100
21) Trichlorotrifluoroethane	2.732	101	344030	9.789	ppbv		88
22) Trans-1,2-Dichloroethene	3.098	61	218904	11.244	ppbv		91
23) 1,1-Dichloroethane	3.225	63	271206	11.167	ppbv		99
24) Methyl tert-butyl ethe...	3.305	73	396387	11.413	ppbv		95
25) Methyl Ethyl Ketone	3.525	43	227714	11.296	ppbv		94
26) Cis-1,2-Dichloroethene	3.825	61	216565	11.051	ppbv		89
27) Hexane	4.025	57	154237	10.908	ppbv		95
28) Chloroform	4.071	83	387277	10.254	ppbv		97
29) Ethyl acetate	4.071	43	238058	10.845	ppbv		97
30) Tetrahydrofuran	4.445	42	102460	11.617	ppbv	#	85
31) 1,2-Dichloroethane	4.775	62	305876	11.056	ppbv	#	95
32) 1,1,1-Trichloroethane	5.049	97	427289	10.112	ppbv		99
33) Benzene	5.527	78	407077	10.801	ppbv		98
34) Carbon Tetrachloride	5.667	117	492653	10.381	ppbv		100
35) Cyclohexane	5.786	56	165235	10.876	ppbv		95
37) 1,2-dichloropropane	6.299	63	102275	10.662	ppbv	#	88
38) Bromodichloromethane	6.480	83	447102	11.006	ppbv		96
39) Trichloroethene	6.520	130	218730	11.373	ppbv	#	88
41) 1,4-Dioxane	6.567	88	85857	9.440	ppbv		99
43) Heptane	6.847	71	118182	11.107	ppbv	#	95
44) cis-1,3-Dichloropropene	7.254	75	297173	12.009	ppbv		94
45) 4-Methyl-2-pentanone(M...	7.340	43	277992	9.848	ppbv		99
46) trans-1,3-Dichloropropene	7.668	75	341292	12.731	ppbv	#	90
47) 1,1,2-Trichloroethane	7.771	97	209101	11.230	ppbv		98
48) Toluene	7.970	91	535724	11.424	ppbv		97
49) Dibromochloromethane	8.258	129	506570	11.481	ppbv		98

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_11.D
Acq On : 12 Apr 2017 12:47 am
Operator : Keith
Client ID : ICAL 10
Lab ID : 10ppb
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 17 08:46:31 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:22 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.245	43	271875	9.739	ppbv#	90
51) 1,2-Dibromoethane(EDB)	8.423	107	385737	11.019	ppbv	95
52) Tetrachloroethene	8.773	166	310826	11.813	ppbv#	89
54) 1,1,1,2-Tetrachloroethane	9.238	131	284710	10.192	ppbv	100
55) Chlorobenzene	9.245	112	453861	9.862	ppbv	94
56) Ethylbenzene	9.511	91	754645	10.258	ppbv	96
57) m,p-Xylene	9.624	91	1271418	18.859	ppbv	91
58) Bromoform	9.624	173	495706	10.090	ppbv	100
59) Styrene	9.821	104	422235	10.277	ppbv	93
60) 1,1,2,2-Tetrachloroethane	9.882	83	409765	8.463	ppbv	97
61) o-Xylene	9.882	91	562336	8.911	ppbv	93
64) Isopropylbenzene	10.208	105	718040	9.224	ppbv	96
66) 4-Ethyltoluene	10.546	105	828325	9.436	ppbv	95
67) 1,3,5-Trimethylbenzene	10.589	105	711643	9.342	ppbv	93
68) 1,2,4-Trimethylbenzene	10.784	105	723007	9.098	ppbv	91
70) Benzyl chloride	10.849	91	640872	10.308	ppbv#	92
71) 1,3-Dichlorobenzene	10.854	146	488228	9.921	ppbv#	95
72) 1,4-Dichlorobenzene	10.886	146	463106	9.748	ppbv#	96
73) sec-Butylbenzene	10.919	105	944868	9.097	ppbv	94
74) 4-Isopropyltoluene	11.000	119	907039	9.358	ppbv#	90
75) 1,2-Dichlorobenzene	11.054	146	465783	9.888	ppbv#	95
76) n-Butylbenzene	11.205	91	812312	9.319	ppbv#	92
77) 1,2,4-Trichlorobenzene	11.889	180	299281	12.185	ppbv#	96
79) Hexachlorobutadiene	12.118	225	438866	9.942	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.650	85	488167	10.839	ppbv	91
82] Vinyl Chloride(sim)	1.698	62	140931	10.894	ppbv	100
83] Bromomethane(sim)	1.853	94	190307	10.907	ug/l	99
84] Trichlorofluoromethane...	2.240	101	564544	10.015	ppbv	99
85] Trans-1,2-Dichloroethe...	3.101	61	236838	9.823	ppbv	94
86] 1,1-Dichloroethene(sim)	2.528	61	260626	10.807	ppbv	94
87] 1,1-Dichloroethane(sim)	3.228	63	291260	11.164	ppbv	100
88] Cis-1,2-Dichloroethene...	3.825	61	216565	11.051	ppbv	89
89] 1,2-Dichloroethane(sim)	4.778	62	305152	10.737	ppbv#	94
90] 1,1,1-Trichloroethane(...	5.049	97	427289	10.112	ppbv#	99
91] Carbon Tetrachloride(sim)	5.670	117	521261	10.310	ppbv	100
92] Trichlorotrifluoroetha...	2.732	101	344030	9.789	ppbv	99
94] 1,2-dichloropropane(sim)	6.299	63	102275	10.658	ppbv#	88
95] Bromodichloromethane(sim)	6.483	83	479555	10.911	ppbv	96
96] Trichloroethene(sim)	6.520	130	218730	11.364	ppbv#	90
97] 1,4-Dioxane(sim)	6.570	88	91675	9.269	ppbv	97
98] cis-1,3-Dichloropropen...	7.254	75	297173	12.004	ppbv	94
99] 1,1,2-Trichloroethane(...	7.774	97	228334	10.009	ppbv	98
100] Dibromochloromethane(sim)	8.258	129	506570	11.478	ppbv	98
101] 1,2-Dibromoethane(EDB)...	8.426	107	418916	10.879	ppbv	96
102] Tetrachloroethene(sim)	8.773	166	310826	11.808	ppbv	89
104] Bromoform(sim)	9.624	173	495706	9.136	ppbv	100
105] 1,1,1,2-Tetrachloroeth...	9.241	131	310650	10.078	ppbv	100
106] m,p-Xylene(sim)	9.624	91	1271884	18.810	ppbv#	91
107] 1,1,2,2-Tetrachloroeth...	9.877	83	444362	8.363	ppbv	96
110] Benzyl chloride(sim)	10.849	91	641560	10.290	ppbv	92
111] 1,3-Dichlorobenzene(sim)	10.852	146	540223	9.538	ppbv#	95
112] 1,4-Dichlorobenzene(sim)	10.886	146	463098	9.719	ppbv	96
113] sec-Butylbenzene(sim)	10.922	105	1004226	8.982	ppbv	93
114] 4-Isopropyltoluene(sim)	11.000	119	907039	9.331	ppbv#	90
115] 1,2-Dichlorobenzene(sim)	11.052	146	527207	9.847	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_11.D
Acq On : 12 Apr 2017 12:47 am
Operator : Keith
Client ID : ICAL 10
Lab ID : 10ppb
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 17 08:46:31 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:22 2017
Response via : Initial Calibration

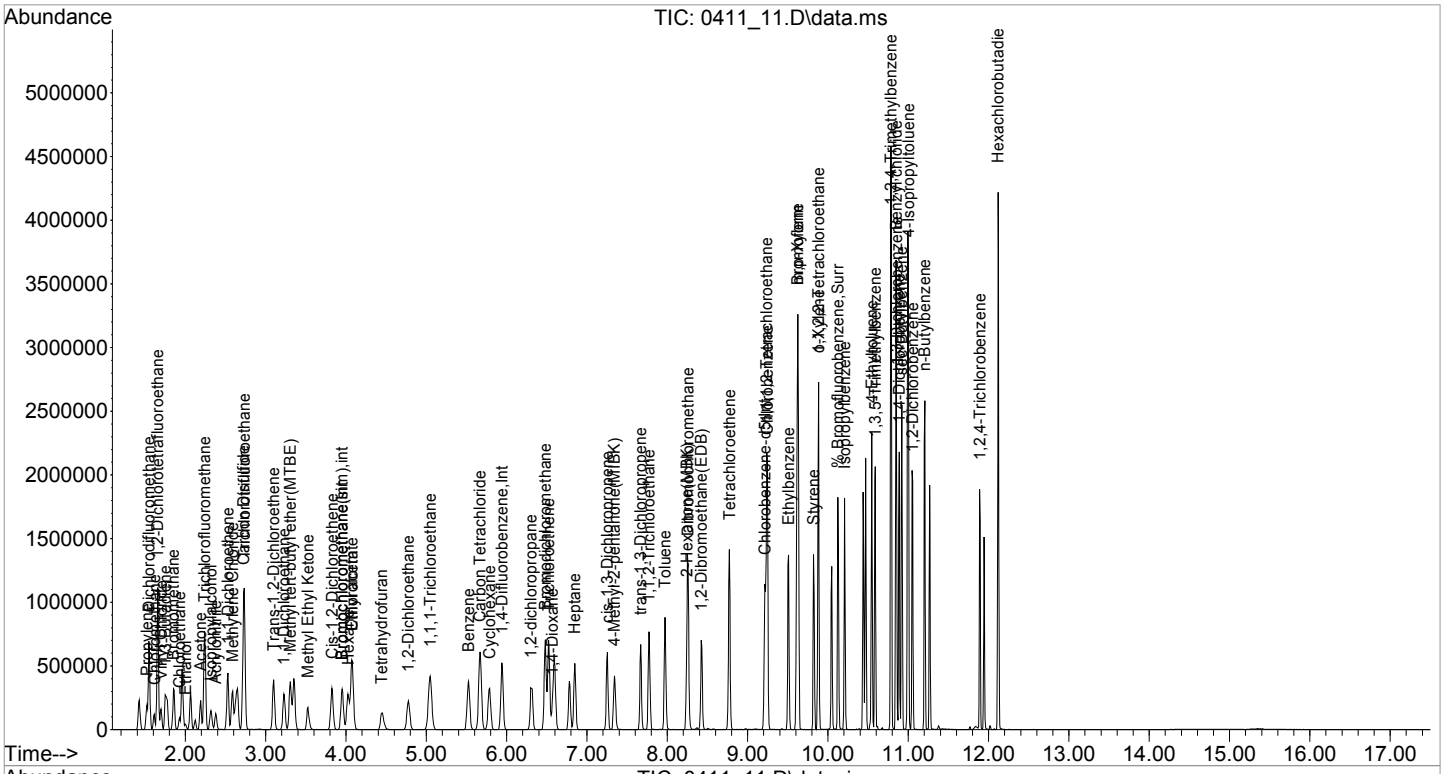
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.205	91	812312	9.293	ppbv	92
117] 1,2,4-Trichlorobenzene...	11.892	180	342101	11.594	ppbv	95
119] Hexachlorobutadiene(sim)	12.121	225	478821	9.894	ppbv	98

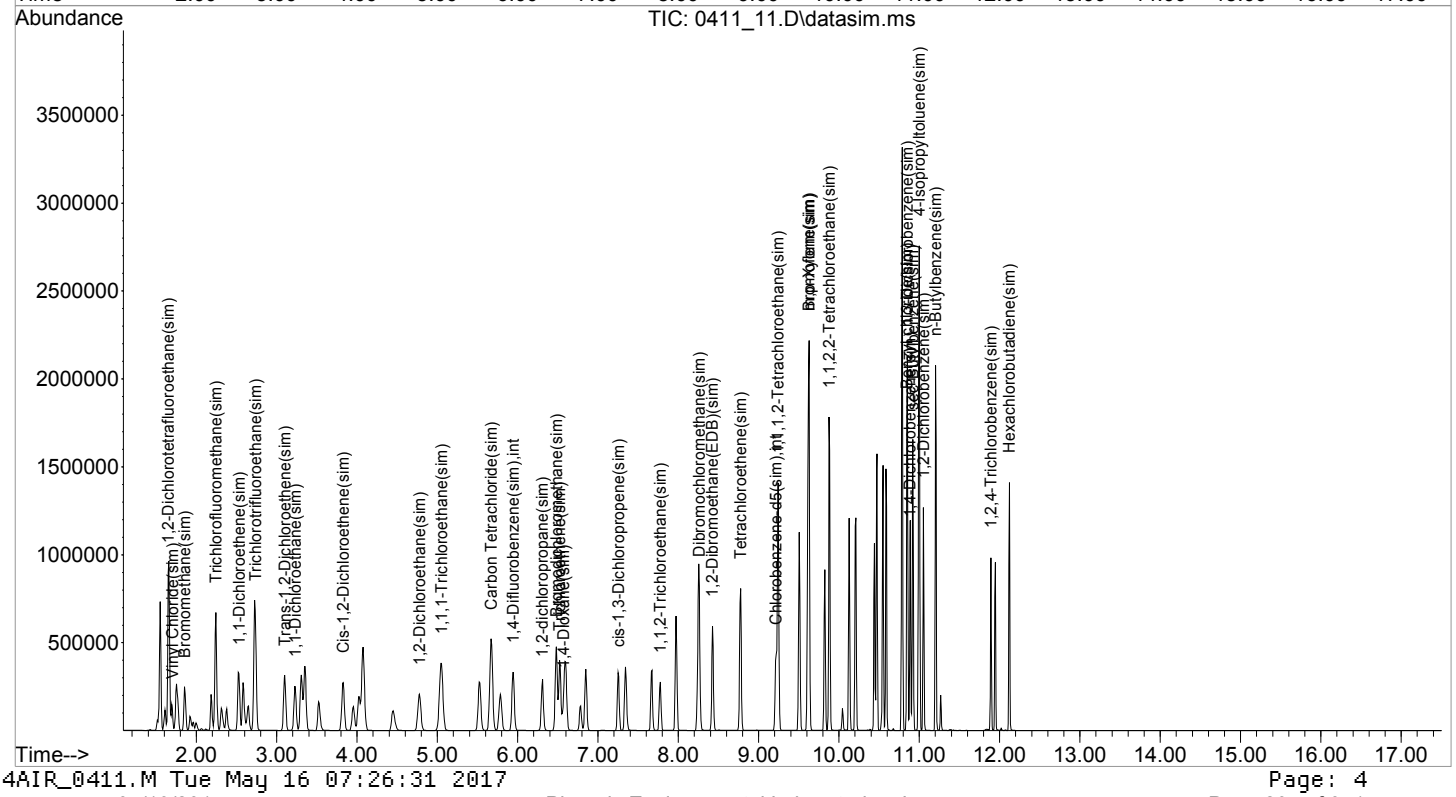
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_11.D
Acq On : 12 Apr 2017 12:47 am
Operator : Keith
Client ID : ICAL 10
Lab ID : 10ppb
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 17 08:46:31 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:22 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_12.D
Acq On : 12 Apr 2017 1:22 am
Operator : Keith
Client ID : ICAL 25
Lab ID : 25ppb
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 17 08:46:54 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:42 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.958	130	141752	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.948	114	492956	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	329667	10.000	ng		0.00
80) Bromochloromethane(sim)	3.958	130	141752	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.951	114	539838	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.218	82	347762	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.132	95	390745	8.764	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 87.60%				
Target Compounds							Qvalue
2) Propylene	1.520	41	231145	30.349	ppbv		94
3) Dichlorodifluoromethane	1.545	85	1470235	27.144	ppbv		99
4) Chloromethane	1.613	52	98270	27.131	ppbv	#	76
5) 1,2-Dichlorotetrafluor...	1.656	85	1256459	27.876	ppbv		95
6) Vinyl Chloride	1.698	62	377616	26.953	ppbv		99
7) 1,3-Butadiene	1.749	54	224878	25.382	ppbv		97
8) Bromomethane	1.859	94	479150	27.259	ppbv	#	98
9) Chloroethane	1.927	64	163278	27.234	ppbv		95
10) Ethanol	2.003	45	125755	27.620	ppbv		96
12) Acetone	2.189	43	572115	26.036	ppbv		98
13) Trichlorofluoromethane	2.240	101	1570444	26.471	ppbv		99
14) Isopropylalcohol	2.316	45	570151	28.309	ppbv		95
15) Acrylonitrile	2.384	53	220966	29.021	ppbv		94
16) 1,1-Dichloroethene	2.528	61	705073	27.073	ppbv		94
17) Methylene Chloride	2.588	49	414628	24.906	ppbv	#	82
20) Carbon Disulfide	2.732	76	1036165	26.647	ppbv		100
21) Trichlorotrifluoroethane	2.732	101	998981	27.220	ppbv		89
22) Trans-1,2-Dichloroethene	3.104	61	598130	28.052	ppbv		92
23) 1,1-Dichloroethane	3.231	63	722112	27.215	ppbv		99
24) Methyl tert-butyl ethe...	3.298	73	1152862	30.144	ppbv	#	92
25) Methyl Ethyl Ketone	3.525	43	652047	29.484	ppbv		93
26) Cis-1,2-Dichloroethene	3.831	61	585156	27.432	ppbv		91
27) Hexane	4.031	57	434272	28.346	ppbv		96
28) Chloroform	4.085	83	1084244	27.068	ppbv		97
29) Ethyl acetate	4.071	43	740122	31.182	ppbv		98
30) Tetrahydrofuran	4.438	42	313031	32.022	ppbv	#	83
31) 1,2-Dichloroethane	4.782	62	859939	28.552	ppbv	#	94
32) 1,1,1-Trichloroethane	5.056	97	1270450	28.483	ppbv		100
33) Benzene	5.533	78	1194034	29.342	ppbv		98
34) Carbon Tetrachloride	5.674	117	1432023	28.333	ppbv		100
35) Cyclohexane	5.786	56	482629	29.350	ppbv		95
37) 1,2-dichloropropane	6.320	63	309534	29.071	ppbv	#	89
38) Bromodichloromethane	6.487	83	1289130	28.271	ppbv		96
39) Trichloroethene	6.527	130	642815	29.429	ppbv	#	88
41) 1,4-Dioxane	6.560	88	289933	29.911	ppbv		97
43) Heptane	6.853	71	354061	29.550	ppbv		94
44) cis-1,3-Dichloropropene	7.253	75	856991	29.886	ppbv		95
45) 4-Methyl-2-pentanone(M...	7.333	43	875588	28.706	ppbv		98
46) trans-1,3-Dichloropropene	7.675	75	904694	28.481	ppbv		96
47) 1,1,2-Trichloroethane	7.778	97	607399	28.853	ppbv		99
48) Toluene	7.977	91	1567980	29.393	ppbv		97
49) Dibromochloromethane	8.265	129	1464929	29.133	ppbv		99

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_12.D
Acq On : 12 Apr 2017 1:22 am
Operator : Keith
Client ID : ICAL 25
Lab ID : 25ppb
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 17 08:46:54 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:42 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	8.244	43	840095	27.953	ppbv#	88
51) 1,2-Dibromoethane(EDB)	8.430	107	1101915	28.032	ppbv	96
52) Tetrachloroethene	8.773	166	954534	31.500	ppbv#	91
54) 1,1,1,2-Tetrachloroethane	9.245	131	883122	25.960	ppbv	100
55) Chlorobenzene	9.245	112	1377872	24.857	ppbv	97
56) Ethylbenzene	9.510	91	2213328	24.651	ppbv	98
57) m,p-Xylene	9.624	91	3722497	46.516	ppbv	95
58) Bromoform	9.632	173	1573788	26.395	ppbv	99
59) Styrene	9.829	104	1276014	25.432	ppbv	93
60) 1,1,2,2-Tetrachloroethane	9.882	83	1237196	22.257	ppbv	96
61) o-Xylene	9.882	91	1772775	24.090	ppbv	95
64) Isopropylbenzene	10.208	105	2313455	25.213	ppbv	97
66) 4-Ethyltoluene	10.546	105	2477343	23.770	ppbv	97
67) 1,3,5-Trimethylbenzene	10.589	105	2116026	23.470	ppbv	94
68) 1,2,4-Trimethylbenzene	10.789	105	2113666	22.662	ppbv	94
70) Benzyl chloride	10.849	91	1931296	25.411	ppbv	94
71) 1,3-Dichlorobenzene	10.854	146	1494141	25.158	ppbv#	96
72) 1,4-Dichlorobenzene	10.886	146	1471526	25.814	ppbv#	96
73) sec-Butylbenzene	10.924	105	2818989	23.126	ppbv	95
74) 4-Isopropyltoluene	11.005	119	2684975	23.393	ppbv	93
75) 1,2-Dichlorobenzene	11.054	146	1403461	24.714	ppbv	96
76) n-Butylbenzene	11.205	91	2389631	23.182	ppbv	95
77) 1,2,4-Trichlorobenzene	11.889	180	944970	29.636	ppbv#	97
79) Hexachlorobutadiene	12.118	225	1329175	24.933	ppbv	100
81] 1,2-Dichlorotetrafluor...	1.659	85	1334182	28.170	ppbv	93
82] Vinyl Chloride(sim)	1.698	62	377616	27.756	ppbv	99
83] Bromomethane(sim)	1.862	94	514391	28.034	ug/l	99
84] Trichlorofluoromethane...	2.240	101	1570444	26.490	ppbv	99
85] Trans-1,2-Dichloroethe...	3.101	61	642373	25.335	ppbv	95
86] 1,1-Dichloroethene(sim)	2.528	61	705073	27.801	ppbv	94
87] 1,1-Dichloroethane(sim)	3.234	63	769245	28.037	ppbv	100
88] Cis-1,2-Dichloroethene...	3.831	61	585156	28.394	ppbv	91
89] 1,2-Dichloroethane(sim)	4.785	62	862755	28.866	ppbv#	94
90] 1,1,1-Trichloroethane(...	5.056	97	1270450	28.590	ppbv#	100
91] Carbon Tetrachloride(sim)	5.677	117	1499054	28.194	ppbv	99
92] Trichlorotrifluoroetha...	2.732	101	998981	27.028	ppbv	99
94] 1,2-dichloropropane(sim)	6.320	63	309534	29.729	ppbv#	89
95] Bromodichloromethane(sim)	6.490	83	1367935	28.686	ppbv	97
96] Trichloroethene(sim)	6.527	130	642866	30.783	ppbv#	91
97] 1,4-Dioxane(sim)	6.563	88	308788	29.493	ppbv	97
98] cis-1,3-Dichloropropen...	7.253	75	856985	31.905	ppbv	95
99] 1,1,2-Trichloroethane(...	7.781	97	665737	26.897	ppbv	99
100] Dibromochloromethane(sim)	8.265	129	1464929	30.591	ppbv	99
101] 1,2-Dibromoethane(EDB)...	8.433	107	1195526	28.614	ppbv	97
102] Tetrachloroethene(sim)	8.773	166	954534	33.421	ppbv	91
104] Bromoform(sim)	9.632	173	1573805	24.029	ppbv	100
105] 1,1,1,2-Tetrachloroeth...	9.240	131	943101	25.348	ppbv	99
106] m,p-Xylene(sim)	9.624	91	3723839	45.626	ppbv	95
107] 1,1,2,2-Tetrachloroeth...	9.885	83	1299465	20.262	ppbv	98
110] Benzyl chloride(sim)	10.849	91	1931296	25.663	ppbv	94
111] 1,3-Dichlorobenzene(sim)	10.857	146	1614753	23.619	ppbv#	95
112] 1,4-Dichlorobenzene(sim)	10.886	146	1471463	25.584	ppbv	96
113] sec-Butylbenzene(sim)	10.922	105	2884839	21.377	ppbv	95
114] 4-Isopropyltoluene(sim)	11.005	119	2684975	22.882	ppbv	93
115] 1,2-Dichlorobenzene(sim)	11.057	146	1515244	23.447	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_12.D
Acq On : 12 Apr 2017 1:22 am
Operator : Keith
Client ID : ICAL 25
Lab ID : 25ppb
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 17 08:46:54 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:42 2017
Response via : Initial Calibration

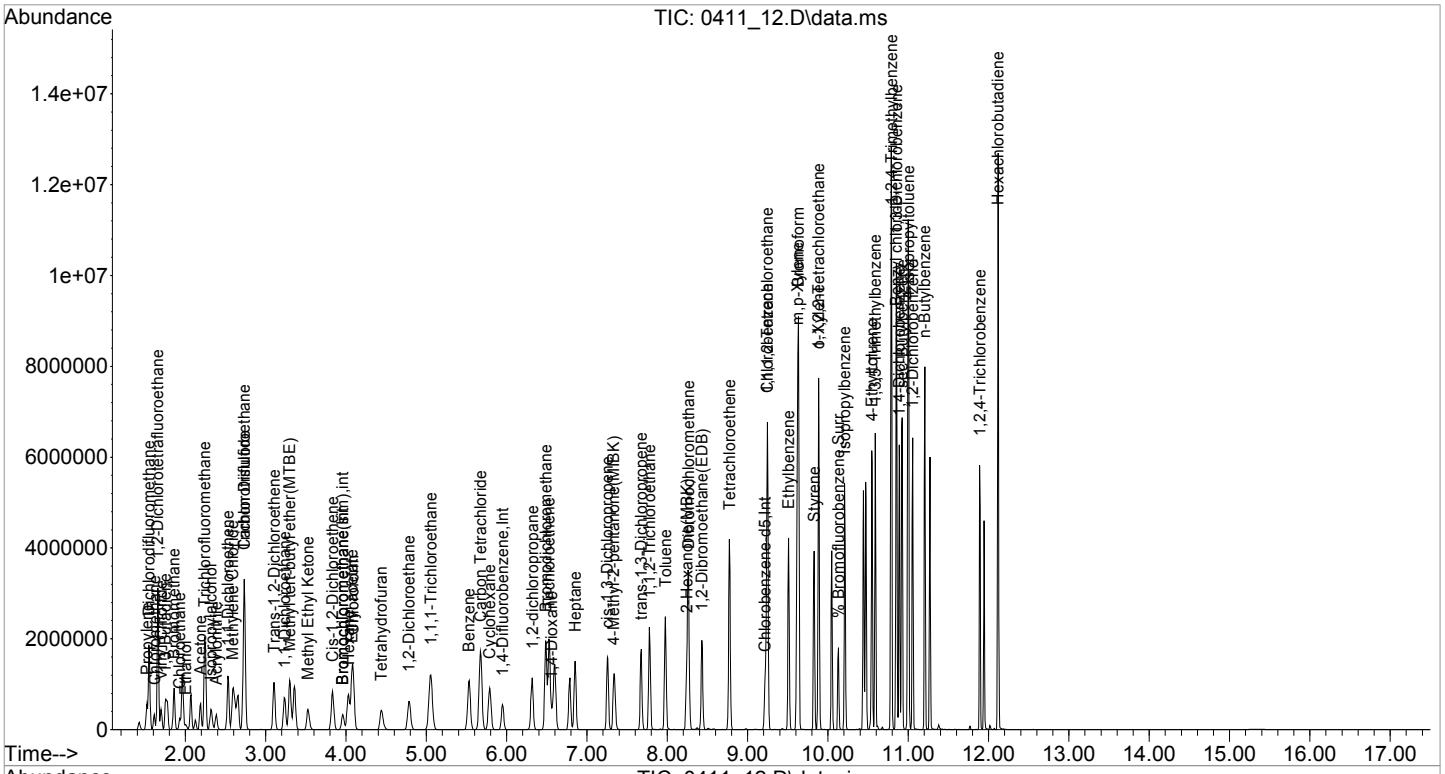
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.205	91	2389631	22.648	ppbv	95
117] 1,2,4-Trichlorobenzene...	11.892	180	1052433	29.549	ppbv	96
119] Hexachlorobutadiene(sim)	12.121	225	1356796	23.227	ppbv	98

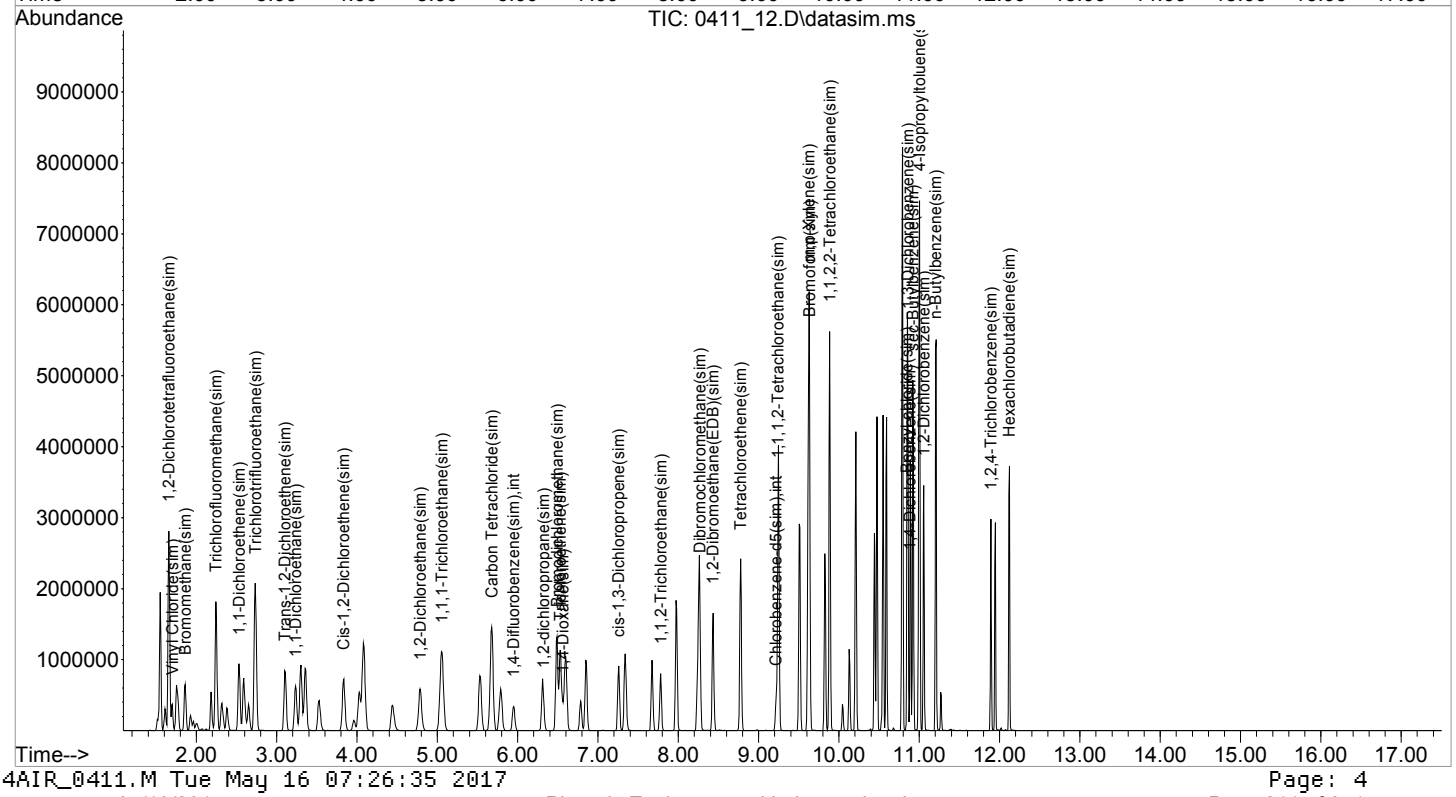
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_12.D
Acq On : 12 Apr 2017 1:22 am
Operator : Keith
Client ID : ICAL 25
Lab ID : 25ppb
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 17 08:46:54 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:46:42 2017
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_13.D
Acq On : 12 Apr 2017 2:00 am
Operator : Keith
Client ID : ICAL 40
Lab ID : 40ppb
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 17 08:47:25 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:02 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.965	130	153721	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.955	114	530695	10.000	ng		0.00
53) Chlorobenzene-d5	9.222	82	379251	10.000	ng		0.00
80) Bromochloromethane(sim)	3.965	130	153721	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.951	114	581146	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.218	82	397958	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.132	95	403222	8.112	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 81.10%				
Target Compounds							Qvalue
2) Propylene	1.520	41	396586	45.579	ppbv		94
3) Dichlorodifluoromethane	1.546	85	2395047	39.920	ppbv		99
4) Chloromethane	1.613	52	160494	40.008	ppbv#		76
5) 1,2-Dichlorotetrafluor...	1.656	85	1983421	39.444	ppbv		96
6) Vinyl Chloride	1.698	62	580896	37.501	ppbv		99
7) 1,3-Butadiene	1.757	54	358249	37.145	ppbv		97
8) Bromomethane	1.859	94	751877	38.573	ppbv#		97
9) Chloroethane	1.927	64	265524	39.947	ppbv		97
10) Ethanol	2.003	45	210119	41.469	ppbv		98
12) Acetone	2.189	43	981441	40.764	ppbv		98
13) Trichlorofluoromethane	2.249	101	2553617	39.116	ppbv		99
14) Isopropylalcohol	2.325	45	962843	42.673	ppbv		96
15) Acrylonitrile	2.384	53	382769	44.566	ppbv		95
16) 1,1-Dichloroethene	2.528	61	1187701	41.199	ppbv		95
17) Methylene Chloride	2.588	49	674510	37.397	ppbv#		80
20) Carbon Disulfide	2.732	76	1767062	41.226	ppbv		100
21) Trichlorotrifluoroethane	2.732	101	1692236	41.596	ppbv		90
22) Trans-1,2-Dichloroethene	3.105	61	1003623	42.119	ppbv		93
23) 1,1-Dichloroethane	3.238	63	1226022	41.685	ppbv		99
24) Methyl tert-butyl ethe...	3.298	73	2001785	45.904	ppbv#		91
25) Methyl Ethyl Ketone	3.531	43	1107664	44.204	ppbv		93
26) Cis-1,2-Dichloroethene	3.838	61	1001574	42.270	ppbv		92
27) Hexane	4.031	57	729661	42.497	ppbv		98
28) Chloroform	4.091	83	1753812	39.557	ppbv		97
29) Ethyl acetate	4.078	43	1518268	55.551	ppbv#		95
30) Tetrahydrofuran	4.438	42	558059	49.189	ppbv#		81
31) 1,2-Dichloroethane	4.796	62	1437134	42.491	ppbv#		91
32) 1,1,1-Trichloroethane	5.056	97	2107165	42.098	ppbv		100
33) Benzene	5.534	78	1955202	42.462	ppbv		98
34) Carbon Tetrachloride	5.674	117	2391178	42.220	ppbv		99
35) Cyclohexane	5.786	56	846060	45.467	ppbv		94
37) 1,2-dichloropropane	6.320	63	579502	48.578	ppbv#		91
38) Bromodichloromethane	6.493	83	2182178	43.045	ppbv		97
39) Trichloroethene	6.533	130	1094107	44.554	ppbv		89
41) 1,4-Dioxane	6.560	88	469646	42.899	ppbv		96
43) Heptane	6.853	71	598936	44.412	ppbv		93
44) cis-1,3-Dichloropropene	7.260	75	1470520	45.416	ppbv		95
45) 4-Methyl-2-pentanone(M...	7.340	43	1400794	41.134	ppbv		97
46) trans-1,3-Dichloropropene	7.675	75	1524464	43.080	ppbv		96
47) 1,1,2-Trichloroethane	7.785	97	1036480	44.038	ppbv		99
48) Toluene	7.977	91	2560680	42.712	ppbv		97
49) Dibromochloromethane	8.265	129	2439412	43.274	ppbv		99

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_13.D
Acq On : 12 Apr 2017 2:00 am
Operator : Keith
Client ID : ICAL 40
Lab ID : 40ppb
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 17 08:47:25 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:02 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	8.245	43	1390493	41.743	ppbv#	85
51)	1,2-Dibromoethane(EDB)	8.437	107	1905299	43.698	ppbv	96
52)	Tetrachloroethene	8.780	166	1694645	48.777	ppbv#	91
54)	1,1,1,2-Tetrachloroethane	9.245	131	1502149	38.019	ppbv	100
55)	Chlorobenzene	9.253	112	2361363	37.083	ppbv	98
56)	Ethylbenzene	9.511	91	3650011	35.461	ppbv	99
57)	m,p-Xylene	9.632	91	6137657	67.850	ppbv	97
58)	Bromoform	9.639	173	2588625	37.220	ppbv	99
59)	Styrene	9.829	104	2239990	38.641	ppbv	94
60)	1,1,2,2-Tetrachloroethane	9.890	83	2072817	33.328	ppbv	96
61)	o-Xylene	9.890	91	2925013	34.868	ppbv	97
64)	Isopropylbenzene	10.216	105	3915974	37.019	ppbv	97
66)	4-Ethyltoluene	10.551	105	4031694	34.045	ppbv	98
67)	1,3,5-Trimethylbenzene	10.594	105	3520220	34.467	ppbv	96
68)	1,2,4-Trimethylbenzene	10.794	105	3473793	33.151	ppbv	96
70)	Benzyl chloride	10.854	91	3208439	36.545	ppbv	96
71)	1,3-Dichlorobenzene	10.859	146	2541071	37.134	ppbv	96
72)	1,4-Dichlorobenzene	10.892	146	2444157	36.970	ppbv	95
73)	sec-Butylbenzene	10.924	105	4664308	33.897	ppbv	97
74)	4-Isopropyltoluene	11.005	119	4421972	34.036	ppbv	95
75)	1,2-Dichlorobenzene	11.059	146	2355731	36.163	ppbv	95
76)	n-Butylbenzene	11.205	91	3768465	32.367	ppbv	97
77)	1,2,4-Trichlorobenzene	11.894	180	1690153	44.035	ppbv#	97
79)	Hexachlorobutadiene	12.123	225	2065215	33.698	ppbv	100
81]	1,2-Dichlorotetrafluor...	1.659	85	2062629	40.159	ppbv	96
82]	Vinyl Chloride(sim)	1.698	62	580896	39.373	ppbv	99
83]	Bromomethane(sim)	1.862	94	806636	40.539	ug/l	98
84]	Trichlorofluoromethane...	2.249	101	2553617	39.721	ppbv	99
85]	Trans-1,2-Dichloroethe...	3.107	61	1070225	38.923	ppbv	96
86]	1,1-Dichloroethene(sim)	2.528	61	1187701	43.185	ppbv	95
87]	1,1-Dichloroethane(sim)	3.234	63	1304016	43.827	ppbv	99
88]	Cis-1,2-Dichloroethene...	3.838	61	1001574	44.815	ppbv	92
89]	1,2-Dichloroethane(sim)	4.792	62	1436552	44.321	ppbv#	94
90]	1,1,1-Trichloroethane(...	5.056	97	2107165	43.727	ppbv#	100
91]	Carbon Tetrachloride(sim)	5.677	117	2477084	42.961	ppbv	99
92]	Trichlorotrifluoroetha...	2.732	101	1692236	42.219	ppbv	99
94]	1,2-dichloropropane(sim)	6.320	63	579502	51.702	ppbv#	91
95]	Bromodichloromethane(sim)	6.490	83	2299985	44.802	ppbv	97
96]	Trichloroethene(sim)	6.533	130	1094031	48.662	ppbv#	91
97]	1,4-Dioxane(sim)	6.563	88	497184	44.112	ppbv	98
98]	cis-1,3-Dichloropropen...	7.260	75	1470520	50.856	ppbv	95
99]	1,1,2-Trichloroethane(...	7.781	97	1127553	42.317	ppbv	100
100]	Dibromochloromethane(sim)	8.265	129	2439138	47.314	ppbv	99
101]	1,2-Dibromoethane(EDB)...	8.440	107	2016807	44.840	ppbv	97
102]	Tetrachloroethene(sim)	8.780	166	1694645	55.117	ppbv	91
104]	Bromoform(sim)	9.639	173	2588431	34.536	ppbv	99
105]	1,1,1,2-Tetrachloroeth...	9.248	131	1565700	36.773	ppbv	99
106]	m,p-Xylene(sim)	9.632	91	6139599	65.737	ppbv	97
107]	1,1,2,2-Tetrachloroeth...	9.885	83	2066007	28.151	ppbv	98
110]	Benzyl chloride(sim)	10.854	91	3208439	37.256	ppbv	96
111]	1,3-Dichlorobenzene(sim)	10.857	146	2689750	34.381	ppbv	95
112]	1,4-Dichlorobenzene(sim)	10.892	146	2444157	37.136	ppbv	95
113]	sec-Butylbenzene(sim)	10.927	105	4681136	30.312	ppbv	97
114]	4-Isopropyltoluene(sim)	11.005	119	4421972	32.932	ppbv	95
115]	1,2-Dichlorobenzene(sim)	11.057	146	2524936	34.143	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_13.D
Acq On : 12 Apr 2017 2:00 am
Operator : Keith
Client ID : ICAL 40
Lab ID : 40ppb
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 17 08:47:25 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:02 2017
Response via : Initial Calibration

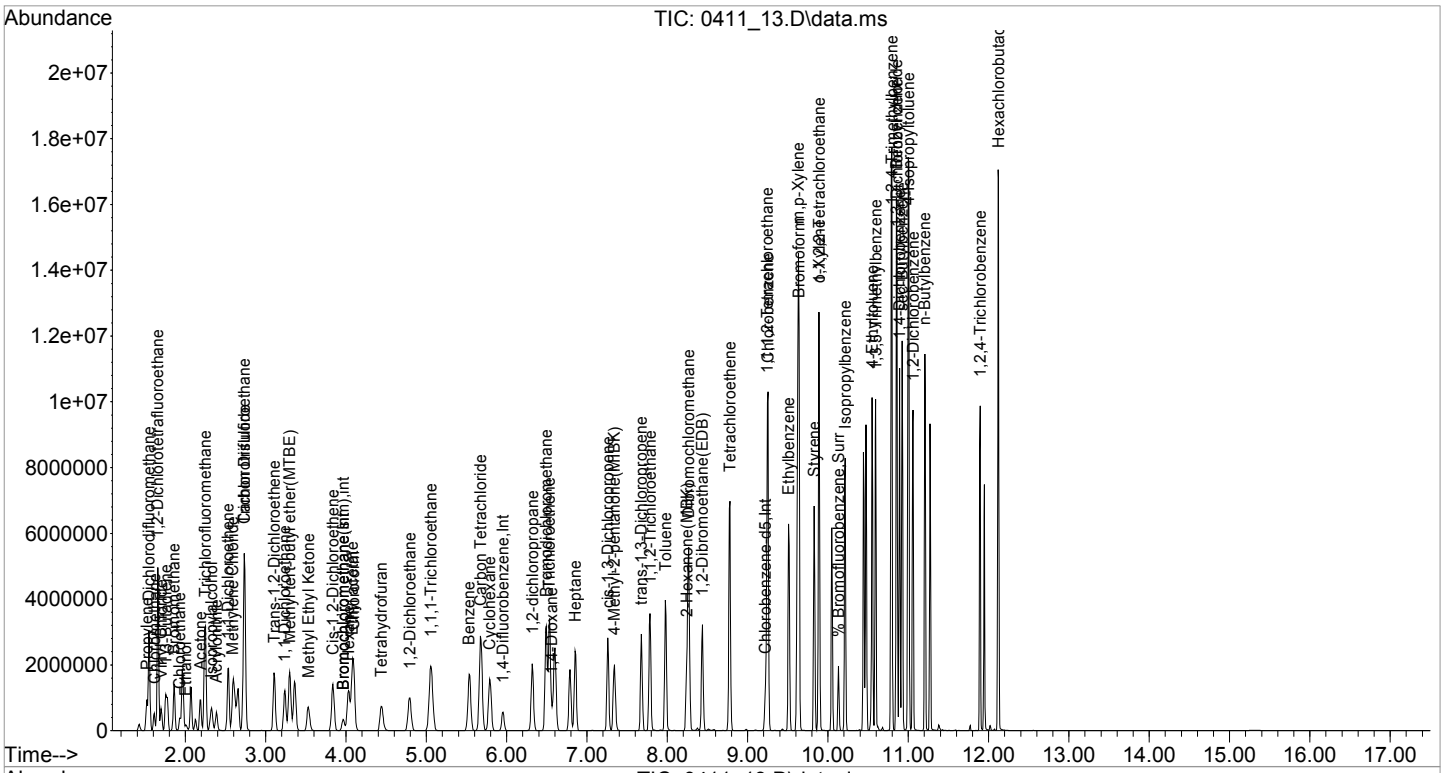
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.205	91	3768465	31.211	ppbv	97
117] 1,2,4-Trichlorobenzene...	11.892	180	1826092	44.805	ppbv	97
119] Hexachlorobutadiene(sim)	12.121	225	2072028	30.997	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\11A\
Data File : 0411_13.D
Acq On : 12 Apr 2017 2:00 am
Operator : Keith
Client ID : ICAL 40
Lab ID : 40ppb
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 17 08:47:25 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:47:02 2017
Response via : Initial Calibration



7A
AIR CONTINUING CALIBRATION CHECK
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/13/17 Time: 13:04

Lab File Id: 0412_33.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Dichlorodifluoromethane(sim)	4.486	4.380		2.4	30
1,2-Dichlorotetrafluoroethane(sim)	3.248	2.949		9.2	30
Vinyl Chloride(sim)	1.261	0.975		22.7	30
Bromomethane(sim)	1.179	0.851		27.8	30
Trichlorofluoromethane(sim)	5.546	5.951		-7.3	30
1,2-Dichloroethane(sim)	1.807	1.669		7.6	30
1,1,1-Trichloroethane(sim)	3.176	3.381		-6.5	30
Carbon Tetrachloride(sim)	3.146	3.487		-10.8	30
1,1-Dichloroethene(sim)	2.614	2.461		5.9	30
Carbon Disulfide(sim)	2.365	1.835		22.4	30
Trichlorotrifluoroethane(sim)	3.071	3.030		1.3	30
Trans-1,2-Dichloroethene(sim)	1.833	1.711		6.7	30
1,1-Dichloroethane(sim)	2.285	1.649		27.8	30
Cis-1,2-Dichloroethene(sim)	1.139	0.970		14.8	30
Chloroform(sim)	2.695	2.550		5.4	30
Benzene(sim)	1.986	1.542		22.4	30
1,2-dichloropropane(sim)	0.199	0.164		17.6	30
Bromodichloromethane(sim)	0.549	0.543		1.1	30
Trichloroethene(sim)	0.364	0.354		2.7	30
1,4-Dioxane(sim)	0.124	0.118		4.8	30
cis-1,3-Dichloropropene(sim)	0.289	0.267		7.6	30
1,1,2-Trichloroethane(sim)	0.343	0.326		5.0	30
Dibromochloromethane(sim)	0.839	0.879		-4.8	30
1,2-Dibromoethane(EDB)(sim)	0.615	0.611		0.7	30
Tetrachloroethene(sim)	0.459	0.527		-14.8	30
Bromoform(sim)	2.441	2.837		-16.2	30
Chlorobenzene(sim)	2.108	2.075		1.6	30
Ethylbenzene(sim)	2.054	2.130		-3.7	30
m,p-Xylene(sim)	1.790	1.980		-10.6	30
Styrene(sim)	1.047	1.213		-15.9	30
1,1,2,2-Tetrachloroethane(sim)	1.852	1.801		2.8	30
o-Xylene(sim)	1.602	1.921		-19.9	30
Isopropylbenzene(sim)	2.536	2.787		-9.9	30
4-Ethyltoluene(sim)	2.365	2.806		-18.6	30
1,3,5-Trimethylbenzene(sim)	2.034	2.342		-15.1	30
1,2,4-Trimethylbenzene(sim)	2.006	2.491		-24.2	30

(#) Maximum %D not met.

FORM VII AIR

7B
AIR CONTINUING CALIBRATION CHECK
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/13/17 Time: 13:04

Lab File Id: 0412_33.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Benzyl chloride(sim)	1.703	2.026		-19.0	30
1,3-Dichlorobenzene(sim)	1.774	2.212		-24.7	30
1,4-Dichlorobenzene(sim)	1.971	2.622		-33.0 #	30
sec-Butylbenzene(sim)	1.784	2.156		-20.9	30
4-Isopropyltoluene(sim)	2.423	3.123		-28.9	30
1,2-Dichlorobenzene(sim)	1.745	1.983		-13.6	30
n-Butylbenzene(sim)	1.996	2.368		-18.6	30
1,2,4-Trichlorobenzene(sim)	0.886	1.002		-13.1	30
Hexachlorobutadiene(sim)	1.856	2.225		-19.9	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_33.D
Acq On : 13 Apr 2017 01:04 pm
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0ppb; air04q
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:31:44 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	130807	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	355273	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	144360	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	130807	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	421645	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	150312	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	221523	11.283	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 112.80%				
Target Compounds							Qvalue
2) Propylene	3.651	41	10489	0.769	ppbv		93
3) Dichlorodifluoromethane	3.724	85	45454	0.966	ppbv#		93
4) Chloromethane	3.886	50	12773	0.784	ppbv#		1
5) 1,2-Dichlorotetrafluor...	3.983	85	38572	0.955	ppbv		98
6) Vinyl Chloride	4.089	62	11172	0.850	ppbv		93
7) 1,3-Butadiene	4.210	54	8474	0.752	ppbv#		20
8) Bromomethane	4.454	94	11127	0.860	ppbv#		79
9) Chloroethane	4.600	64	4969	0.824	ppbv#		64
11) Ethanol	4.738	45	7219	0.817	ppbv#		71
12) Acetone	5.103	43	40114	0.990	ppbv#		72
13) Trichlorofluoromethane	5.208	101	62848	1.130	ppbv		96
14) Isopropylalcohol	5.297	45	36755	0.921	ppbv#		74
15) Acrylonitrile	5.441	53	11064	0.877	ppbv#		93
16) 1,1-Dichloroethene	5.673	61	27211	0.959	ppbv#		86
17) Methylene Chloride	5.756	49	25313	0.877	ppbv#		72
20) Carbon Disulfide	5.965	76	24000	0.815	ppbv		97
21) Trichlorotrifluoroethane	5.923	101	30042	0.973	ppbv#		84
22) Trans-1,2-Dichloroethene	6.334	61	22376	1.013	ppbv		89
23) 1,1-Dichloroethane	6.449	63	17809	0.756	ppbv		94
24) Methyl tert-butyl ethe...	6.491	73	22589	0.835	ppbv#		79
25) Methyl Ethyl Ketone	6.668	43	21274	0.754	ppbv#		83
26) Cis-1,2-Dichloroethene	6.894	61	12686	0.821	ppbv		98
27) Hexane	6.987	57	10322	0.906	ppbv#		41
28) Chloroform	7.041	83	26508	0.964	ppbv#		85
29) Ethyl acetate	6.995	61	2219	0.845	ppbv#		1
30) Tetrahydrofuran	7.251	42	8962	0.805	ppbv#		71
31) 1,2-Dichloroethane	7.406	62	21834	0.939	ppbv#		93
32) 1,1,1-Trichloroethane	7.522	97	34637	1.070	ppbv#		89
33) Benzene	7.740	78	20173	0.830	ppbv#		74
34) Carbon Tetrachloride	7.815	117	45615	1.122	ppbv		95
35) Cyclohexane	7.873	41	8164	0.805	ppbv#		31
37) 1,2-dichloropropane	8.113	63	6904	0.866	ppbv#		7
38) Bromodichloromethane	8.205	83	29300	0.992	ppbv		97
39) Trichloroethene	8.221	130	14903	0.986	ppbv		86
41) 1,4-Dioxane	8.213	88	4496	0.878	ppbv#		72
43) Heptane	8.288	43	444	0.034	ppbv		95
44) cis-1,3-Dichloropropene	8.594	75	11274	0.812	ppbv		88
45) 4-Methyl-2-pentanone(M...	8.603	43	18077	0.856	ppbv#		91
46) trans-1,3-Dichloropropene	8.830	75	12996	0.919	ppbv		92
47) 1,1,2-Trichloroethane	8.922	97	10990	0.989	ppbv		94
48) Toluene	9.055	91	22569	0.909	ppbv		97
49) Dibromochloromethane	9.266	129	37061	1.030	ppbv		97

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_33.D
Acq On : 13 Apr 2017 01:04 pm
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0ppb; air04q
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:31:44 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.154	43	15845	0.804	ppbv#	89
51)	1,2-Dibromoethane(EDB)	9.386	107	20469	0.962	ppbv	99
52)	Tetrachloroethene	9.604	166	22232	1.105	ppbv	98
54)	1,1,1,2-Tetrachloroethane	9.934	131	20336	1.160	ppbv	93
55)	Chlorobenzene	9.949	112	26314	1.132	ppbv	87
56)	Ethylbenzene	10.127	91	32013	1.069	ppbv	94
57)	m,p-Xylene	10.216	91	54161	2.216	ppbv	98
58)	Bromoform	10.275	173	42642	1.286	ppbv	95
59)	Styrene	10.408	104	18230	1.111	ppbv#	92
60)	1,1,2,2-Tetrachloroethane	10.460	83	21607	1.034	ppbv	98
61)	o-Xylene	10.467	91	28879	1.147	ppbv	91
64)	Isopropylbenzene	10.778	105	38985	1.163	ppbv	97
66)	4-Ethyltoluene	11.141	105	41013	1.188	ppbv	99
67)	1,3,5-Trimethylbenzene	11.178	105	35203	1.138	ppbv	96
68)	1,2,4-Trimethylbenzene	11.423	105	32495	1.037	ppbv#	92
70)	Benzyl chloride	11.512	91	27558	1.004	ppbv#	92
71)	1,3-Dichlorobenzene	11.527	146	33255	1.252	ppbv	99
72)	1,4-Dichlorobenzene	11.571	146	31998	1.286	ppbv	96
73)	sec-Butylbenzene	11.586	105	47737	1.194	ppbv#	93
74)	4-Isopropyltoluene	11.682	119	44834	1.163	ppbv#	89
75)	1,2-Dichlorobenzene	11.786	146	29806	1.143	ppbv	95
76)	n-Butylbenzene	11.942	91	32587	1.046	ppbv#	93
77)	1,2,4-Trichlorobenzene	12.906	180	15064	0.943	ppbv	97
79)	Hexachlorobutadiene	13.224	225	33441	1.323	ppbv	96
81]	Dichlorodifluoromethan...	3.727	85	57297	0.976	ppbv	95
82]	1,2-Dichlorotetrafluor...	3.983	85	38572	0.908	ppbv	98
83]	Vinyl Chloride(sim)	4.092	62	12760	0.774	ppbv	98
84]	Bromomethane(sim)	4.454	94	11127	0.722	ppbv#	79
85]	Trichlorofluoromethane...	5.211	101	77848	1.073	ppbv	99
86]	1,2-Dichloroethane(sim)	7.406	62	21834	0.924	ppbv#	93
87]	1,1,1-Trichloroethane(...	7.525	97	44225	1.064	ppbv#	95
88]	Carbon Tetrachloride(sim)	7.815	117	45615	1.108	ppbv	95
89]	1,1-Dichloroethene(sim)	5.676	61	32197	0.942	ppbv#	84
90]	Carbon Disulfide(sim)	5.965	76	24000	0.776	ppbv	98
91]	Trichlorotrifluoroetha...	5.926	101	39635	0.987	ppbv	98
92]	Trans-1,2-Dichloroethe...	6.334	61	22376	0.933	ppbv	89
93]	1,1-Dichloroethane(sim)	6.452	63	21567m	0.721	ppbv	
94]	Cis-1,2-Dichloroethene...	6.894	61	12686	0.852	ppbv	98
95]	Chloroform(sim)	7.044	83	33362	0.946	ppbv#	87
96]	Benzene(sim)	7.740	78	20173	0.776	ppbv#	74
98]	1,2-dichloropropane(sim)	8.113	63	6904	0.821	ppbv#	7
99]	Bromodichloromethane(sim)	8.199	85	22881	0.988	ppbv#	41
100]	Trichloroethene(sim)	8.221	130	14909	0.972	ppbv	88
101]	1,4-Dioxane(sim)	8.216	88	4964	0.947	ppbv#	80
102]	cis-1,3-Dichloropropen...	8.594	75	11274	0.925	ppbv#	88
103]	1,1,2-Trichloroethane(...	8.924	97	13750	0.950	ppbv	94
104]	Dibromochloromethane(sim)	9.266	129	37061	1.047	ppbv	96
105]	1,2-Dibromoethane(EDB)...	9.389	107	25755	0.993	ppbv	100
106]	Tetrachloroethene(sim)	9.604	166	22232	1.149	ppbv	98
108]	Bromoform(sim)	10.275	173	42642	1.162	ppbv	95
109]	Chlorobenzene(sim)	9.945	112	31186	0.984	ppbv#	93
110]	Ethylbenzene(sim)	10.127	91	32013	1.037	ppbv#	95
111]	m,p-Xylene(sim)	10.218	91	59509	2.212	ppbv	99
112]	Styrene(sim)	10.408	104	18230	1.159	ppbv#	93
113]	1,1,2,2-Tetrachloroeth...	10.455	83	27068	0.972	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_33.D
Acq On : 13 Apr 2017 01:04 pm
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0ppb; air04q
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:31:44 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

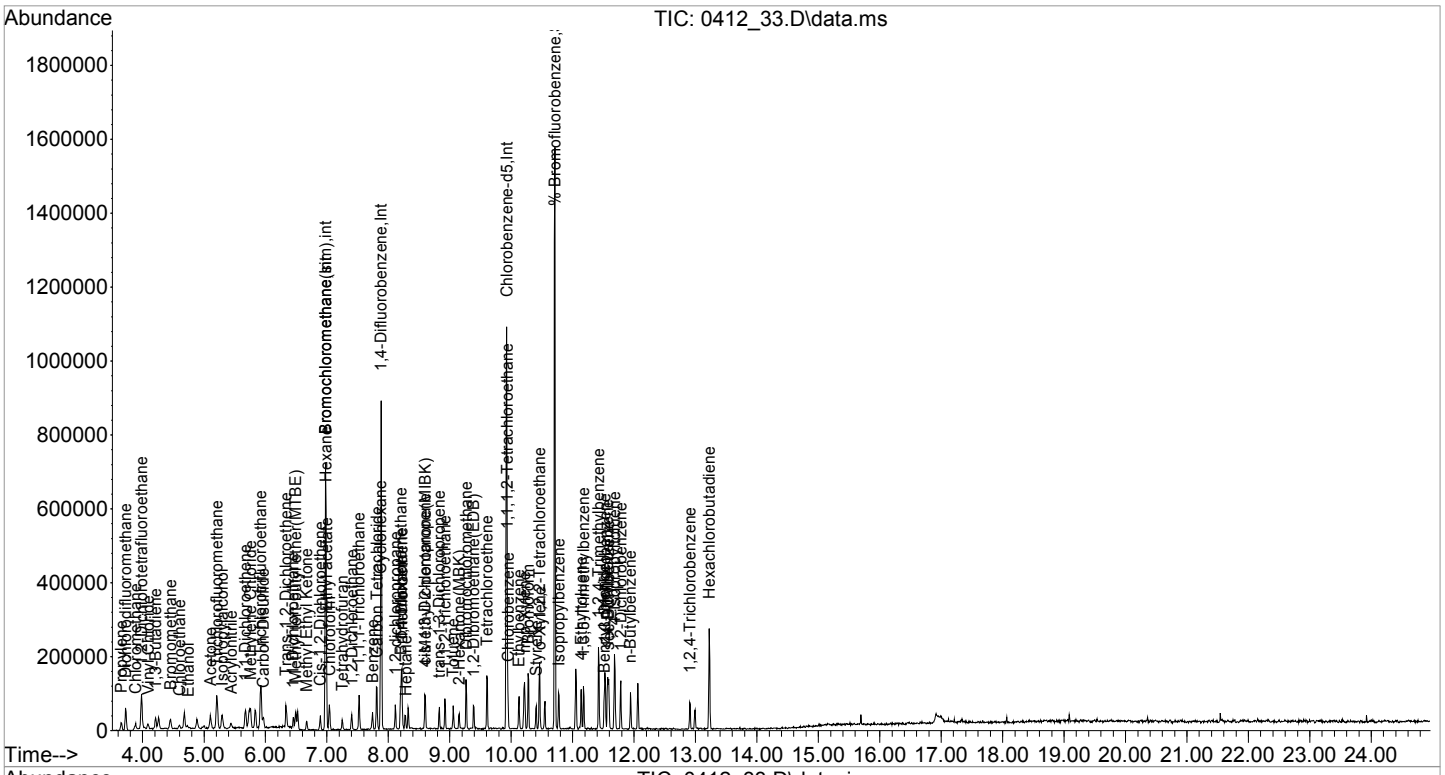
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	28879	1.199	ppbv	93
115] Isopropylbenzene(sim)	10.774	105	41891	1.099	ppbv#	68
117] 4-Ethyltoluene(sim)	11.136	105	42185	1.187	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.178	105	35203	1.151	ppbv	94
119] 1,2,4-Trimethylbenzene...	11.426	105	37447	1.242	ppbv	95
121] Benzyl chloride(sim)	11.515	91	30449	1.189	ppbv	97
122] 1,3-Dichlorobenzene(sim)	11.527	146	33255	1.247	ppbv	98
123] 1,4-Dichlorobenzene(sim)	11.574	146	39415m	1.330	ppbv	
124] sec-Butylbenzene(sim)	11.423	105	32407	1.208	ppbv	78
125] 4-Isopropyltoluene(sim)	11.678	119	46946m	1.289	ppbv	
126] 1,2-Dichlorobenzene(sim)	11.786	146	29806	1.137	ppbv	95
127] n-Butylbenzene(sim)	11.945	91	35588	1.186	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.906	180	15064	1.131	ppbv	98
130] Hexachlorobutadiene(sim)	13.224	225	33441	1.199	ppbv	96

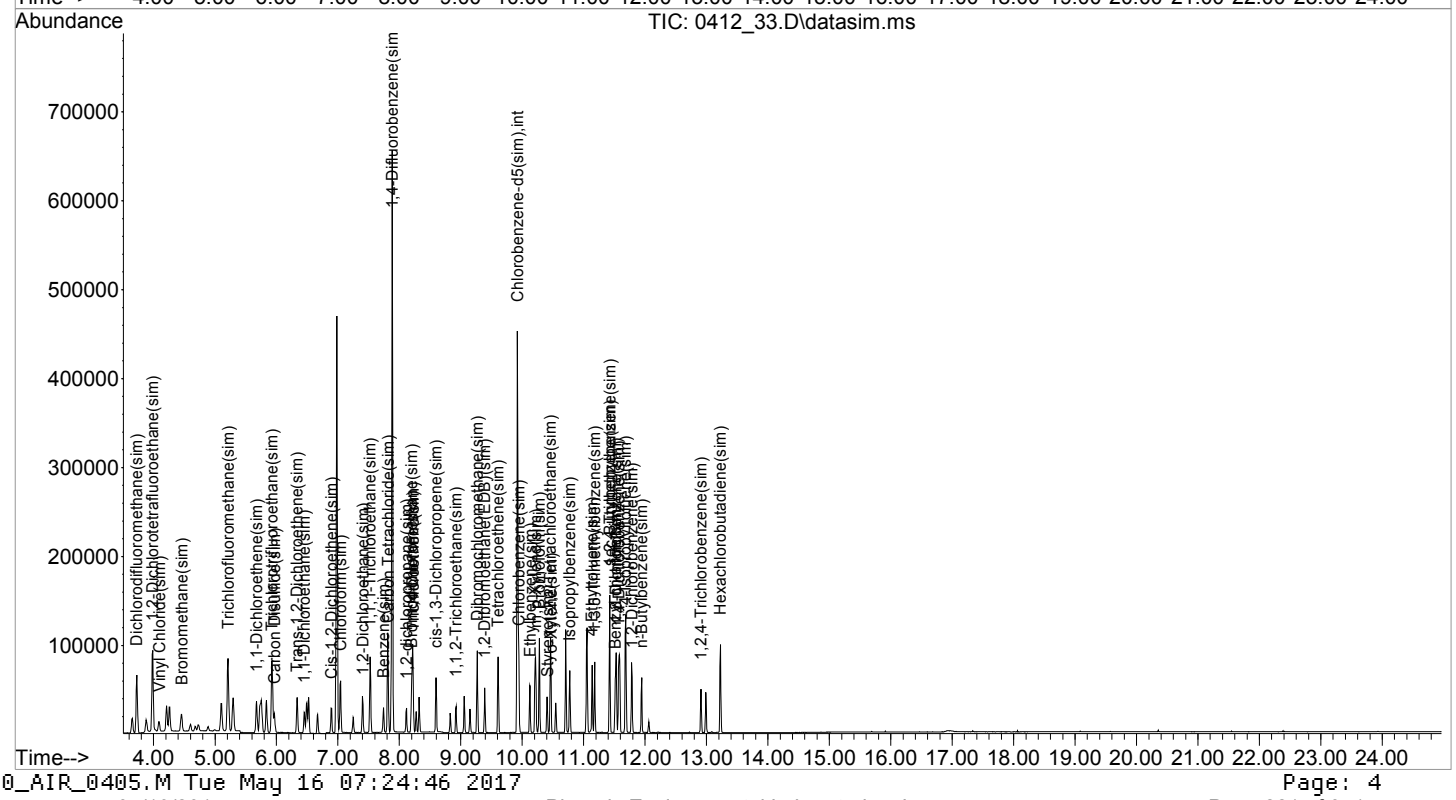
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_33.D
Acq On : 13 Apr 2017 01:04 pm
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0ppb; air04q
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:31:44 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





7A
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/13/17 Time: 13:40

Lab File Id: 0412_34.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF10	RRF MIN	%D	% D LIMITS
Propylene	1.042	0.872		16.3	30
Dichlorodifluoromethane	3.598	3.748		-4.2	30
Chloromethane	1.246	1.048		15.9	30
1,2-Dichlorotetrafluoroethane	3.088	3.052		1.2	30
Vinyl Chloride	1.004	0.841		16.2	30
1,3-Butadiene	0.861	0.724		15.9	30
Bromomethane	0.989	0.847		14.4	30
Chloroethane	0.461	0.356		22.8	30
Ethanol	0.675	0.490		27.4	30
Acetone	3.099	2.919		5.8	30
Trichlorofluoromethane	4.252	4.713		-10.8	30
Isopropylalcohol	3.052	2.610		14.5	30
Acrylonitrile	0.965	0.810		16.1	30
1,1-Dichloroethene	2.169	2.166		0.1	30
Methylene Chloride	2.208	1.928		12.7	30
Carbon Disulfide	2.252	1.992		11.5	30
Trichlorotrifluoroethane	2.360	2.342		0.8	30
Trans-1,2-Dichloroethene	1.688	1.674		0.8	30
1,1-Dichloroethane	1.801	1.355		24.8	30
Methyl tert-butyl ether(MTBE)	2.069	1.872		9.5	30
Methyl Ethyl Ketone	2.157	1.904		11.7	30
Cis-1,2-Dichloroethene	1.181	1.093		7.5	30
Hexane	0.871	0.791		9.2	30
Chloroform	2.101	2.122		-1.0	30
Ethyl acetate	0.201	0.174		13.4	30
Tetrahydrofuran	0.851	0.773		9.2	30
1,2-Dichloroethane	1.777	1.978		-11.3	30
1,1,1-Trichloroethane	2.474	2.785		-12.6	30
Benzene	1.858	1.774		4.5	30
Carbon Tetrachloride	3.108	3.777		-21.5	30
Cyclohexane	0.776	0.847		-9.1	30
1,2-dichloropropane	0.224	0.203		9.4	30
Bromodichloromethane	0.831	0.861		-3.6	30
Trichloroethene	0.426	0.460		-8.0	30
1,4-Dioxane	0.144	0.151		-4.9	30
Heptane	0.370	0.389		-5.1	30

(#) Maximum %D not met.

FORM VII AIR

7B
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/13/17 Time: 13:40

Lab File Id: 0412_34.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF10	RRF MIN	%D	% D LIMITS
cis-1,3-Dichloropropene	0.391	0.416		-6.4	30
4-Methyl-2-pentanone(MIBK)	0.594	0.718		-20.9	30
trans-1,3-Dichloropropene	0.398	0.453		-13.8	30
1,1,2-Trichloroethane	0.313	0.329		-5.1	30
Toluene	0.699	0.763		-9.2	30
Dibromochloromethane	1.013	1.173		-15.8	30
2-Hexanone(MBK)	0.555	0.691		-24.5	30
1,2-Dibromoethane(EDB)	0.599	0.652		-8.8	30
Tetrachloroethene	0.566	0.667		-17.8	30
1,1,1,2-Tetrachloroethane	1.214	1.285		-5.8	30
Chlorobenzene	1.611	1.615		-0.2	30
Ethylbenzene	2.075	2.269		-9.3	30
m,p-Xylene	1.693	1.918		-13.3	30
Bromoform	2.298	2.533		-10.2	30
Styrene	1.137	1.300		-14.3	30
1,1,2,2-Tetrachloroethane	1.447	1.337		7.6	30
o-Xylene	1.745	1.972		-13.0	30
Isopropylbenzene	2.322	2.529		-8.9	30
4-Ethyltoluene	2.392	2.854		-19.3	30
1,3,5-Trimethylbenzene	2.143	2.400		-12.0	30
1,2,4-Trimethylbenzene	2.170	2.588		-19.3	30
Benzyl chloride	1.901	2.303		-21.1	30
1,3-Dichlorobenzene	1.840	2.168		-17.8	30
1,4-Dichlorobenzene	1.724	2.117		-22.8	30
sec-Butylbenzene	2.769	3.216		-16.1	30
4-Isopropyltoluene	2.671	3.287		-23.1	30
1,2-Dichlorobenzene	1.807	2.011		-11.3	30
n-Butylbenzene	2.158	2.602		-20.6	30
1,2,4-Trichlorobenzene	1.107	1.627		-47.0 #	30
Hexachlorobutadiene	1.751	2.058		-17.5	30
% Bromofluorobenzene	1.360	1.330		2.2	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_34.D
Acq On : 13 Apr 2017 01:40 pm
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10ppb;04v
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 13:33:56 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.987	130	129499	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.889	114	357009	10.000	ng		0.00
53) Chlorobenzene-d5	9.926	82	179723	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.987	130	129499	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	425404	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	194648	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	238988	9.777	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.80%				
Target Compounds							Qvalue
2) Propylene	3.642	41	112883	8.364	ppbv	#	88
3) Dichlorodifluoromethane	3.715	85	485421	10.419	ppbv	#	94
4) Chloromethane	3.878	50	135778	8.418	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.975	85	395213	9.884	ppbv		99
6) Vinyl Chloride	4.080	62	108850	8.370	ppbv		99
7) 1,3-Butadiene	4.210	54	93783	8.410	ppbv	#	28
8) Bromomethane	4.445	94	109653	8.562	ppbv	#	83
9) Chloroethane	4.600	64	46138	7.728	ppbv	#	59
11) Ethanol	4.729	45	63441	7.253	ppbv	#	92
12) Acetone	5.094	43	378066	9.421	ppbv	#	68
13) Trichlorofluoromethane	5.208	101	610305	11.082	ppbv		98
14) Isopropylalcohol	5.289	45	337948	8.551	ppbv	#	79
15) Acrylonitrile	5.441	53	104947	8.398	ppbv	#	90
16) 1,1-Dichloroethene	5.679	61	280513	9.987	ppbv	#	82
17) Methylene Chloride	5.756	49	249737	8.736	ppbv	#	68
20) Carbon Disulfide	5.970	76	257955	8.847	ppbv		99
21) Trichlorotrifluoroethane	5.923	101	303349	9.927	ppbv	#	85
22) Trans-1,2-Dichloroethene	6.339	61	216794	9.915	ppbv		88
23) 1,1-Dichloroethane	6.459	63	175527	7.525	ppbv		94
24) Methyl tert-butyl ethe...	6.485	73	242468	9.048	ppbv	#	84
25) Methyl Ethyl Ketone	6.668	43	246614	8.828	ppbv	#	85
26) Cis-1,2-Dichloroethene	6.901	61	141485	9.252	ppbv		94
27) Hexane	6.987	57	102414	9.084	ppbv	#	24
28) Chloroform	7.049	83	274747	10.096	ppbv	#	87
29) Ethyl acetate	6.987	61	22502	8.653	ppbv	#	12
30) Tetrahydrofuran	7.242	42	100125	9.090	ppbv	#	78
31) 1,2-Dichloroethane	7.405	62	256196	11.133	ppbv		99
32) 1,1,1-Trichloroethane	7.529	97	360665	11.256	ppbv	#	93
33) Benzene	7.748	78	229691	9.547	ppbv	#	82
34) Carbon Tetrachloride	7.815	117	489142	12.153	ppbv		98
35) Cyclohexane	7.873	41	109708	10.922	ppbv	#	50
37) 1,2-dichloropropane	8.113	63	72387	9.036	ppbv	#	1
38) Bromodichloromethane	8.204	83	307417	10.356	ppbv		98
39) Trichloroethene	8.221	130	164203	10.806	ppbv		94
41) 1,4-Dioxane	8.213	88	54003	10.495	ppbv	#	90
43) Heptane	8.329	43	139004	10.513	ppbv	#	75
44) cis-1,3-Dichloropropene	8.594	75	148594	10.657	ppbv		95
45) 4-Methyl-2-pentanone(M...	8.594	43	256508	12.088	ppbv	#	84
46) trans-1,3-Dichloropropene	8.830	75	161682	11.378	ppbv		99
47) 1,1,2-Trichloroethane	8.921	97	117301	10.506	ppbv		95
48) Toluene	9.055	91	272408	10.913	ppbv	#	98
49) Dibromochloromethane	9.266	129	418798	11.580	ppbv		99

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_34.D
Acq On : 13 Apr 2017 01:40 pm
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10ppb;04v
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 13:33:56 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.146	43	246864m	12.467	ppbv	
51)	1,2-Dibromoethane(EDB)	9.393	107	232715	10.882	ppbv	99
52)	Tetrachloroethene	9.611	166	238122	11.774	ppbv	99
54)	1,1,1,2-Tetrachloroethane	9.934	131	231004	10.587	ppbv	99
55)	Chlorobenzene	9.949	112	290291	10.028	ppbv	94
56)	Ethylbenzene	10.126	91	407863	10.938	ppbv	98
57)	m,p-Xylene	10.215	91	689461	22.656	ppbv	98
58)	Bromoform	10.282	173	455286	11.026	ppbv	100
59)	Styrene	10.408	104	233698	11.441	ppbv#	86
60)	1,1,2,2-Tetrachloroethane	10.459	83	240309	9.239	ppbv#	93
61)	o-Xylene	10.467	91	354411	11.303	ppbv	98
64)	Isopropylbenzene	10.778	105	454568	10.891	ppbv	96
66)	4-Ethyltoluene	11.141	105	512878	11.931	ppbv	96
67)	1,3,5-Trimethylbenzene	11.178	105	431285	11.197	ppbv	98
68)	1,2,4-Trimethylbenzene	11.422	105	465203	11.927	ppbv#	95
70)	Benzyl chloride	11.519	91	413841	12.115	ppbv#	96
71)	1,3-Dichlorobenzene	11.534	146	389572	11.779	ppbv	99
72)	1,4-Dichlorobenzene	11.571	146	380563	12.284	ppbv	99
73)	sec-Butylbenzene	11.586	105	578056	11.618	ppbv#	94
74)	4-Isopropyltoluene	11.682	119	590732	12.308	ppbv#	92
75)	1,2-Dichlorobenzene	11.786	146	361392	11.128	ppbv	97
76)	n-Butylbenzene	11.941	91	467683	12.060	ppbv	94
77)	1,2,4-Trichlorobenzene	12.913	180	292422	14.704	ppbv	97
79)	Hexachlorobutadiene	13.224	225	369908	11.753	ppbv	99
81]	Dichlorodifluoromethan...	3.718	85	601350	10.351	ppbv	95
82]	1,2-Dichlorotetrafluor...	3.975	85	395213	9.396	ppbv	100
83]	Vinyl Chloride(sim)	4.083	62	131191	8.036	ppbv	97
84]	Bromomethane(sim)	4.445	94	109653	7.183	ppbv#	83
85]	Trichlorofluoromethane...	5.211	101	776105	10.807	ppbv	100
86]	1,2-Dichloroethane(sim)	7.405	62	256196	10.946	ppbv	99
87]	1,1,1-Trichloroethane(...	7.532	97	457304	11.117	ppbv#	94
88]	Carbon Tetrachloride(sim)	7.815	117	489142	12.006	ppbv	98
89]	1,1-Dichloroethene(sim)	5.676	61	334006	9.867	ppbv#	83
90]	Carbon Disulfide(sim)	5.970	76	258020	8.424	ppbv	99
91]	Trichlorotrifluoroetha...	5.926	101	394080	9.909	ppbv	99
92]	Trans-1,2-Dichloroethe...	6.339	61	216794	9.134	ppbv	88
93]	1,1-Dichloroethane(sim)	6.457	63	208787	7.055	ppbv#	94
94]	Cis-1,2-Dichloroethene...	6.901	61	141485	9.593	ppbv	94
95]	Chloroform(sim)	7.052	83	345539	9.901	ppbv#	87
96]	Benzene(sim)	7.748	78	229691	8.930	ppbv#	82
98]	1,2-dichloropropane(sim)	8.113	63	72387	8.537	ppbv#	1
99]	Bromodichloromethane(sim)	8.207	85	256665	10.987	ppbv#	41
100]	Trichloroethene(sim)	8.221	130	164338	10.615	ppbv	94
101]	1,4-Dioxane(sim)	8.207	88	60353	11.412	ppbv#	86
102]	cis-1,3-Dichloropropen...	8.594	75	148594	12.088	ppbv#	95
103]	1,1,2-Trichloroethane(...	8.924	97	150083	10.276	ppbv	95
104]	Dibromochloromethane(sim)	9.266	129	418798	11.730	ppbv	99
105]	1,2-Dibromoethane(EDB)...	9.389	107	305993	11.695	ppbv	100
106]	Tetrachloroethene(sim)	9.611	166	238098	12.198	ppbv	99
108]	Bromoform(sim)	10.282	173	455286	9.584	ppbv	100
109]	Chlorobenzene(sim)	9.944	112	350697	8.548	ppbv#	91
110]	Ethylbenzene(sim)	10.126	91	407863	10.204	ppbv	97
111]	m,p-Xylene(sim)	10.218	91	767298	22.021	ppbv	97
112]	Styrene(sim)	10.408	104	233698	11.471	ppbv#	86
113]	1,1,2,2-Tetrachloroeth...	10.462	83	301607	8.364	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_34.D
Acq On : 13 Apr 2017 01:40 pm
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10ppb;04v
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 13:33:56 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

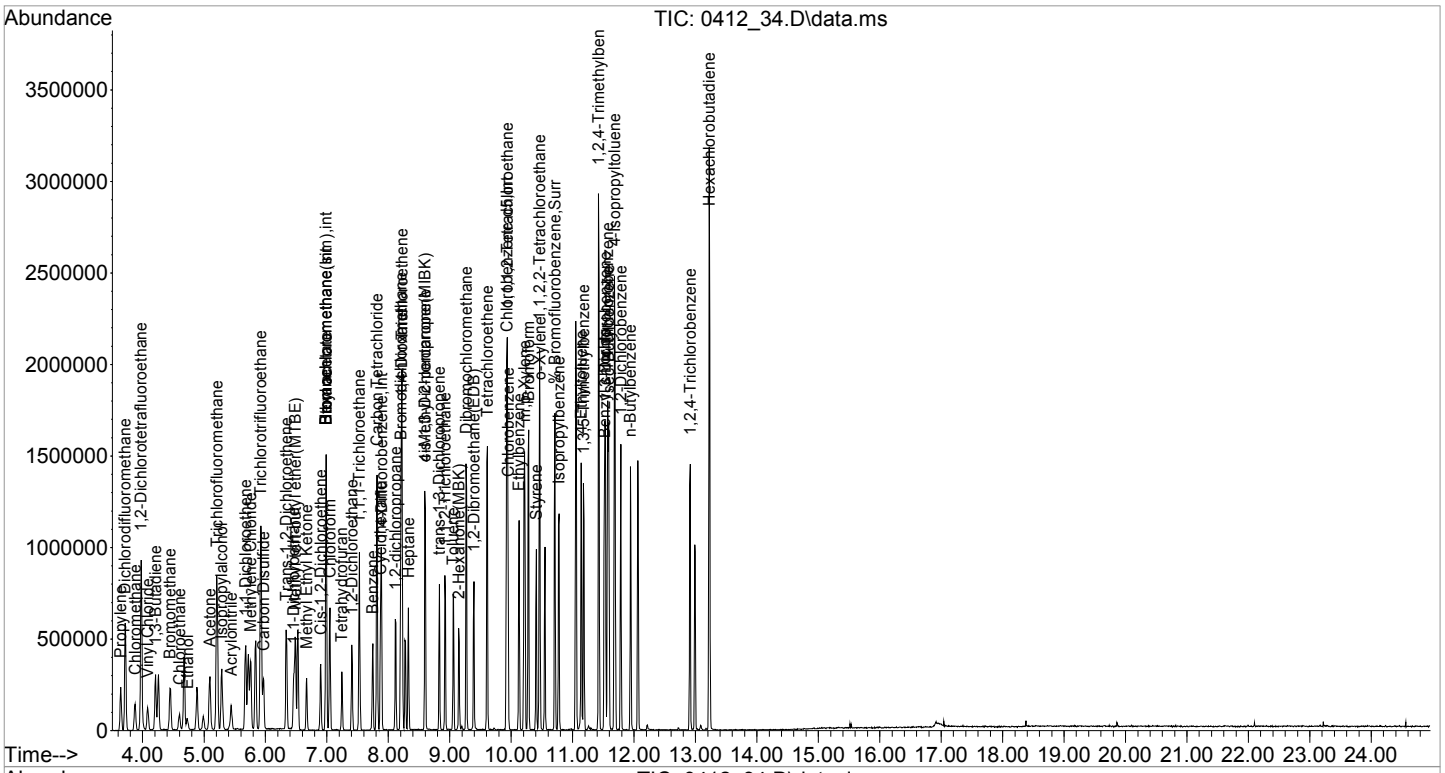
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	354411	11.365	ppbv	100
115] Isopropylbenzene(sim)	10.773	105	495387	10.037	ppbv#	67
117] 4-Ethyltoluene(sim)	11.136	105	552092	11.993	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.178	105	431285	10.894	ppbv	98
119] 1,2,4-Trimethylbenzene...	11.425	105	502586	12.871	ppbv#	93
121] Benzyl chloride(sim)	11.514	91	447526	13.499	ppbv	95
122] 1,3-Dichlorobenzene(sim)	11.534	146	389572	11.283	ppbv	98
123] 1,4-Dichlorobenzene(sim)	11.574	146	495840	12.924	ppbv	97
124] sec-Butylbenzene(sim)	11.422	105	464825	13.383	ppbv	80
125] 4-Isopropyltoluene(sim)	11.677	119	618053	13.104	ppbv#	90
126] 1,2-Dichlorobenzene(sim)	11.786	146	361392	10.641	ppbv	98
127] n-Butylbenzene(sim)	11.944	91	522323	13.445	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	292064	16.936	ppbv	97
130] Hexachlorobutadiene(sim)	13.224	225	369770	10.237	ppbv	100

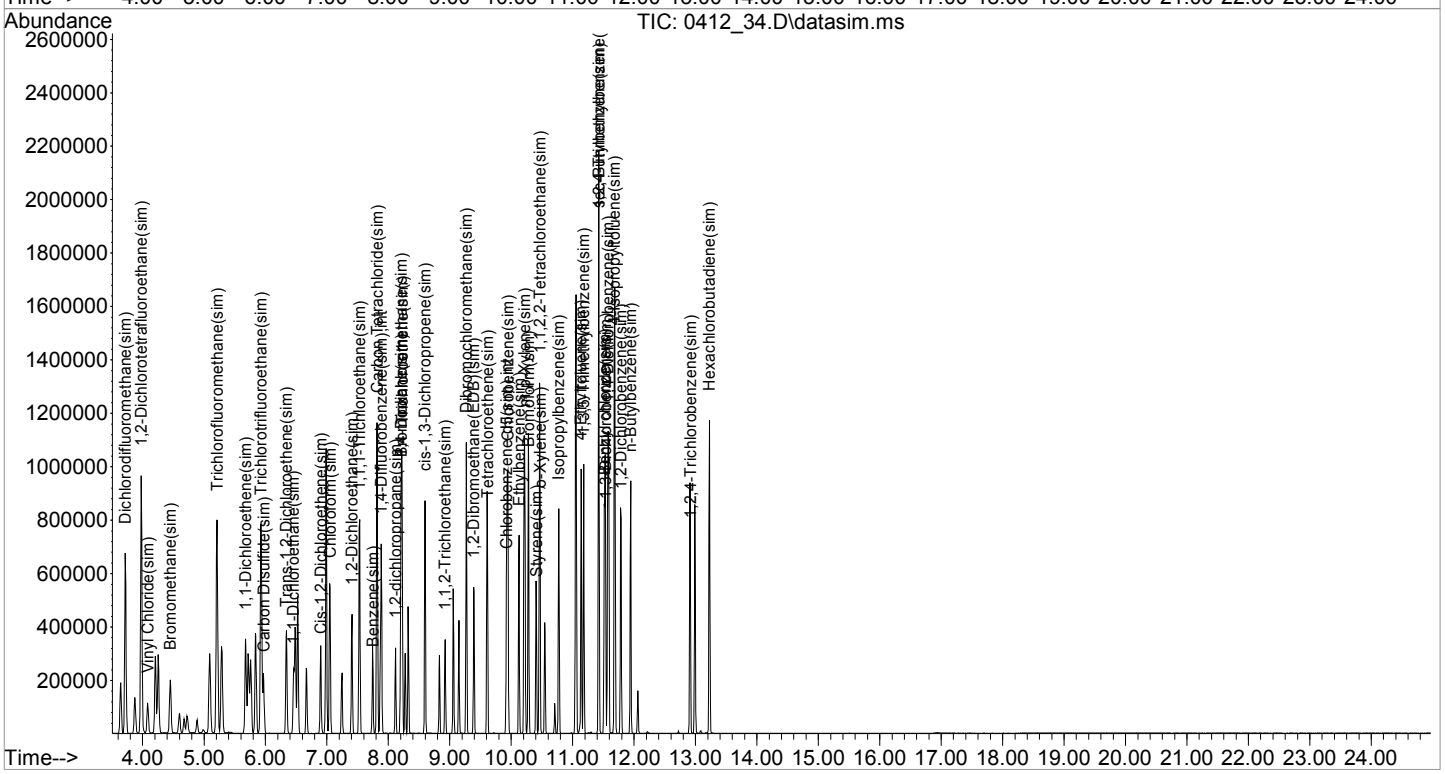
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_34.D
Acq On : 13 Apr 2017 01:40 pm
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10ppb;04v
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 13:33:56 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





7A
AIR CONTINUING CALIBRATION CHECK
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/14/17 Time: 08:09

Lab File Id: 0412_61.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
Dichlorodifluoromethane(sim)	4.486	4.472		0.3	30
1,2-Dichlorotetrafluoroethane(sim)	3.248	2.974		8.4	30
Vinyl Chloride(sim)	1.261	0.944		25.1	30
Bromomethane(sim)	1.179	0.827		29.9	30
Trichlorofluoromethane(sim)	5.546	6.048		-9.1	30
1,2-Dichloroethane(sim)	1.807	1.713		5.2	30
1,1,1-Trichloroethane(sim)	3.176	3.443		-8.4	30
Carbon Tetrachloride(sim)	3.146	3.549		-12.8	30
1,1-Dichloroethene(sim)	2.614	2.443		6.5	30
Carbon Disulfide(sim)	2.365	1.960		17.1	30
Trichlorotrifluoroethane(sim)	3.071	3.070		0.0	30
Trans-1,2-Dichloroethene(sim)	1.833	1.687		8.0	30
1,1-Dichloroethane(sim)	2.285	2.245		1.8	30
Cis-1,2-Dichloroethene(sim)	1.139	0.918		19.4	30
Chloroform(sim)	2.695	2.542		5.7	30
Benzene(sim)	1.986	1.656		16.6	30
1,2-dichloropropane(sim)	0.199	0.167		16.1	30
Bromodichloromethane(sim)	0.549	0.518		5.6	30
Trichloroethene(sim)	0.364	0.350		3.8	30
1,4-Dioxane(sim)	0.124	0.114		8.1	30
cis-1,3-Dichloropropene(sim)	0.289	0.250		13.5	30
1,1,2-Trichloroethane(sim)	0.343	0.311		9.3	30
Dibromochloromethane(sim)	0.839	0.842		-0.4	30
1,2-Dibromoethane(EDB)(sim)	0.615	0.593		3.6	30
Tetrachloroethene(sim)	0.459	0.481		-4.8	30
Bromoform(sim)	2.441	2.754		-12.8	30
Chlorobenzene(sim)	2.108	2.063		2.1	30
Ethylbenzene(sim)	2.054	2.028		1.3	30
m,p-Xylene(sim)	1.790	1.946		-8.7	30
Styrene(sim)	1.047	1.225		-17.0	30
1,1,2,2-Tetrachloroethane(sim)	1.852	1.759		5.0	30
o-Xylene(sim)	1.602	1.754		-9.5	30
Isopropylbenzene(sim)	2.536	2.670		-5.3	30
4-Ethyltoluene(sim)	2.365	2.742		-15.9	30
1,3,5-Trimethylbenzene(sim)	2.034	2.236		-9.9	30
1,2,4-Trimethylbenzene(sim)	2.006	2.395		-19.4	30

(#) Maximum %D not met.

FORM VII AIR

7B
AIR CONTINUING CALIBRATION CHECK
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/14/17 Time: 08:09

Lab File Id: 0412_61.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
Benzyl chloride(sim)	1.703	1.986		-16.6	30
1,3-Dichlorobenzene(sim)	1.774	2.130		-20.1	30
1,4-Dichlorobenzene(sim)	1.971	2.685		-36.2 #	30
sec-Butylbenzene(sim)	1.784	2.211		-23.9	30
4-Isopropyltoluene(sim)	2.423	3.182		-31.3 #	30
1,2-Dichlorobenzene(sim)	1.745	2.230		-27.8	30
n-Butylbenzene(sim)	1.996	2.310		-15.7	30
1,2,4-Trichlorobenzene(sim)	0.886	1.097		-23.8	30
Hexachlorobutadiene(sim)	1.856	2.265		-22.0	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_61.D
Acq On : 14 Apr 2017 08:09 am
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:17:59 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	109178	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	307096	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	125528	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	109178	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	365325	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	128710	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	194282	11.380	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.80%				
Target Compounds							Qvalue
2) Propylene	3.659	41	8076	0.710	ppbv	#	82
3) Dichlorodifluoromethane	3.732	85	40289	1.026	ppbv	#	92
4) Chloromethane	3.886	50	10708	0.787	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.983	85	32470	0.963	ppbv	#	95
6) Vinyl Chloride	4.089	62	8025	0.732	ppbv		94
7) 1,3-Butadiene	4.218	54	7783	0.828	ppbv	#	22
8) Bromomethane	4.454	94	9124	0.845	ppbv	#	71
9) Chloroethane	4.600	64	4138	0.822	ppbv	#	58
11) Ethanol	4.721	45	6515	0.884	ppbv	#	75
12) Acetone	5.103	43	34289	1.013	ppbv	#	69
13) Trichlorofluoromethane	5.216	101	53121	1.144	ppbv	#	98
14) Isopropylalcohol	5.297	45	29208	0.877	ppbv	#	66
15) Acrylonitrile	5.441	53	9245	0.878	ppbv	#	90
16) 1,1-Dichloroethene	5.679	61	22435	0.947	ppbv	#	80
17) Methylene Chloride	5.762	49	23234	0.964	ppbv	#	66
20) Carbon Disulfide	5.971	76	21400	0.871	ppbv		96
21) Trichlorotrifluoroethane	5.923	101	25667	0.996	ppbv	#	81
22) Trans-1,2-Dichloroethene	6.339	61	18306	0.993	ppbv		92
23) 1,1-Dichloroethane	6.449	63	20784	1.057	ppbv		96
24) Methyl tert-butyl ethe...	6.485	73	20993	0.929	ppbv	#	77
25) Methyl Ethyl Ketone	6.668	43	18480	0.785	ppbv	#	88
26) Cis-1,2-Dichloroethene	6.894	61	10022	0.777	ppbv		91
27) Hexane	6.987	57	7068	0.744	ppbv	#	9
28) Chloroform	7.041	83	21437	0.934	ppbv	#	83
29) Ethyl acetate	6.987	61	1921	0.876	ppbv	#	28
30) Tetrahydrofuran	7.250	42	6119	0.659	ppbv	#	87
31) 1,2-Dichloroethane	7.405	62	18707	0.964	ppbv		97
32) 1,1,1-Trichloroethane	7.529	97	29822	1.104	ppbv	#	93
33) Benzene	7.740	78	18082	0.891	ppbv	#	87
34) Carbon Tetrachloride	7.807	117	38748	1.142	ppbv		95
35) Cyclohexane	7.873	41	7502	0.886	ppbv	#	27
37) 1,2-dichloropropane	8.113	63	6083	0.883	ppbv	#	16
38) Bromodichloromethane	8.196	83	24036	0.941	ppbv		93
39) Trichloroethene	8.221	130	12910	0.988	ppbv		94
41) 1,4-Dioxane	8.213	88	3213	0.726	ppbv	#	62
43) Heptane	8.329	43	9481	0.834	ppbv	#	74
44) cis-1,3-Dichloropropene	8.594	75	9275	0.773	ppbv		97
45) 4-Methyl-2-pentanone(M...	8.602	43	14238	0.780	ppbv		95
46) trans-1,3-Dichloropropene	8.830	75	10050	0.822	ppbv		97
47) 1,1,2-Trichloroethane	8.921	97	9483	0.987	ppbv		92
48) Toluene	9.055	91	19744	0.919	ppbv		93
49) Dibromochloromethane	9.266	129	30771	0.989	ppbv		98

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_61.D
Acq On : 14 Apr 2017 08:09 am
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:17:59 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.154	43	14347	0.842	ppbv#	82
51)	1,2-Dibromoethane(EDB)	9.393	107	16548	0.900	ppbv	93
52)	Tetrachloroethene	9.604	166	17560	1.009	ppbv	96
54)	1,1,1,2-Tetrachloroethane	9.934	131	16596	1.089	ppbv	99
55)	Chlorobenzene	9.949	112	23150	1.145	ppbv	88
56)	Ethylbenzene	10.127	91	26102	1.002	ppbv	95
57)	m,p-Xylene	10.215	91	45008	2.118	ppbv	98
58)	Bromoform	10.275	173	35446	1.229	ppbv	99
59)	Styrene	10.408	104	15768	1.105	ppbv#	93
60)	1,1,2,2-Tetrachloroethane	10.460	83	17686	0.974	ppbv	91
61)	o-Xylene	10.467	91	22580	1.031	ppbv	96
64)	Isopropylbenzene	10.771	105	31696	1.087	ppbv#	93
66)	4-Ethyltoluene	11.141	105	33577	1.118	ppbv	94
67)	1,3,5-Trimethylbenzene	11.178	105	28782	1.070	ppbv	92
68)	1,2,4-Trimethylbenzene	11.423	105	28462	1.045	ppbv	91
70)	Benzyl chloride	11.512	91	21532	0.902	ppbv#	89
71)	1,3-Dichlorobenzene	11.526	146	27411	1.187	ppbv	99
72)	1,4-Dichlorobenzene	11.571	146	25864	1.195	ppbv	94
73)	sec-Butylbenzene	11.586	105	38634	1.112	ppbv#	90
74)	4-Isopropyltoluene	11.682	119	40591	1.211	ppbv#	91
75)	1,2-Dichlorobenzene	11.786	146	28698	1.265	ppbv#	89
76)	n-Butylbenzene	11.942	91	26569	0.981	ppbv#	93
77)	1,2,4-Trichlorobenzene	12.905	180	14121	1.017	ppbv	97
79)	Hexachlorobutadiene	13.224	225	29306	1.333	ppbv	97
81]	Dichlorodifluoromethan...	3.735	85	48826	0.997	ppbv	95
82]	1,2-Dichlorotetrafluor...	3.983	85	32470	0.916	ppbv#	95
83]	Vinyl Chloride(sim)	4.092	62	10301	0.748	ppbv	98
84]	Bromomethane(sim)	4.454	94	9029	0.702	ppbv#	70
85]	Trichlorofluoromethane...	5.211	101	66034	1.091	ppbv	100
86]	1,2-Dichloroethane(sim)	7.405	62	18707	0.948	ppbv	97
87]	1,1,1-Trichloroethane(...	7.525	97	37588	1.084	ppbv#	95
88]	Carbon Tetrachloride(sim)	7.807	117	38748	1.128	ppbv	95
89]	1,1-Dichloroethene(sim)	5.676	61	26676	0.935	ppbv#	84
90]	Carbon Disulfide(sim)	5.971	76	21400	0.829	ppbv	96
91]	Trichlorotrifluoroetha...	5.926	101	33518	1.000	ppbv	98
92]	Trans-1,2-Dichloroethe...	6.339	61	18423	0.921	ppbv	92
93]	1,1-Dichloroethane(sim)	6.457	63	24513	0.982	ppbv#	95
94]	Cis-1,2-Dichloroethene...	6.894	61	10022	0.806	ppbv	91
95]	Chloroform(sim)	7.044	83	27748	0.943	ppbv#	86
96]	Benzene(sim)	7.740	78	18082	0.834	ppbv#	87
98]	1,2-dichloropropane(sim)	8.113	63	6083	0.835	ppbv#	16
99]	Bromodichloromethane(sim)	8.199	85	18926	0.943	ppbv#	41
100]	Trichloroethene(sim)	8.221	130	12794	0.962	ppbv	95
101]	1,4-Dioxane(sim)	8.216	88	4169	0.918	ppbv#	79
102]	cis-1,3-Dichloropropen...	8.594	75	9144	0.866	ppbv	97
103]	1,1,2-Trichloroethane(...	8.924	97	11371	0.907	ppbv	94
104]	Dibromochloromethane(sim)	9.266	129	30771	1.004	ppbv	100
105]	1,2-Dibromoethane(EDB)...	9.389	107	21676	0.965	ppbv	99
106]	Tetrachloroethene(sim)	9.604	166	17560	1.048	ppbv	96
108]	Bromoform(sim)	10.275	173	35446	1.128	ppbv	99
109]	Chlorobenzene(sim)	9.944	112	26552	0.979	ppbv#	91
110]	Ethylbenzene(sim)	10.127	91	26102	0.988	ppbv#	94
111]	m,p-Xylene(sim)	10.218	91	50094	2.174	ppbv	99
112]	Styrene(sim)	10.408	104	15768	1.170	ppbv#	93
113]	1,1,2,2-Tetrachloroeth...	10.455	83	22644	0.950	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_61.D
Acq On : 14 Apr 2017 08:09 am
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:17:59 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

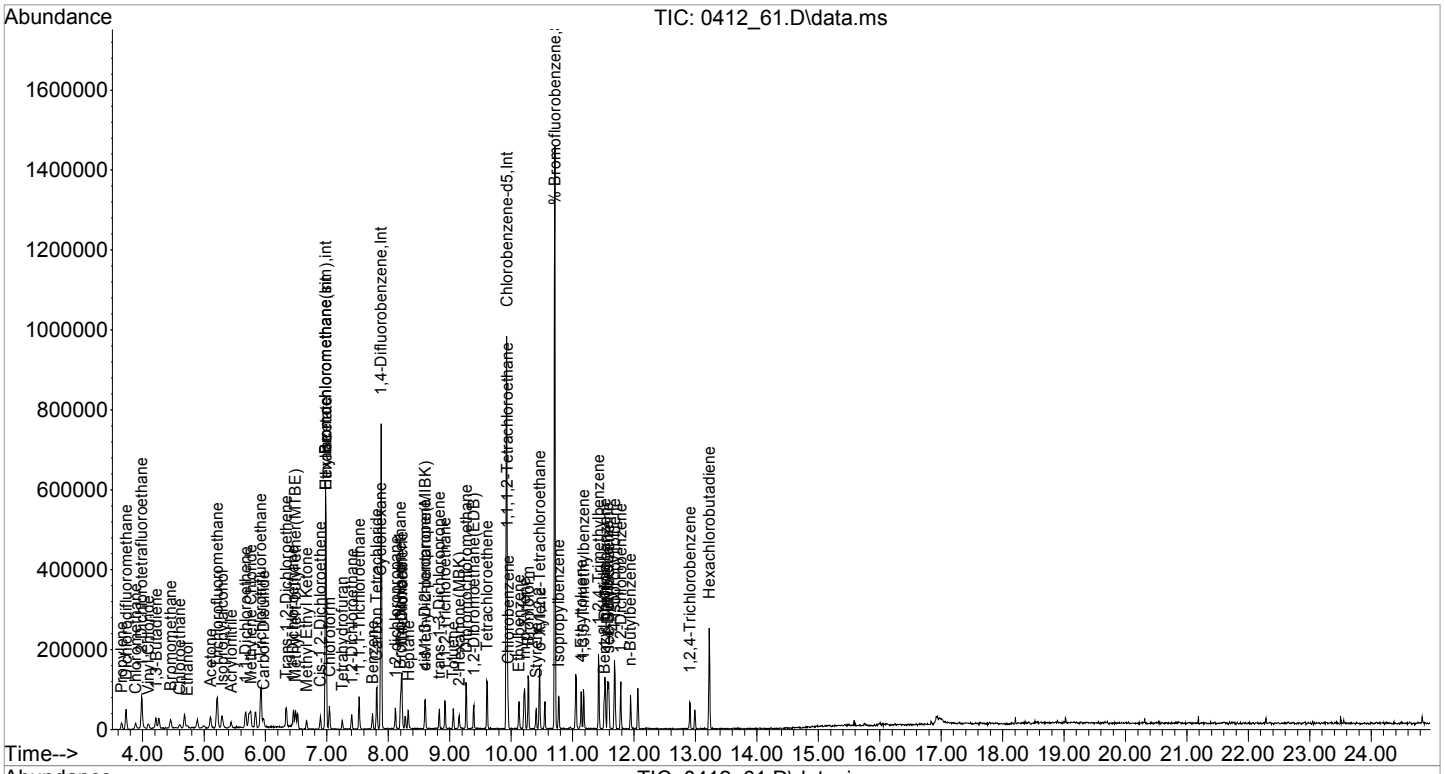
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	22580	1.095	ppbv	94
115] Isopropylbenzene(sim)	10.773	105	34363	1.053	ppbv#	68
117] 4-Ethyltoluene(sim)	11.136	105	35298	1.160	ppbv	96
118] 1,3,5-Trimethylbenzene...	11.178	105	28782	1.099	ppbv	90
119] 1,2,4-Trimethylbenzene...	11.426	105	30828	1.194	ppbv#	96
121] Benzyl chloride(sim)	11.514	91	25567	1.166	ppbv	96
122] 1,3-Dichlorobenzene(sim)	11.526	146	27411	1.201	ppbv	99
123] 1,4-Dichlorobenzene(sim)	11.574	146	34564	1.362	ppbv	97
124] sec-Butylbenzene(sim)	11.423	105	28461	1.239	ppbv	79
125] 4-Isopropyltoluene(sim)	11.678	119	40953	1.313	ppbv#	91
126] 1,2-Dichlorobenzene(sim)	11.786	146	28698	1.278	ppbv	90
127] n-Butylbenzene(sim)	11.945	91	29728	1.157	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.905	180	14121	1.238	ppbv	97
130] Hexachlorobutadiene(sim)	13.224	225	29158	1.221	ppbv	96

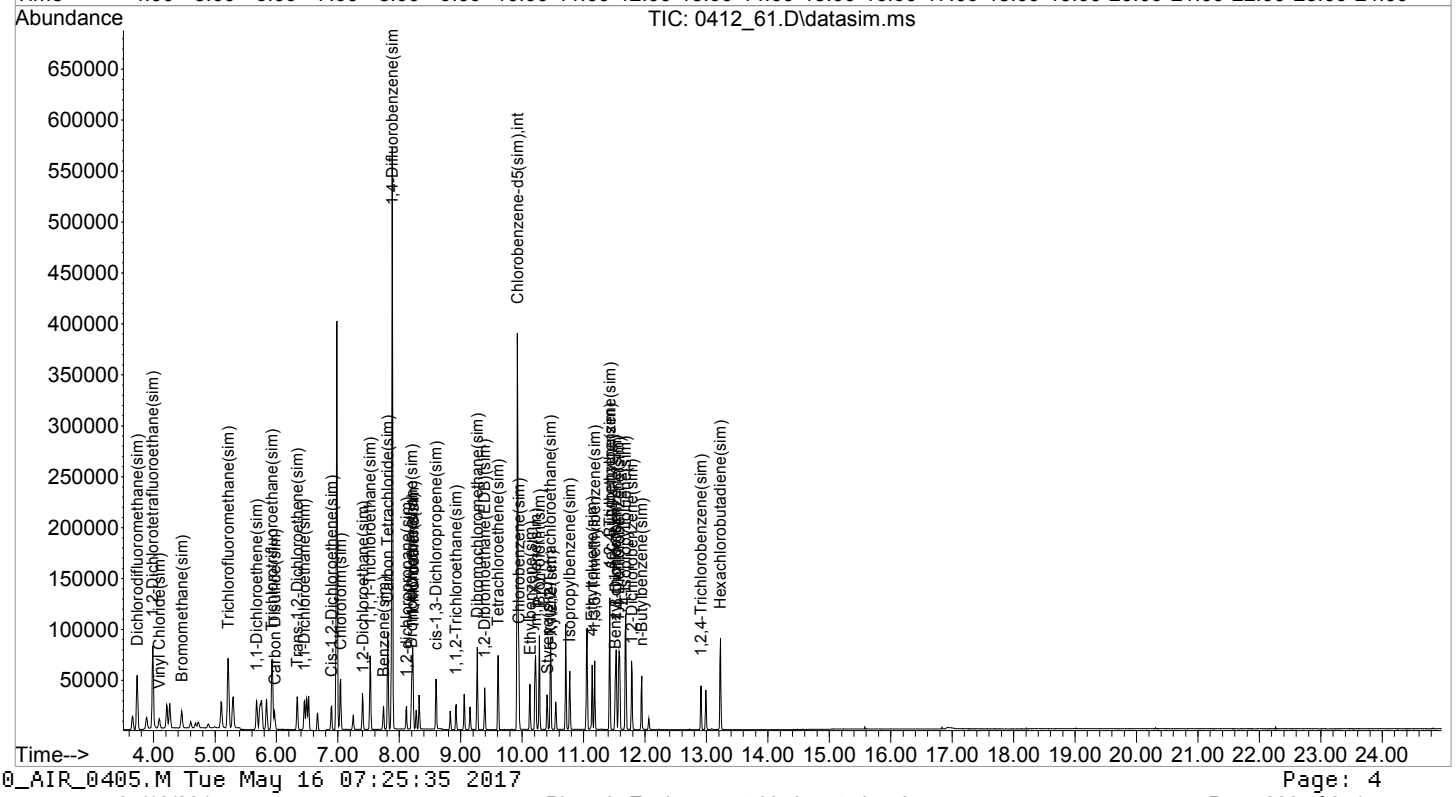
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_61.D
Acq On : 14 Apr 2017 08:09 am
Operator : CORTEX\ms
Client ID : CCAL 1
Lab ID : 1.0
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:17:59 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





7A
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/14/17 Time: 08:46

Lab File Id: 0412_62.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
Propylene	1.042	0.804		22.8	30
Dichlorodifluoromethane	3.598	3.848		-6.9	30
Chloromethane	1.246	0.997		20.0	30
1,2-Dichlorotetrafluoroethane	3.088	3.060		0.9	30
Vinyl Chloride	1.004	0.799		20.4	30
1,3-Butadiene	0.861	0.747		13.2	30
Bromomethane	0.989	0.848		14.3	30
Chloroethane	0.461	0.332		28.0	30
Ethanol	0.675	0.456		32.4 #	30
Acetone	3.099	2.870		7.4	30
Trichlorofluoromethane	4.252	4.897		-15.2	30
Isopropylalcohol	3.052	2.447		19.8	30
Acrylonitrile	0.965	0.787		18.4	30
1,1-Dichloroethene	2.169	2.108		2.8	30
Methylene Chloride	2.208	1.902		13.9	30
Carbon Disulfide	2.252	1.916		14.9	30
Trichlorotrifluoroethane	2.360	2.428		-2.9	30
Trans-1,2-Dichloroethene	1.688	1.675		0.8	30
1,1-Dichloroethane	1.801	1.824		-1.3	30
Methyl tert-butyl ether(MTBE)	2.069	1.957		5.4	30
Methyl Ethyl Ketone	2.157	1.796		16.7	30
Cis-1,2-Dichloroethene	1.181	1.063		10.0	30
Hexane	0.871	0.751		13.8	30
Chloroform	2.101	2.044		2.7	30
Ethyl acetate	0.201	0.148		26.4	30
Tetrahydrofuran	0.851	0.746		12.3	30
1,2-Dichloroethane	1.777	1.921		-8.1	30
1,1,1-Trichloroethane	2.474	2.803		-13.3	30
Benzene	1.858	1.768		4.8	30
Carbon Tetrachloride	3.108	3.844		-23.7	30
Cyclohexane	0.776	0.895		-15.3	30
1,2-dichloropropane	0.224	0.196		12.5	30
Bromodichloromethane	0.831	0.871		-4.8	30
Trichloroethene	0.426	0.470		-10.3	30
1,4-Dioxane	0.144	0.144		0.0	30
Heptane	0.370	0.372		-0.5	30

(#) Maximum %D not met.

FORM VII AIR

7B
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM20 Calibration Date: 04/14/17 Time: 08:46

Lab File Id: 0412_62.D Init. Calib. Date(s): 04/05/17 04/05/17

Heated Purge (Y/N): Y Init. Calib. Times: 12:02 18:16

GC Column: zb-1ms Method File: 20_AIR_0405.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
cis-1,3-Dichloropropene	0.391	0.408		-4.3	30
4-Methyl-2-pentanone(MIBK)	0.594	0.694		-16.8	30
trans-1,3-Dichloropropene	0.398	0.432		-8.5	30
1,1,2-Trichloroethane	0.313	0.314		-0.3	30
Toluene	0.699	0.757		-8.3	30
Dibromochloromethane	1.013	1.154		-13.9	30
2-Hexanone(MBK)	0.555	0.674		-21.4	30
1,2-Dibromoethane(EDB)	0.599	0.662		-10.5	30
Tetrachloroethene	0.566	0.685		-21.0	30
1,1,1,2-Tetrachloroethane	1.214	1.329		-9.5	30
Chlorobenzene	1.611	1.667		-3.5	30
Ethylbenzene	2.075	2.238		-7.9	30
m,p-Xylene	1.693	1.952		-15.3	30
Bromoform	2.298	2.633		-14.6	30
Styrene	1.137	1.342		-18.0	30
1,1,2,2-Tetrachloroethane	1.447	1.312		9.3	30
o-Xylene	1.745	1.965		-12.6	30
Isopropylbenzene	2.322	2.640		-13.7	30
4-Ethyltoluene	2.392	2.897		-21.1	30
1,3,5-Trimethylbenzene	2.143	2.507		-17.0	30
1,2,4-Trimethylbenzene	2.170	2.635		-21.4	30
Benzyl chloride	1.901	2.277		-19.8	30
1,3-Dichlorobenzene	1.840	2.206		-19.9	30
1,4-Dichlorobenzene	1.724	2.251		-30.6 #	30
sec-Butylbenzene	2.769	3.275		-18.3	30
4-Isopropyltoluene	2.671	3.418		-28.0	30
1,2-Dichlorobenzene	1.807	2.158		-19.4	30
n-Butylbenzene	2.158	2.722		-26.1	30
1,2,4-Trichlorobenzene	1.107	1.713		-54.7 #	30
Hexachlorobutadiene	1.751	2.265		-29.4	30
% Bromofluorobenzene	1.360	1.333		2.0	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_62.D
Acq On : 14 Apr 2017 08:46 am
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:18:33 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.987	130	108021	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.889	114	304589	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	148237	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.987	130	108021	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	362811	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	163870	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	197642	9.803	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.00%				
Target Compounds							Qvalue
2) Propylene	3.659	41	86823	7.712	ppbv		91
3) Dichlorodifluoromethane	3.732	85	415701	10.697	ppbv	#	94
4) Chloromethane	3.886	50	107728	8.007	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.983	85	330548	9.911	ppbv		97
6) Vinyl Chloride	4.097	62	86336	7.959	ppbv		96
7) 1,3-Butadiene	4.218	54	80670	8.673	ppbv	#	39
8) Bromomethane	4.454	94	91567	8.571	ppbv	#	82
9) Chloroethane	4.608	64	35837	7.196	ppbv	#	55
11) Ethanol	4.729	45	49245	6.750	ppbv	#	90
12) Acetone	5.094	43	309970	9.260	ppbv	#	67
13) Trichlorofluoromethane	5.216	101	528932	11.515	ppbv		99
14) Isopropylalcohol	5.289	45	264331	8.018	ppbv	#	75
15) Acrylonitrile	5.441	53	85024	8.157	ppbv	#	89
16) 1,1-Dichloroethene	5.679	61	227703	9.719	ppbv	#	81
17) Methylene Chloride	5.762	49	205483	8.617	ppbv	#	68
20) Carbon Disulfide	5.970	76	206935	8.508	ppbv		98
21) Trichlorotrifluoroethane	5.929	101	262224	10.288	ppbv	#	86
22) Trans-1,2-Dichloroethene	6.339	61	180901	9.918	ppbv		88
23) 1,1-Dichloroethane	6.459	63	197001	10.125	ppbv		96
24) Methyl tert-butyl ethe...	6.485	73	211426	9.459	ppbv	#	83
25) Methyl Ethyl Ketone	6.668	43	194006	8.326	ppbv	#	87
26) Cis-1,2-Dichloroethene	6.902	61	114838	9.003	ppbv		92
27) Hexane	6.995	57	81087	8.622	ppbv	#	21
28) Chloroform	7.049	83	220747	9.725	ppbv	#	83
29) Ethyl acetate	6.987	61	15997	7.375	ppbv	#	1
30) Tetrahydrofuran	7.242	42	80549	8.766	ppbv	#	77
31) 1,2-Dichloroethane	7.405	62	207498	10.809	ppbv		98
32) 1,1,1-Trichloroethane	7.529	97	302801	11.329	ppbv	#	92
33) Benzene	7.748	78	191027	9.519	ppbv	#	84
34) Carbon Tetrachloride	7.815	117	415210	12.367	ppbv		99
35) Cyclohexane	7.873	41	96700	11.541	ppbv	#	44
37) 1,2-dichloropropane	8.121	63	59703	8.735	ppbv	#	1
38) Bromodichloromethane	8.204	83	265263	10.474	ppbv		99
39) Trichloroethene	8.221	130	143208	11.046	ppbv		94
41) 1,4-Dioxane	8.204	88	43920	10.004	ppbv	#	87
43) Heptane	8.329	43	113256	10.039	ppbv	#	76
44) cis-1,3-Dichloropropene	8.594	75	124293	10.448	ppbv		92
45) 4-Methyl-2-pentanone(M...	8.594	43	211442	11.679	ppbv	#	83
46) trans-1,3-Dichloropropene	8.830	75	131704	10.864	ppbv		98
47) 1,1,2-Trichloroethane	8.921	97	95548	10.030	ppbv		97
48) Toluene	9.055	91	230498	10.823	ppbv	#	98
49) Dibromochloromethane	9.266	129	351439	11.390	ppbv		99

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_62.D
Acq On : 14 Apr 2017 08:46 am
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:18:33 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	9.146	43	205365	12.156	ppbv#	73
51)	1,2-Dibromoethane(EDB)	9.393	107	201729	11.056	ppbv	99
52)	Tetrachloroethene	9.611	166	208720	12.096	ppbv	99
54)	1,1,1,2-Tetrachloroethane	9.934	131	197057	10.949	ppbv	98
55)	Chlorobenzene	9.949	112	247037	10.347	ppbv	94
56)	Ethylbenzene	10.126	91	331692	10.785	ppbv	97
57)	m,p-Xylene	10.215	91	578613	23.052	ppbv	100
58)	Bromoform	10.282	173	390295	11.460	ppbv	99
59)	Styrene	10.408	104	198919	11.807	ppbv#	89
60)	1,1,2,2-Tetrachloroethane	10.459	83	194461	9.065	ppbv#	88
61)	o-Xylene	10.467	91	291356	11.266	ppbv	99
64)	Isopropylbenzene	10.778	105	391390	11.369	ppbv	97
66)	4-Ethyltoluene	11.141	105	429463	12.112	ppbv	94
67)	1,3,5-Trimethylbenzene	11.178	105	371610	11.697	ppbv	98
68)	1,2,4-Trimethylbenzene	11.422	105	390665	12.144	ppbv#	96
70)	Benzyl chloride	11.519	91	337472	11.978	ppbv#	95
71)	1,3-Dichlorobenzene	11.534	146	327028	11.989	ppbv	99
72)	1,4-Dichlorobenzene	11.571	146	333738	13.061	ppbv	98
73)	sec-Butylbenzene	11.586	105	485410	11.828	ppbv#	93
74)	4-Isopropyltoluene	11.682	119	506648	12.798	ppbv#	93
75)	1,2-Dichlorobenzene	11.786	146	319854	11.941	ppbv	96
76)	n-Butylbenzene	11.941	91	403442	12.613	ppbv	93
77)	1,2,4-Trichlorobenzene	12.913	180	253912	15.479	ppbv	98
79)	Hexachlorobutadiene	13.224	225	335746	12.934	ppbv	99
81]	Dichlorodifluoromethan...	3.735	85	509078	10.505	ppbv	95
82]	1,2-Dichlorotetrafluor...	3.983	85	330548	9.421	ppbv	97
83]	Vinyl Chloride(sim)	4.091	62	105413	7.741	ppbv	97
84]	Bromomethane(sim)	4.454	94	91567	7.191	ppbv#	82
85]	Trichlorofluoromethane...	5.219	101	663742	11.080	ppbv	100
86]	1,2-Dichloroethane(sim)	7.405	62	207498	10.628	ppbv	98
87]	1,1,1-Trichloroethane(...	7.532	97	388684	11.328	ppbv#	94
88]	Carbon Tetrachloride(sim)	7.815	117	415210	12.218	ppbv	99
89]	1,1-Dichloroethene(sim)	5.682	61	274692	9.729	ppbv#	84
90]	Carbon Disulfide(sim)	5.970	76	206935	8.100	ppbv	98
91]	Trichlorotrifluoroetha...	5.932	101	332796	10.032	ppbv	99
92]	Trans-1,2-Dichloroethe...	6.339	61	180901	9.137	ppbv	88
93]	1,1-Dichloroethane(sim)	6.462	63	233688	9.466	ppbv#	94
94]	Cis-1,2-Dichloroethene...	6.902	61	114838	9.334	ppbv	92
95]	Chloroform(sim)	7.052	83	285266	9.799	ppbv#	86
96]	Benzene(sim)	7.748	78	191027	8.903	ppbv#	84
98]	1,2-dichloropropane(sim)	8.121	63	59706	8.256	ppbv#	1
99]	Bromodichloromethane(sim)	8.207	85	215907	10.837	ppbv#	41
100]	Trichloroethene(sim)	8.221	130	143208	10.846	ppbv	95
101]	1,4-Dioxane(sim)	8.207	88	49848	11.052	ppbv#	85
102]	cis-1,3-Dichloropropen...	8.594	75	124293	11.856	ppbv#	92
103]	1,1,2-Trichloroethane(...	8.924	97	125433	10.070	ppbv	94
104]	Dibromochloromethane(sim)	9.266	129	351439	11.541	ppbv	98
105]	1,2-Dibromoethane(EDB)...	9.389	107	257237	11.528	ppbv	100
106]	Tetrachloroethene(sim)	9.611	166	208309	12.513	ppbv	99
108]	Bromoform(sim)	10.282	173	390295	9.759	ppbv	99
109]	Chlorobenzene(sim)	9.944	112	297443	8.611	ppbv#	90
110]	Ethylbenzene(sim)	10.126	91	331692	9.856	ppbv#	96
111]	m,p-Xylene(sim)	10.218	91	644814	21.982	ppbv	97
112]	Styrene(sim)	10.408	104	198919	11.597	ppbv#	89
113]	1,1,2,2-Tetrachloroeth...	10.462	83	250274	8.244	ppbv#	96

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_62.D
Acq On : 14 Apr 2017 08:46 am
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:18:33 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

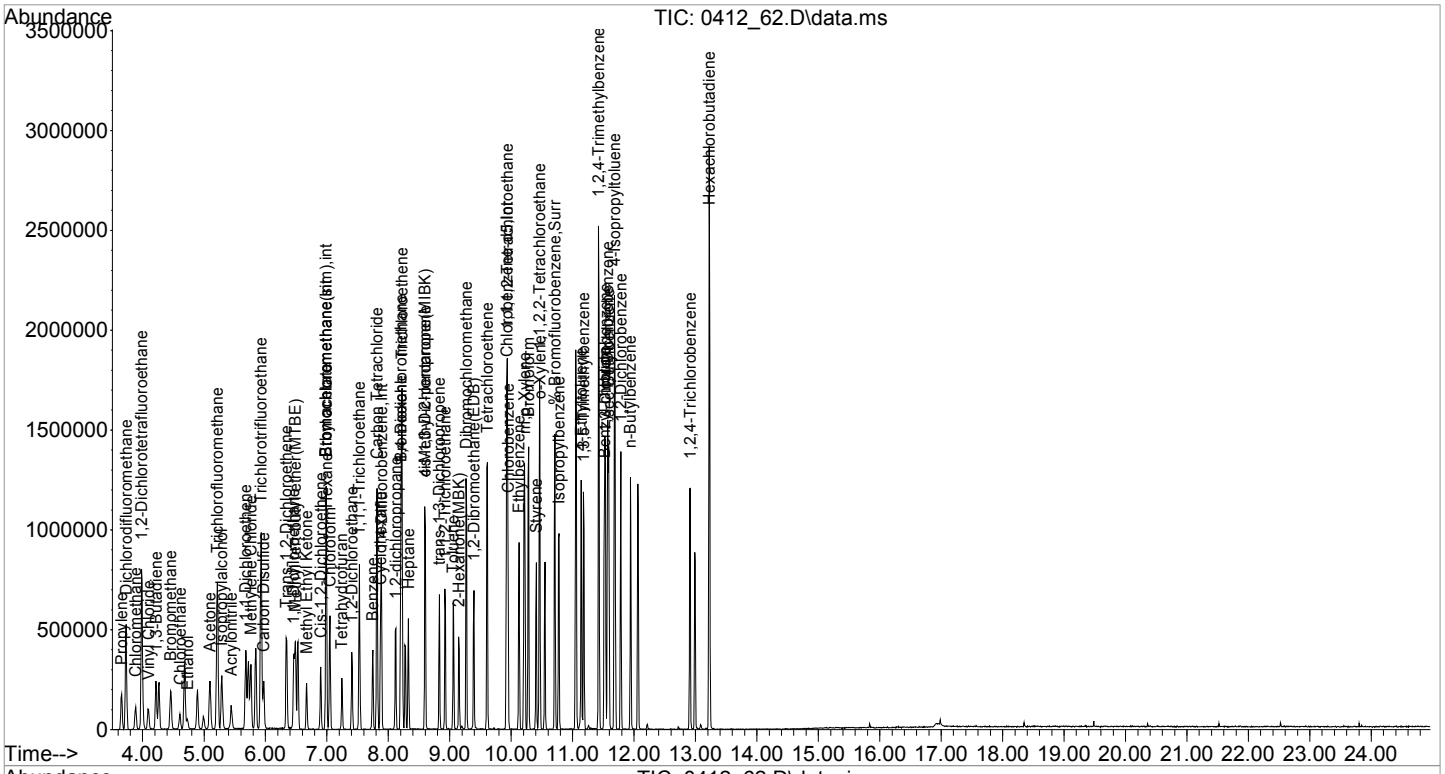
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	291356	11.098	ppbv	99
115] Isopropylbenzene(sim)	10.773	105	424852	10.225	ppbv#	67
117] 4-Ethyltoluene(sim)	11.136	105	468117	12.079	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.178	105	371610	11.149	ppbv	96
119] 1,2,4-Trimethylbenzene...	11.425	105	427238	12.996	ppbv#	94
121] Benzyl chloride(sim)	11.514	91	374061	13.402	ppbv	95
122] 1,3-Dichlorobenzene(sim)	11.534	146	327028	11.251	ppbv	100
123] 1,4-Dichlorobenzene(sim)	11.574	146	429002	13.282	ppbv	97
124] sec-Butylbenzene(sim)	11.422	105	390378	13.350	ppbv	79
125] 4-Isopropyltoluene(sim)	11.677	119	534766	13.468	ppbv#	90
126] 1,2-Dichlorobenzene(sim)	11.786	146	319854	11.187	ppbv	98
127] n-Butylbenzene(sim)	11.944	91	443148	13.549	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	253912	17.490	ppbv	99
130] Hexachlorobutadiene(sim)	13.224	225	335926	11.047	ppbv	100

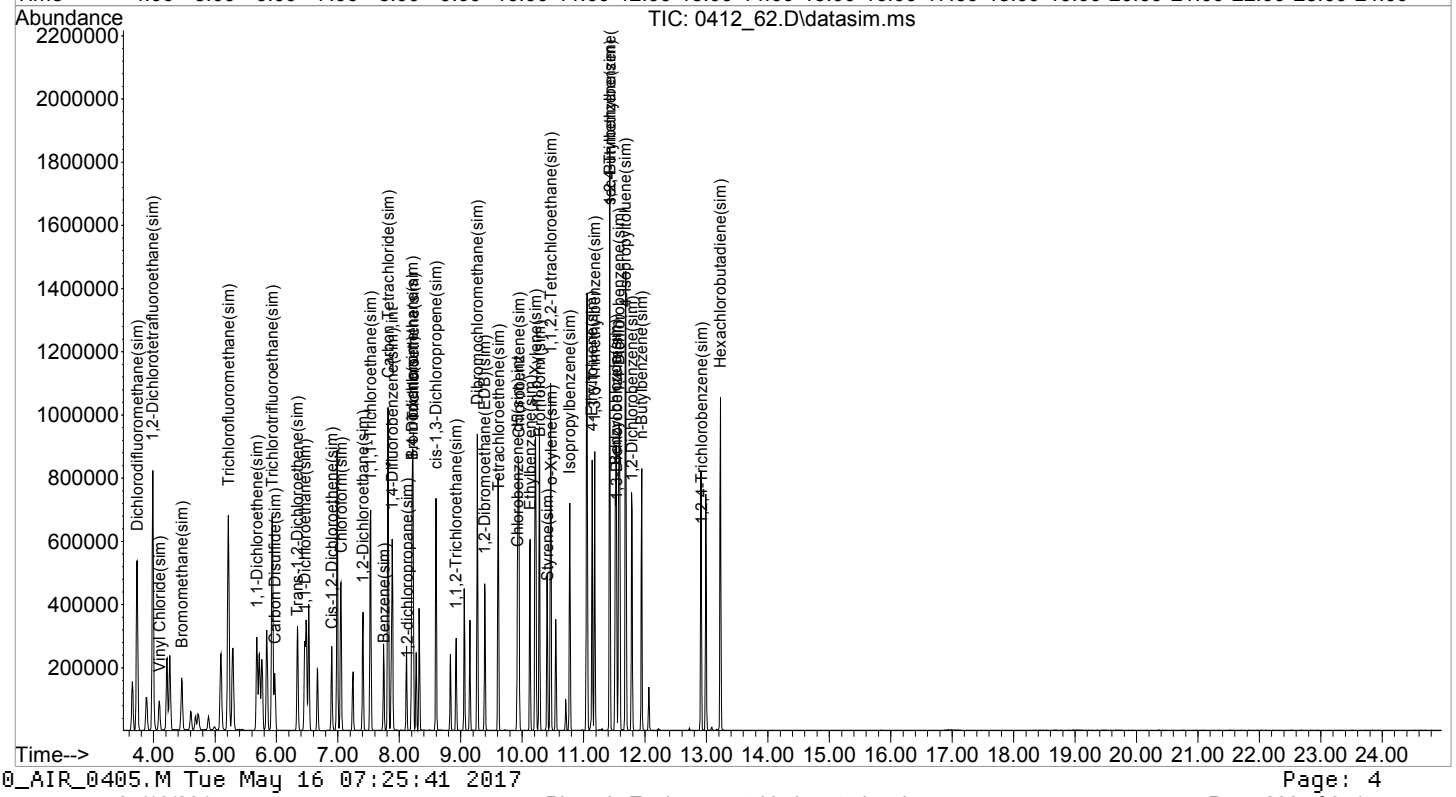
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_62.D
Acq On : 14 Apr 2017 08:46 am
Operator : CORTEX\ms
Client ID : CCAL 10
Lab ID : 10
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:18:33 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





7A
AIR CONTINUING CALIBRATION CHECK
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM24 Calibration Date: 04/17/17 Time: 10:01

Lab File Id: 0417_02.D Init. Calib. Date(s): 04/11/17 04/12/17

Heated Purge (Y/N): Y Init. Calib. Times: 19:43 02:00

GC Column: zb-1ms Method File: 24AIR_0411.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
1,2-Dichlorotetrafluoroethane(sim)	3.062	2.651		13.4	30
Vinyl Chloride(sim)	0.827	0.768		7.1	30
Bromomethane(sim)	1.273	1.067		16.2	30
Trichlorofluoromethane(sim)	4.345	3.262		24.9	30
Trans-1,2-Dichloroethene(sim)	1.544	1.364		11.7	30
1,1-Dichloroethene(sim)	1.744	1.490		14.6	30
1,1-Dichloroethane(sim)	1.898	1.785		6.0	30
Cis-1,2-Dichloroethene(sim)	1.287	1.235		4.0	30
1,2-Dichloroethane(sim)	2.049	1.807		11.8	30
1,1,1-Trichloroethane(sim)	2.862	2.497		12.8	30
Carbon Tetrachloride(sim)	3.485	2.962		15.0	30
Trichlorotrifluoroethane(sim)	2.603	2.111		18.9	30
1,2-dichloropropane(sim)	0.184	0.172		6.5	30
Bromodichloromethane(sim)	0.770	0.723		6.1	30
Trichloroethene(sim)	0.350	0.332		5.1	30
1,4-Dioxane(sim)	0.183	0.155		15.3	30
cis-1,3-Dichloropropene(sim)	0.439	0.418		4.8	30
1,1,2-Trichloroethane(sim)	0.404	0.344		14.9	30
Dibromochloromethane(sim)	0.807	0.702		13.0	30
1,2-Dibromoethane(EDB)(sim)	0.687	0.633		7.9	30
Tetrachloroethene(sim)	0.475	0.463		2.5	30
Bromoform(sim)	1.436	1.385		3.6	30
1,1,1,2-Tetrachloroethane(sim)	1.002	0.873		12.9	30
m,p-Xylene(sim)	2.024	1.991		1.6	30
1,1,2,2-Tetrachloroethane(sim)	1.771	1.540		13.0	30
Benzyl chloride(sim)	1.767	1.594		9.8	30
1,3-Dichlorobenzene(sim)	1.821	1.587		12.9	30
1,4-Dichlorobenzene(sim)	1.512	1.357		10.3	30
sec-Butylbenzene(sim)	3.444	3.140		8.8	30
4-Isopropyltoluene(sim)	2.875	2.867		0.3	30
1,2-Dichlorobenzene(sim)	1.877	1.581		15.8	30
n-Butylbenzene(sim)	2.453	2.401		2.1	30
1,2,4-Trichlorobenzene(sim)	0.785	0.709		9.7	30
Hexachlorobutadiene(sim)	1.738	1.437		17.3	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_02.D
Acq On : 17 Apr 2017 10:01 am
Operator : Keith
Client ID : CCAL 1 - BFB TUNE
Lab ID : 1.0 ppb 01B - 1.0 ppb 01B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 15:03:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.951	130	120814	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.948	114	404473	10.000	ng		0.01
53) Chlorobenzene-d5	9.222	82	204079	10.000	ng		0.00
80) Bromochloromethane(sim)	3.951	130	120814	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.944	114	441158	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.218	82	218007	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.132	95	285247	10.636	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.40%				
Target Compounds							Qvalue
2) Propylene	1.520	41	5050	0.762	ppbv		95
3) Dichlorodifluoromethane	1.554	85	34417	0.730	ppbv		99
4) Chloromethane	1.613	52	2359	0.760	ppbv	#	82
5) 1,2-Dichlorotetrafluor...	1.656	85	29908	0.779	ppbv		89
6) Vinyl Chloride	1.698	62	9276	0.794	ppbv		99
7) 1,3-Butadiene	1.757	54	5727	0.795	ppbv	#	89
8) Bromomethane	1.859	94	11923	0.800	ppbv	#	97
9) Chloroethane	1.927	64	4245	0.817	ppbv		98
10) Ethanol	2.020	45	3068	0.684	ppbv		98
12) Acetone	2.206	43	15188	0.732	ppbv		94
13) Trichlorofluoromethane	2.240	101	39410	0.765	ppbv		98
14) Isopropylalcohol	2.342	45	14124	0.766	ppbv		92
15) Acrylonitrile	2.384	53	4976	0.762	ppbv		92
16) 1,1-Dichloroethene	2.528	61	18002	0.791	ppbv		92
17) Methylene Chloride	2.588	49	12313	0.797	ppbv	#	83
20) Carbon Disulfide	2.732	76	27324	0.817	ppbv		100
21) Trichlorotrifluoroethane	2.740	101	25508	0.783	ppbv		86
22) Trans-1,2-Dichloroethene	3.105	61	15066	0.814	ppbv		90
23) 1,1-Dichloroethane	3.231	63	20067	0.855	ppbv		99
24) Methyl tert-butyl ethe...	3.345	73	25920	0.789	ppbv		96
25) Methyl Ethyl Ketone	3.551	43	16171	0.827	ppbv		97
26) Cis-1,2-Dichloroethene	3.825	61	14918	0.820	ppbv		90
27) Hexane	4.031	57	11240	0.819	ppbv		96
28) Chloroform	4.071	83	29002	0.833	ppbv		96
29) Ethyl acetate	4.105	43	16675	0.753	ppbv		99
30) Tetrahydrofuran	4.498	42	6492	0.758	ppbv	#	85
31) 1,2-Dichloroethane	4.775	62	19992	0.761	ppbv	#	94
32) 1,1,1-Trichloroethane	5.049	97	30162	0.771	ppbv		99
33) Benzene	5.527	78	28943	0.808	ppbv		99
34) Carbon Tetrachloride	5.674	117	33945	0.767	ppbv		99
35) Cyclohexane	5.793	56	11487	0.826	ppbv		99
37) 1,2-dichloropropane	6.320	63	7581	0.817	ppbv	#	89
38) Bromodichloromethane	6.487	83	29737	0.784	ppbv		95
39) Trichloroethene	6.527	130	14644	0.788	ppbv	#	86
41) 1,4-Dioxane	6.627	88	6041	0.747	ppbv	#	97
43) Heptane	6.853	71	7798	0.792	ppbv	#	97
44) cis-1,3-Dichloropropene	7.260	75	18432	0.798	ppbv		93
45) 4-Methyl-2-pentanone(M...	7.374	43	17708	0.739	ppbv		98
46) trans-1,3-Dichloropropene	7.668	75	17760	0.721	ppbv		95
47) 1,1,2-Trichloroethane	7.778	97	13997	0.807	ppbv		98
48) Toluene	7.977	91	34440	0.789	ppbv		98
49) Dibromochloromethane	8.258	129	30952	0.767	ppbv		97

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_02.D
Acq On : 17 Apr 2017 10:01 am
Operator : Keith
Client ID : CCAL 1 - BFB TUNE
Lab ID : 1.0 ppb 01B - 1.0 ppb 01B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 15:03:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	8.272	43	17991	0.781	ppbv	91
51)	1,2-Dibromoethane(EDB)	8.430	107	25322	0.789	ppbv	93
52)	Tetrachloroethene	8.780	166	20410	0.784	ppbv#	90
54)	1,1,1,2-Tetrachloroethane	9.245	131	17162	0.837	ppbv	99
55)	Chlorobenzene	9.245	112	29610	0.859	ppbv#	80
56)	Ethylbenzene	9.511	91	47459	0.893	ppbv	96
57)	m,p-Xylene	9.624	91	86805	1.886	ppbv	91
58)	Bromoform	9.632	173	30201	0.844	ppbv	100
59)	Styrene	9.829	104	25170	0.875	ppbv	93
60)	1,1,2,2-Tetrachloroethane	9.882	83	30759	0.908	ppbv	95
61)	o-Xylene	9.882	91	40397	0.923	ppbv	92
64)	Isopropylbenzene	10.208	105	49351	0.870	ppbv	96
66)	4-Ethyltoluene	10.546	105	52602	0.857	ppbv	94
67)	1,3,5-Trimethylbenzene	10.589	105	49879	0.922	ppbv	93
68)	1,2,4-Trimethylbenzene	10.789	105	45780	0.851	ppbv	90
70)	Benzyl chloride	10.849	91	34753	0.814	ppbv#	91
71)	1,3-Dichlorobenzene	10.854	146	30188	0.836	ppbv#	94
72)	1,4-Dichlorobenzene	10.886	146	29588	0.859	ppbv#	95
73)	sec-Butylbenzene	10.924	105	63920	0.879	ppbv#	92
74)	4-Isopropyltoluene	11.000	119	62500	0.926	ppbv	91
75)	1,2-Dichlorobenzene	11.054	146	30148	0.868	ppbv#	95
76)	n-Butylbenzene	11.205	91	52342	0.894	ppbv#	91
77)	1,2,4-Trichlorobenzene	11.894	180	13256	0.693	ppbv#	96
79)	Hexachlorobutadiene	12.123	225	27887	0.851	ppbv	100
81]	1,2-Dichlorotetrafluor...	1.659	85	32031	0.866	ppbv	89
82]	Vinyl Chloride(sim)	1.698	62	9276	0.929	ppbv	99
83]	Bromomethane(sim)	1.862	94	12889	0.838	ug/l	99
84]	Trichlorofluoromethane...	2.240	101	39410	0.751	ppbv	98
85]	Trans-1,2-Dichloroethe...	3.101	61	16473	0.883	ppbv	93
86]	1,1-Dichloroethene(sim)	2.528	61	18002	0.854	ppbv	92
87]	1,1-Dichloroethane(sim)	3.228	63	21562	0.940	ppbv	100
88]	Cis-1,2-Dichloroethene...	3.825	61	14918	0.960	ppbv	90
89]	1,2-Dichloroethane(sim)	4.778	62	21826	0.882	ppbv	95
90]	1,1,1-Trichloroethane(...	5.049	97	30162	0.872	ppbv#	99
91]	Carbon Tetrachloride(sim)	5.677	117	35785	0.850	ppbv	100
92]	Trichlorotrifluoroetha...	2.740	101	25508	0.811	ppbv	99
94]	1,2-dichloropropane(sim)	6.320	63	7581	0.934	ppbv#	89
95]	Bromodichloromethane(sim)	6.483	83	31883	0.939	ppbv	96
96]	Trichloroethene(sim)	6.527	130	14641	0.948	ppbv#	90
97]	1,4-Dioxane(sim)	6.630	88	6831	0.845	ppbv	98
98]	cis-1,3-Dichloropropen...	7.260	75	18432	0.951	ppbv	93
99]	1,1,2-Trichloroethane(...	7.774	97	15192	0.853	ppbv	98
100]	Dibromochloromethane(sim)	8.258	129	30952	0.870	ppbv	97
101]	1,2-Dibromoethane(EDB)...	8.433	107	27927	0.922	ppbv	95
102]	Tetrachloroethene(sim)	8.780	166	20410	0.975	ppbv	90
104]	Bromoform(sim)	9.632	173	30201	0.965	ppbv	100
105]	1,1,1,2-Tetrachloroeth...	9.241	131	19038	0.871	ppbv	99
106]	m,p-Xylene(sim)	9.624	91	86805	1.967	ppbv#	91
107]	1,1,2,2-Tetrachloroeth...	9.877	83	33571	0.870	ppbv	96
110]	Benzyl chloride(sim)	10.849	91	34753	0.902	ppbv	91
111]	1,3-Dichlorobenzene(sim)	10.857	146	34602	0.872	ppbv#	94
112]	1,4-Dichlorobenzene(sim)	10.886	146	29588	0.898	ppbv	95
113]	sec-Butylbenzene(sim)	10.922	105	68464	0.912	ppbv	92
114]	4-Isopropyltoluene(sim)	11.000	119	62500	0.997	ppbv	91
115]	1,2-Dichlorobenzene(sim)	11.057	146	34465	0.842	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_02.D
Acq On : 17 Apr 2017 10:01 am
Operator : Keith
Client ID : CCAL 1 - BFB TUNE
Lab ID : 1.0 ppb 01B - 1.0 ppb 01B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 15:03:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

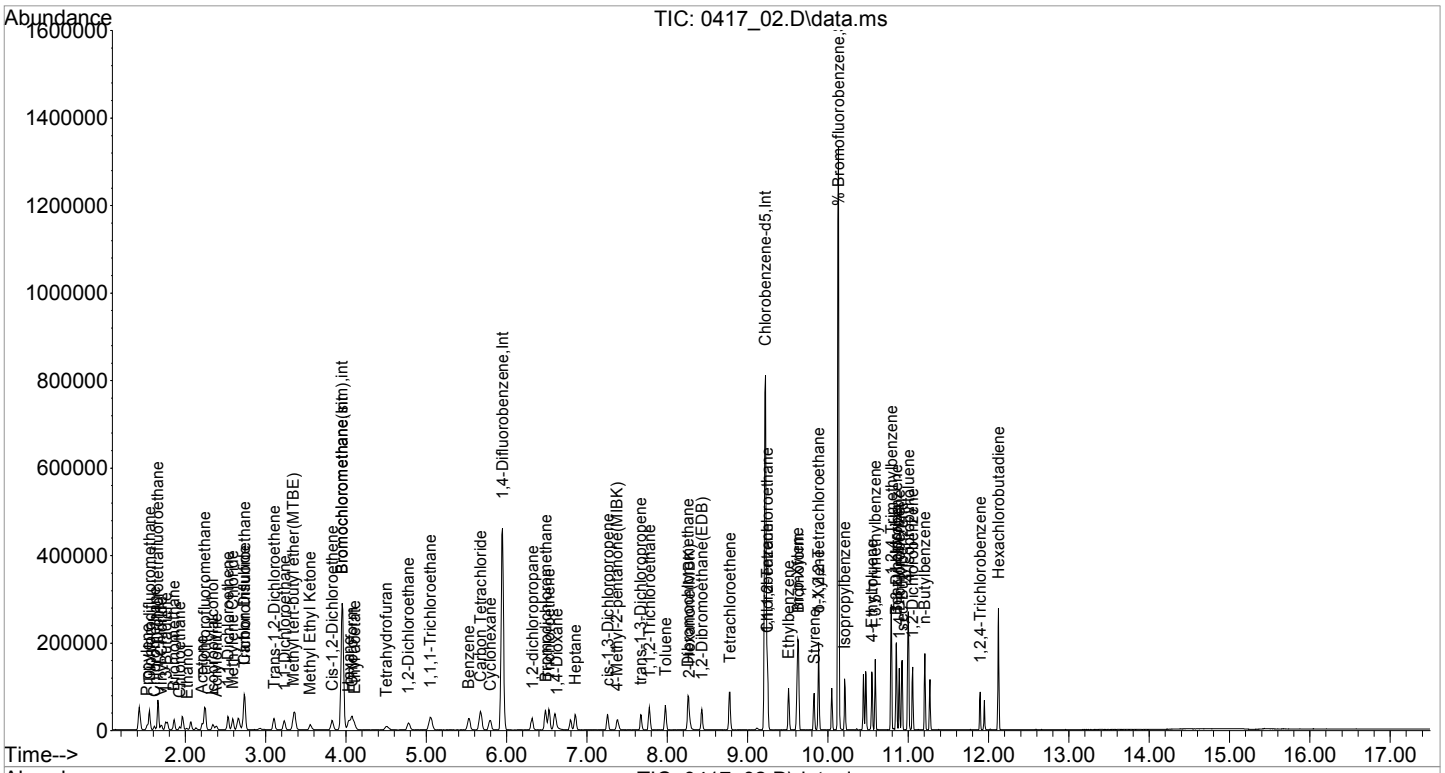
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.205	91	52342	0.979	ppbv	91
117] 1,2,4-Trichlorobenzene...	11.892	180	15446	0.902	ppbv	95
119] Hexachlorobutadiene(sim)	12.121	225	31330	0.827	ppbv	98

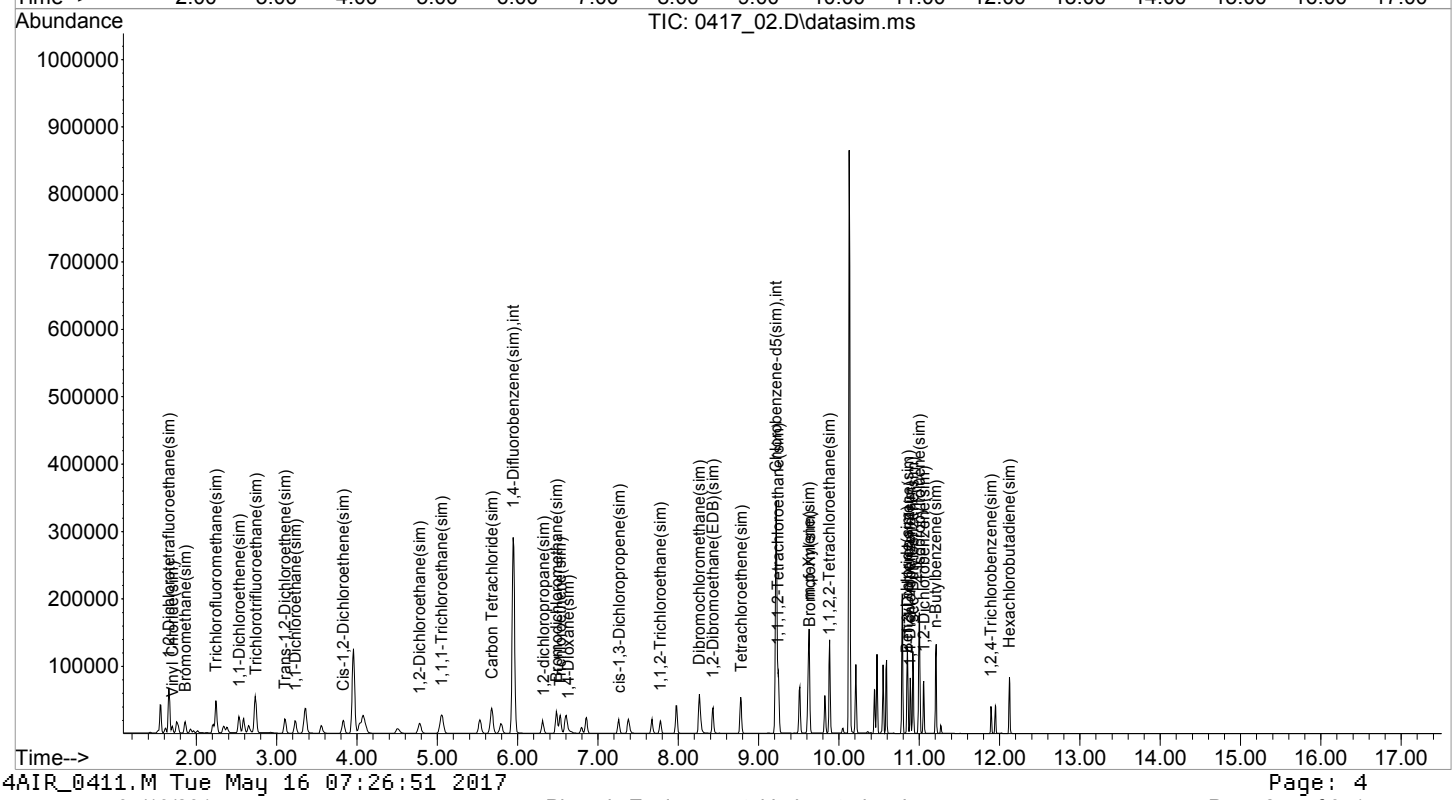
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_02.D
Acq On : 17 Apr 2017 10:01 am
Operator : Keith
Client ID : CCAL 1 - BFB TUNE
Lab ID : 1.0 ppb 01B - 1.0 ppb 01B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 15:03:06 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration





7A
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM24 Calibration Date: 04/17/17 Time: 10:33

Lab File Id: 0417_03.D Init. Calib. Date(s): 04/11/17 04/12/17

Heated Purge (Y/N): Y Init. Calib. Times: 19:43 02:00

GC Column: zb-1ms Method File: 24AIR_0411.M

COMPOUND	RRF	RRF10	RRF MIN	%D	% D LIMITS
Propylene	0.549	0.471		14.2	30
Dichlorodifluoromethane	3.902	3.243		16.9	30
Chloromethane	0.257	0.212		17.5	30
1,2-Dichlorotetrafluoroethane	3.179	2.703		15.0	30
Vinyl Chloride	0.967	0.868		10.2	30
1,3-Butadiene	0.597	0.560		6.2	30
Bromomethane	1.233	1.046		15.2	30
Chloroethane	0.430	0.369		14.2	30
Ethanol	0.371	0.254		31.5 #	30
Acetone	1.717	1.316		23.4	30
Trichlorofluoromethane	4.265	3.394		20.4	30
Isopropylalcohol	1.526	1.184		22.4	30
Acrylonitrile	0.540	0.480		11.1	30
1,1-Dichloroethene	1.885	1.608		14.7	30
Methylene Chloride	1.279	0.945		26.1	30
Carbon Disulfide	2.768	2.348		15.2	30
Trichlorotrifluoroethane	2.697	2.076		23.0	30
Trans-1,2-Dichloroethene	1.532	1.374		10.3	30
1,1-Dichloroethane	1.943	1.725		11.2	30
Methyl tert-butyl ether(MTBE)	2.719	2.543		6.5	30
Methyl Ethyl Ketone	1.618	1.449		10.4	30
Cis-1,2-Dichloroethene	1.506	1.341		11.0	30
Hexane	1.136	0.995		12.4	30
Chloroform	2.881	2.410		16.3	30
Ethyl acetate	1.833	1.515		17.3	30
Tetrahydrofuran	0.709	0.663		6.5	30
1,2-Dichloroethane	2.174	1.806		16.9	30
1,1,1-Trichloroethane	3.240	2.727		15.8	30
Benzene	2.966	2.600		12.3	30
Carbon Tetrachloride	3.661	3.097		15.4	30
Cyclohexane	1.151	1.053		8.5	30
1,2-dichloropropane	0.230	0.218		5.2	30
Bromodichloromethane	0.938	0.843		10.1	30
Trichloroethene	0.459	0.414		9.8	30
1,4-Dioxane	0.200	0.170		15.0	30
Heptane	0.243	0.228		6.2	30

(#) Maximum %D not met.

FORM VII AIR

7B
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM24 Calibration Date: 04/17/17 Time: 10:33

Lab File Id: 0417_03.D Init. Calib. Date(s): 04/11/17 04/12/17

Heated Purge (Y/N): Y Init. Calib. Times: 19:43 02:00

GC Column: zb-1ms Method File: 24AIR_0411.M

COMPOUND	RRF	RRF10	RRF MIN	%D	% D LIMITS
cis-1,3-Dichloropropene	0.571	0.559		2.1	30
4-Methyl-2-pentanone(MIBK)	0.592	0.533		10.0	30
trans-1,3-Dichloropropene	0.609	0.579		4.9	30
1,1,2-Trichloroethane	0.429	0.387		9.8	30
Toluene	1.079	1.007		6.7	30
Dibromochloromethane	0.997	0.947		5.0	30
2-Hexanone(MBK)	0.570	0.529		7.2	30
1,2-Dibromoethane(EDB)	0.793	0.710		10.5	30
Tetrachloroethene	0.644	0.585		9.2	30
1,1,1,2-Tetrachloroethane	1.005	0.957		4.8	30
Chlorobenzene	1.689	1.529		9.5	30
Ethylbenzene	2.604	2.548		2.2	30
m,p-Xylene	2.255	2.160		4.2	30
Bromoform	1.754	1.674		4.6	30
Styrene	1.410	1.411		-0.1	30
1,1,2,2-Tetrachloroethane	1.659	1.461		11.9	30
o-Xylene	2.145	2.018		5.9	30
Isopropylbenzene	2.779	2.505		9.9	30
4-Ethyltoluene	3.008	2.817		6.3	30
1,3,5-Trimethylbenzene	2.651	2.403		9.4	30
1,2,4-Trimethylbenzene	2.636	2.434		7.7	30
Benzyl chloride	2.092	2.007		4.1	30
1,3-Dichlorobenzene	1.770	1.529		13.6	30
1,4-Dichlorobenzene	1.687	1.508		10.6	30
sec-Butylbenzene	3.562	3.178		10.8	30
4-Isopropyltoluene	3.309	2.930		11.5	30
1,2-Dichlorobenzene	1.703	1.486		12.7	30
n-Butylbenzene	2.867	2.700		5.8	30
1,2,4-Trichlorobenzene	0.937	0.896		4.4	30
Hexachlorobutadiene	1.605	1.438		10.4	30
% Bromofluorobenzene	1.314	1.380		-5.0	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_03.D
Acq On : 17 Apr 2017 10:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb 01D
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 15:03:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.965	130	109740	10.000	ng		0.02
36) 1,4-Difluorobenzene	5.948	114	369318	10.000	ng		0.01
53) Chlorobenzene-d5	9.222	82	203867	10.000	ng		0.00
80) Bromochloromethane(sim)	3.965	130	109740	10.000	ng		0.02
93) 1,4-Difluorobenzene(sim)	5.951	114	401711	10.000	ng	#	0.01
103) Chlorobenzene-d5(sim)	9.218	82	216576	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.132	95	281307	10.500	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.00%				
Target Compounds							Qvalue
2) Propylene	1.520	41	51720	8.589	ppbv		95
3) Dichlorodifluoromethane	1.546	85	355842	8.310	ppbv		99
4) Chloromethane	1.613	52	23309	8.270	ppbv#		81
5) 1,2-Dichlorotetrafluor...	1.656	85	296642	8.504	ppbv		93
6) Vinyl Chloride	1.698	62	95297	8.977	ppbv		99
7) 1,3-Butadiene	1.749	54	61474	9.391	ppbv		97
8) Bromomethane	1.859	94	114811	8.484	ppbv#		97
9) Chloroethane	1.927	64	40502	8.578	ppbv		94
10) Ethanol	2.003	45	27836	6.828	ppbv		96
12) Acetone	2.189	43	144423	7.665	ppbv		98
13) Trichlorofluoromethane	2.240	101	372481	7.958	ppbv		99
14) Isopropylalcohol	2.316	45	129945	7.761	ppbv		95
15) Acrylonitrile	2.384	53	52646	8.876	ppbv		95
16) 1,1-Dichloroethene	2.528	61	176490	8.533	ppbv		93
17) Methylene Chloride	2.588	49	103693	7.388	ppbv#		84
20) Carbon Disulfide	2.732	76	257698	8.483	ppbv		100
21) Trichlorotrifluoroethane	2.732	101	227874	7.698	ppbv		88
22) Trans-1,2-Dichloroethene	3.105	61	150764	8.969	ppbv		90
23) 1,1-Dichloroethane	3.238	63	189336	8.881	ppbv		99
24) Methyl tert-butyl ethe...	3.311	73	279116	9.354	ppbv		95
25) Methyl Ethyl Ketone	3.531	43	159061	8.960	ppbv		94
26) Cis-1,2-Dichloroethene	3.831	61	147139	8.900	ppbv		90
27) Hexane	4.038	57	109228	8.760	ppbv		97
28) Chloroform	4.085	83	264442	8.365	ppbv		97
29) Ethyl acetate	4.078	43	166305	8.269	ppbv		97
30) Tetrahydrofuran	4.452	42	72810	9.358	ppbv#		84
31) 1,2-Dichloroethane	4.789	62	198218	8.310	ppbv#		94
32) 1,1,1-Trichloroethane	5.056	97	299253	8.417	ppbv		99
33) Benzene	5.534	78	285363	8.766	ppbv		98
34) Carbon Tetrachloride	5.681	117	339835	8.458	ppbv		100
35) Cyclohexane	5.793	56	115521	9.142	ppbv		96
37) 1,2-dichloropropane	6.320	63	80690	9.520	ppbv#		90
38) Bromodichloromethane	6.487	83	311391	8.993	ppbv		96
39) Trichloroethene	6.533	130	153032	9.021	ppbv#		88
41) 1,4-Dioxane	6.573	88	62923	8.527	ppbv		98
43) Heptane	6.860	71	84044	9.354	ppbv#		95
44) cis-1,3-Dichloropropene	7.260	75	206621	9.797	ppbv		94
45) 4-Methyl-2-pentanone(M...	7.347	43	196703	8.996	ppbv		98
46) trans-1,3-Dichloropropene	7.675	75	214016	9.520	ppbv		95
47) 1,1,2-Trichloroethane	7.778	97	142884	9.024	ppbv		98
48) Toluene	7.977	91	371777	9.328	ppbv		97
49) Dibromochloromethane	8.265	129	349754	9.497	ppbv		99

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_03.D
Acq On : 17 Apr 2017 10:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb 01D
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 15:03:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	8.245	43	195340	9.287	ppbv#	89
51)	1,2-Dibromoethane(EDB)	8.430	107	262155	8.949	ppbv	96
52)	Tetrachloroethene	8.780	166	216159	9.092	ppbv#	90
54)	1,1,1,2-Tetrachloroethane	9.245	131	195034	9.517	ppbv	100
55)	Chlorobenzene	9.253	112	311759	9.054	ppbv	94
56)	Ethylbenzene	9.511	91	519352	9.785	ppbv	97
57)	m,p-Xylene	9.624	91	880663	19.153	ppbv	92
58)	Bromoform	9.632	173	341363	9.545	ppbv	99
59)	Styrene	9.829	104	287631	10.005	ppbv	94
60)	1,1,2,2-Tetrachloroethane	9.882	83	297800	8.804	ppbv	97
61)	o-Xylene	9.890	91	411475	9.407	ppbv	93
64)	Isopropylbenzene	10.208	105	510663	9.013	ppbv	97
66)	4-Ethyltoluene	10.551	105	574197	9.364	ppbv	96
67)	1,3,5-Trimethylbenzene	10.589	105	489845	9.064	ppbv	93
68)	1,2,4-Trimethylbenzene	10.789	105	496117	9.232	ppbv	91
70)	Benzyl chloride	10.849	91	409131	9.593	ppbv#	92
71)	1,3-Dichlorobenzene	10.854	146	311695	8.636	ppbv#	95
72)	1,4-Dichlorobenzene	10.892	146	307516	8.942	ppbv#	95
73)	sec-Butylbenzene	10.924	105	647932	8.922	ppbv	94
74)	4-Isopropyltoluene	11.005	119	597325	8.855	ppbv#	91
75)	1,2-Dichlorobenzene	11.054	146	302864	8.725	ppbv#	95
76)	n-Butylbenzene	11.205	91	550380	9.416	ppbv	93
77)	1,2,4-Trichlorobenzene	11.894	180	182584	9.561	ppbv#	97
79)	Hexachlorobutadiene	12.123	225	293117	8.956	ppbv	100
81]	1,2-Dichlorotetrafluor...	1.659	85	321876	9.579	ppbv	90
82]	Vinyl Chloride(sim)	1.698	62	95297	10.506	ppbv	99
83]	Bromomethane(sim)	1.862	94	123677	8.855	ug/l	99
84]	Trichlorofluoromethane...	2.240	101	372481	7.813	ppbv	99
85]	Trans-1,2-Dichloroethe...	3.107	61	162106	9.566	ppbv	93
86]	1,1-Dichloroethene(sim)	2.528	61	176490	9.221	ppbv	93
87]	1,1-Dichloroethane(sim)	3.234	63	202975	9.744	ppbv	100
88]	Cis-1,2-Dichloroethene...	3.831	61	147139	10.421	ppbv	90
89]	1,2-Dichloroethane(sim)	4.785	62	211162	9.390	ppbv#	95
90]	1,1,1-Trichloroethane(...	5.056	97	299253	9.529	ppbv#	99
91]	Carbon Tetrachloride(sim)	5.677	117	358680	9.378	ppbv	100
92]	Trichlorotrifluoroetha...	2.732	101	227874	7.979	ppbv	100
94]	1,2-dichloropropane(sim)	6.320	63	80690	10.917	ppbv#	90
95]	Bromodichloromethane(sim)	6.490	83	333575	10.784	ppbv	96
96]	Trichloroethene(sim)	6.533	130	153032	10.879	ppbv#	91
97]	1,4-Dioxane(sim)	6.570	88	67239	9.140	ppbv	98
98]	cis-1,3-Dichloropropen...	7.260	75	206621	11.709	ppbv	94
99]	1,1,2-Trichloroethane(...	7.781	97	158286	9.755	ppbv	99
100]	Dibromochloromethane(sim)	8.265	129	349754	10.795	ppbv	99
101]	1,2-Dibromoethane(EDB)...	8.433	107	286772	10.392	ppbv	96
102]	Tetrachloroethene(sim)	8.780	166	216040	11.331	ppbv	90
104]	Bromoform(sim)	9.632	173	341363	10.975	ppbv	100
105]	1,1,1,2-Tetrachloroeth...	9.248	131	212528	9.791	ppbv	100
106]	m,p-Xylene(sim)	9.624	91	880651	20.088	ppbv#	92
107]	1,1,2,2-Tetrachloroeth...	9.885	83	319199	8.324	ppbv	97
110]	Benzyl chloride(sim)	10.849	91	409595	10.703	ppbv	92
111]	1,3-Dichlorobenzene(sim)	10.857	146	350386	8.885	ppbv#	95
112]	1,4-Dichlorobenzene(sim)	10.892	146	307491	9.392	ppbv	95
113]	sec-Butylbenzene(sim)	10.922	105	679554	9.111	ppbv	93
114]	4-Isopropyltoluene(sim)	11.005	119	597325	9.593	ppbv#	91
115]	1,2-Dichlorobenzene(sim)	11.057	146	341122	8.390	ppbv	95

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_03.D
Acq On : 17 Apr 2017 10:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb 01D
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 15:03:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

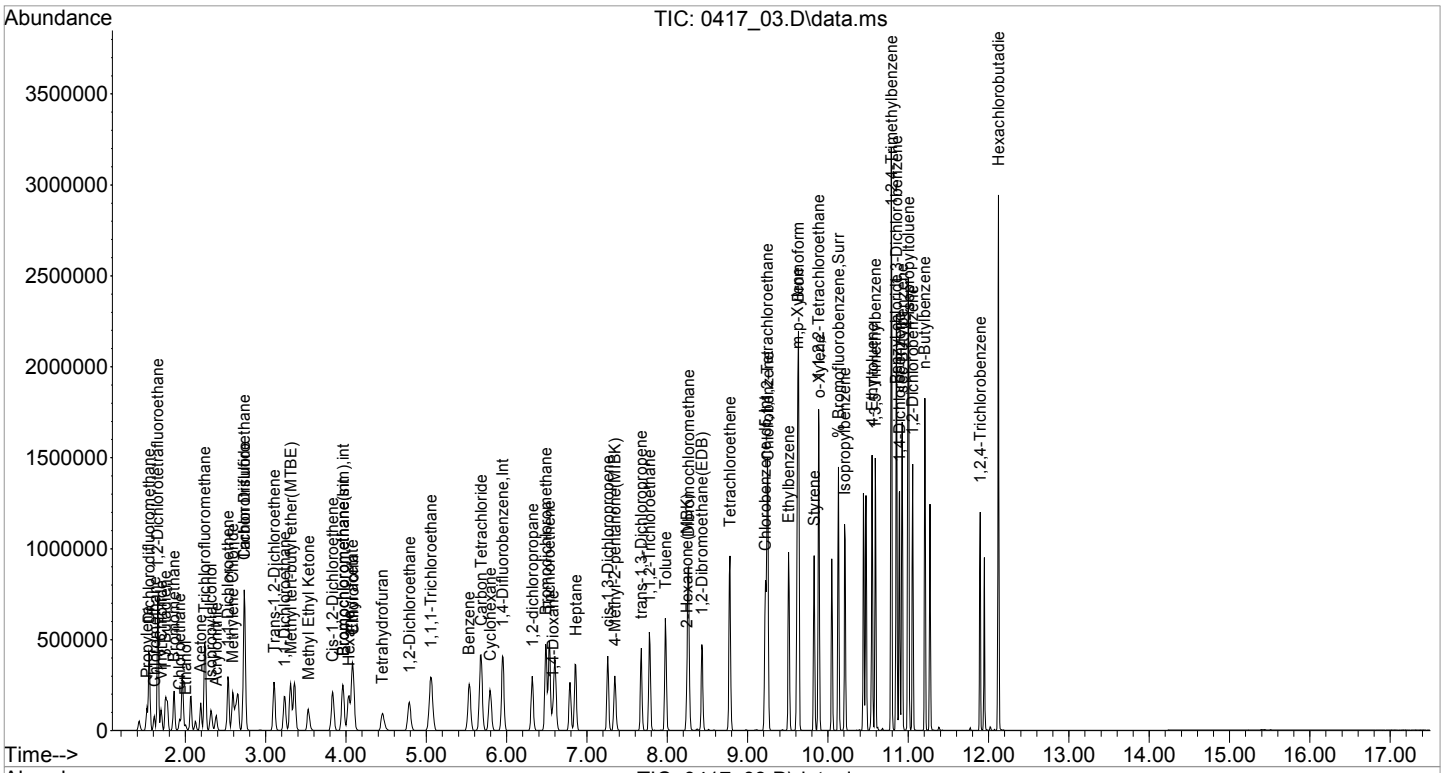
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.205	91	550380	10.358	ppbv	93
117] 1,2,4-Trichlorobenzene...	11.892	180	206245	12.126	ppbv	95
119] Hexachlorobutadiene(sim)	12.121	225	315661	8.388	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_03.D
Acq On : 17 Apr 2017 10:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb 01D
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 17 15:03:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration



7A
AIR CONTINUING CALIBRATION CHECK
Sim Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM24 Calibration Date: 04/18/17 Time: 03:01

Lab File Id: 0417_31.D Init. Calib. Date(s): 04/11/17 04/12/17

Heated Purge (Y/N): Y Init. Calib. Times: 19:43 02:00

GC Column: zb-1ms Method File: 24AIR_0411.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
1,2-Dichlorotetrafluoroethane(sim)	3.062	2.563		16.3	30
Vinyl Chloride(sim)	0.827	0.700		15.4	30
Bromomethane(sim)	1.273	0.975		23.4	30
Trichlorofluoromethane(sim)	4.345	3.018		30.5 #	30
Trans-1,2-Dichloroethene(sim)	1.544	1.362		11.8	30
1,1-Dichloroethene(sim)	1.744	1.385		20.6	30
1,1-Dichloroethane(sim)	1.898	1.751		7.7	30
Cis-1,2-Dichloroethene(sim)	1.287	1.167		9.3	30
1,2-Dichloroethane(sim)	2.049	1.839		10.2	30
1,1,1-Trichloroethane(sim)	2.862	2.553		10.8	30
Carbon Tetrachloride(sim)	3.485	3.062		12.1	30
Trichlorotrifluoroethane(sim)	2.603	1.915		26.4	30
1,2-dichloropropane(sim)	0.184	0.187		-1.6	30
Bromodichloromethane(sim)	0.770	0.720		6.5	30
Trichloroethene(sim)	0.350	0.317		9.4	30
1,4-Dioxane(sim)	0.183	0.144		21.3	30
cis-1,3-Dichloropropene(sim)	0.439	0.372		15.3	30
1,1,2-Trichloroethane(sim)	0.404	0.350		13.4	30
Dibromochloromethane(sim)	0.807	0.659		18.3	30
1,2-Dibromoethane(EDB)(sim)	0.687	0.623		9.3	30
Tetrachloroethene(sim)	0.475	0.456		4.0	30
Bromoform(sim)	1.436	1.310		8.8	30
1,1,1,2-Tetrachloroethane(sim)	1.002	0.860		14.2	30
m,p-Xylene(sim)	2.024	1.908		5.7	30
1,1,2,2-Tetrachloroethane(sim)	1.771	1.542		12.9	30
Benzyl chloride(sim)	1.767	1.576		10.8	30
1,3-Dichlorobenzene(sim)	1.821	1.690		7.2	30
1,4-Dichlorobenzene(sim)	1.512	1.385		8.4	30
sec-Butylbenzene(sim)	3.444	3.247		5.7	30
4-Isopropyltoluene(sim)	2.875	2.742		4.6	30
1,2-Dichlorobenzene(sim)	1.877	1.550		17.4	30
n-Butylbenzene(sim)	2.453	2.324		5.3	30
1,2,4-Trichlorobenzene(sim)	0.785	0.739		5.9	30
Hexachlorobutadiene(sim)	1.738	1.483		14.7	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_31.D
Acq On : 18 Apr 2017 3:01 am
Operator : Keith
Client ID : CCAL 1
Lab ID : 1.0ppb;air4r
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 18 08:50:05 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	3.931	130	107311	10.000	ng	-0.01
36) 1,4-Difluorobenzene	5.927	114	371022	10.000	ng	0.00
53) Chlorobenzene-d5	9.207	82	189521	10.000	ng	0.00
80) Bromochloromethane(sim)	3.931	130	107311	10.000	ng	-0.01
93) 1,4-Difluorobenzene(sim)	5.930	114	404870	10.000	ng	# 0.00
103) Chlorobenzene-d5(sim)	9.203	82	201719	10.000	ng	0.00
System Monitoring Compounds						
62) % Bromofluorobenzene	10.125	95	275700	11.069	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.70%			
Target Compounds						Qvalue
2) Propylene	1.512	41	4031	0.685	ppbv	90
3) Dichlorodifluoromethane	1.545	85	32014	0.765	ppbv	98
4) Chloromethane	1.605	52	2077	0.754	ppbv#	71
5) 1,2-Dichlorotetrafluor...	1.647	85	25244	0.740	ppbv	92
6) Vinyl Chloride	1.689	62	7511	0.724	ppbv	98
7) 1,3-Butadiene	1.740	54	4945	0.773	ppbv	98
8) Bromomethane	1.850	94	9792	0.740	ppbv#	95
9) Chloroethane	1.918	64	3393	0.735	ppbv	94
10) Ethanol	2.003	45	2335	0.586	ppbv#	91
12) Acetone	2.198	43	11779	0.639	ppbv	95
13) Trichlorofluoromethane	2.232	101	32462	0.709	ppbv	99
14) Isopropylalcohol	2.333	45	11629	0.710	ppbv#	88
15) Acrylonitrile	2.367	53	4289	0.739	ppbv	98
16) 1,1-Dichloroethene	2.511	61	14858	0.735	ppbv	95
17) Methylene Chloride	2.571	49	9428	0.687	ppbv#	83
20) Carbon Disulfide	2.715	76	21706	0.731	ppbv	99
21) Trichlorotrifluoroethane	2.723	101	20550	0.710	ppbv	89
22) Trans-1,2-Dichloroethene	3.084	61	13415	0.816	ppbv	90
23) 1,1-Dichloroethane	3.211	63	17214	0.826	ppbv	98
24) Methyl tert-butyl ethe...	3.325	73	22784	0.781	ppbv	98
25) Methyl Ethyl Ketone	3.538	43	12579	0.725	ppbv	96
26) Cis-1,2-Dichloroethene	3.805	61	12520	0.774	ppbv	90
27) Hexane	4.011	57	10045	0.824	ppbv	96
28) Chloroform	4.051	83	25780	0.834	ppbv	95
29) Ethyl acetate	4.085	43	13380	0.680	ppbv	100
30) Tetrahydrofuran	4.491	42	4787	0.629	ppbv#	87
31) 1,2-Dichloroethane	4.754	62	20272	0.869	ppbv#	93
32) 1,1,1-Trichloroethane	5.028	97	27396	0.788	ppbv	98
33) Benzene	5.505	78	25040	0.787	ppbv	99
34) Carbon Tetrachloride	5.653	117	30565	0.778	ppbv	100
35) Cyclohexane	5.772	56	9055	0.733	ppbv	93
37) 1,2-dichloropropane	6.299	63	7573	0.889	ppbv#	81
38) Bromodichloromethane	6.467	83	27080	0.779	ppbv	94
39) Trichloroethene	6.513	130	12828	0.753	ppbv#	88
41) 1,4-Dioxane	6.620	88	5051	0.681	ppbv#	80
43) Heptane	6.840	71	7364	0.816	ppbv#	93
44) cis-1,3-Dichloropropene	7.240	75	15064	0.711	ppbv	94
45) 4-Methyl-2-pentanone(M...	7.367	43	14524	0.661	ppbv	97
46) trans-1,3-Dichloropropene	7.655	75	15401	0.682	ppbv	94
47) 1,1,2-Trichloroethane	7.764	97	12870	0.809	ppbv	99
48) Toluene	7.963	91	30146	0.753	ppbv	97
49) Dibromochloromethane	8.244	129	26687	0.721	ppbv	98

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_31.D
Acq On : 18 Apr 2017 3:01 am
Operator : Keith
Client ID : CCAL 1
Lab ID : 1.0ppb;air4r
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 18 08:50:05 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	8.265	43	14496	0.686	ppbv	96
51)	1,2-Dibromoethane(EDB)	8.416	107	22920	0.779	ppbv	96
52)	Tetrachloroethene	8.766	166	18478	0.774	ppbv#	90
54)	1,1,1,2-Tetrachloroethane	9.230	131	15913	0.835	ppbv	98
55)	Chlorobenzene	9.238	112	27876	0.871	ppbv#	81
56)	Ethylbenzene	9.503	91	40384	0.818	ppbv	98
57)	m,p-Xylene	9.617	91	76963	1.801	ppbv	92
58)	Bromoform	9.617	173	26427	0.795	ppbv	99
59)	Styrene	9.821	104	21772	0.815	ppbv	94
60)	1,1,2,2-Tetrachloroethane	9.874	83	28530	0.907	ppbv	93
61)	o-Xylene	9.874	91	36817	0.905	ppbv	91
64)	Isopropylbenzene	10.200	105	44260	0.840	ppbv#	96
66)	4-Ethyltoluene	10.540	105	52810	0.926	ppbv	94
67)	1,3,5-Trimethylbenzene	10.584	105	46062	0.917	ppbv	93
68)	1,2,4-Trimethylbenzene	10.784	105	44967	0.900	ppbv	89
70)	Benzyl chloride	10.843	91	31797	0.802	ppbv#	91
71)	1,3-Dichlorobenzene	10.848	146	29364	0.875	ppbv#	94
72)	1,4-Dichlorobenzene	10.881	146	27928	0.874	ppbv#	94
73)	sec-Butylbenzene	10.913	105	60570	0.897	ppbv	93
74)	4-Isopropyltoluene	10.994	119	55320	0.882	ppbv#	90
75)	1,2-Dichlorobenzene	11.049	146	27167	0.842	ppbv#	95
76)	n-Butylbenzene	11.200	91	46880	0.863	ppbv#	91
77)	1,2,4-Trichlorobenzene	11.884	180	12590	0.709	ppbv#	97
79)	Hexachlorobutadiene	12.113	225	26840	0.882	ppbv	99
81]	1,2-Dichlorotetrafluor...	1.650	85	27504	0.837	ppbv	91
82]	Vinyl Chloride(sim)	1.689	62	7511	0.847	ppbv	98
83]	Bromomethane(sim)	1.845	94	10464	0.766	ug/l	99
84]	Trichlorofluoromethane...	2.232	101	32384	0.695	ppbv	99
85]	Trans-1,2-Dichloroethe...	3.087	61	14613	0.882	ppbv	94
86]	1,1-Dichloroethene(sim)	2.511	61	14858	0.794	ppbv	95
87]	1,1-Dichloroethane(sim)	3.214	63	18794	0.923	ppbv	100
88]	Cis-1,2-Dichloroethene...	3.805	61	12520	0.907	ppbv	90
89]	1,2-Dichloroethane(sim)	4.757	62	19730	0.897	ppbv	94
90]	1,1,1-Trichloroethane(...	5.028	97	27396	0.892	ppbv#	98
91]	Carbon Tetrachloride(sim)	5.656	117	32861	0.879	ppbv	100
92]	Trichlorotrifluoroetha...	2.723	101	20550	0.736	ppbv	99
94]	1,2-dichloropropane(sim)	6.299	63	7573	1.017	ppbv#	81
95]	Bromodichloromethane(sim)	6.463	83	29167	0.936	ppbv	96
96]	Trichloroethene(sim)	6.513	130	12828	0.905	ppbv#	92
97]	1,4-Dioxane(sim)	6.616	88	5837	0.787	ppbv	99
98]	cis-1,3-Dichloropropen...	7.240	75	15064	0.847	ppbv	94
99]	1,1,2-Trichloroethane(...	7.760	97	14160	0.866	ppbv	98
100]	Dibromochloromethane(sim)	8.244	129	26687	0.817	ppbv	98
101]	1,2-Dibromoethane(EDB)...	8.419	107	25233	0.907	ppbv	95
102]	Tetrachloroethene(sim)	8.766	166	18478	0.962	ppbv	90
104]	Bromoform(sim)	9.617	173	26427	0.912	ppbv	99
105]	1,1,1,2-Tetrachloroeth...	9.233	131	17351	0.858	ppbv	99
106]	m,p-Xylene(sim)	9.617	91	76963	1.885	ppbv#	92
107]	1,1,2,2-Tetrachloroeth...	9.870	83	31110	0.871	ppbv	96
110]	Benzyl chloride(sim)	10.843	91	31797	0.892	ppbv	91
111]	1,3-Dichlorobenzene(sim)	10.846	146	34095	0.928	ppbv#	95
112]	1,4-Dichlorobenzene(sim)	10.881	146	27928	0.916	ppbv	94
113]	sec-Butylbenzene(sim)	10.916	105	65502	0.943	ppbv	92
114]	4-Isopropyltoluene(sim)	10.994	119	55320	0.954	ppbv#	90
115]	1,2-Dichlorobenzene(sim)	11.046	146	31267	0.826	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_31.D
Acq On : 18 Apr 2017 3:01 am
Operator : Keith
Client ID : CCAL 1
Lab ID : 1.0ppb;air4r
ALS Vial : 34 Sample Multiplier: 1

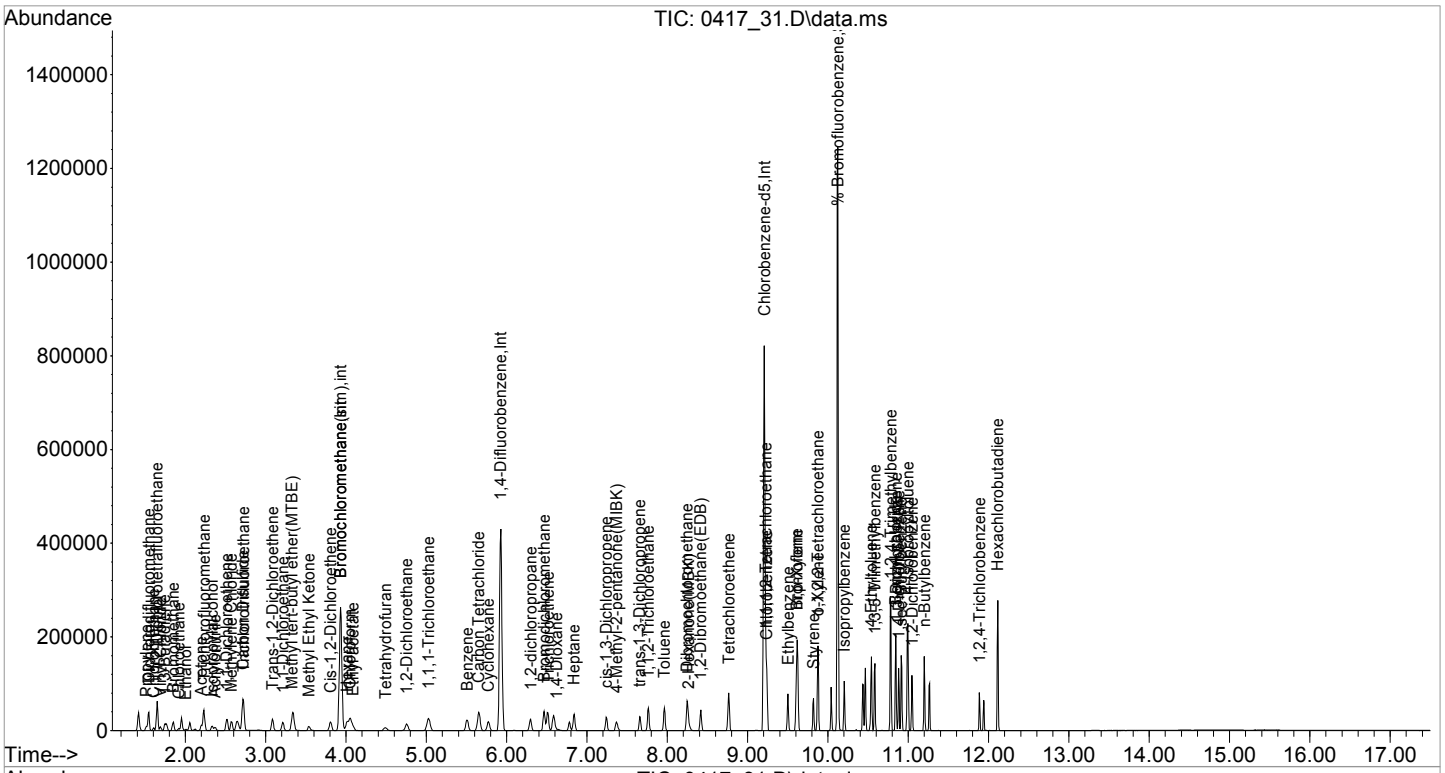
Quant Time: Apr 18 08:50:05 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

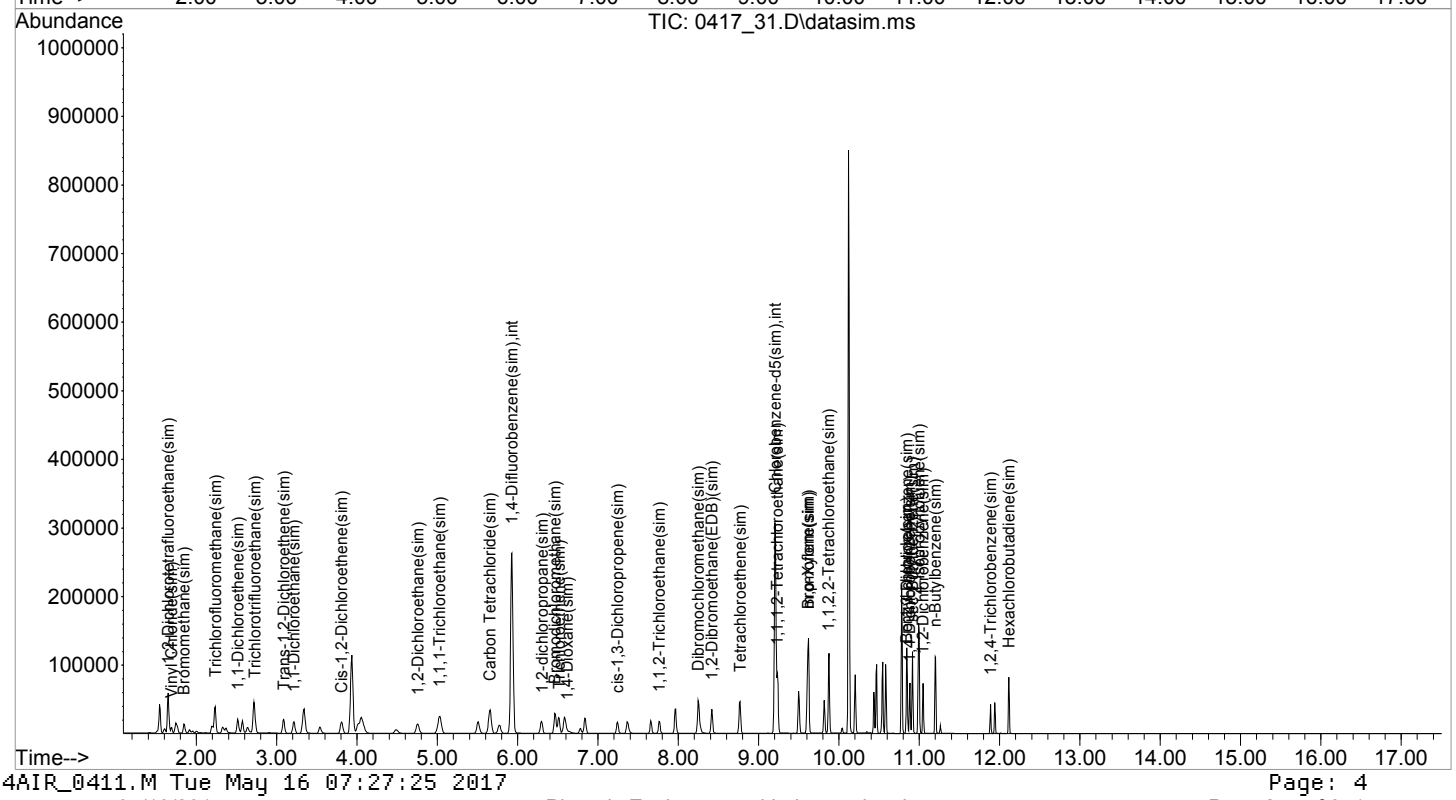
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	46880	0.947	ppbv	91
117] 1,2,4-Trichlorobenzene...	11.887	180	14912	0.941	ppbv	95
119] Hexachlorobutadiene(sim)	12.116	225	29921	0.854	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_31.D
Acq On : 18 Apr 2017 3:01 am
Operator : Keith
Client ID : CCAL 1
Lab ID : 1.0ppb;air4r
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 18 08:50:05 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration





7A
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM24 Calibration Date: 04/18/17 Time: 03:33

Lab File Id: 0417_32.D Init. Calib. Date(s): 04/11/17 04/12/17

Heated Purge (Y/N): Y Init. Calib. Times: 19:43 02:00

GC Column: zb-1ms Method File: 24AIR_0411.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
Propylene	0.549	0.473		13.8	30
Dichlorodifluoromethane	3.902	3.354		14.0	30
Chloromethane	0.257	0.207		19.5	30
1,2-Dichlorotetrafluoroethane	3.179	2.713		14.7	30
Vinyl Chloride	0.967	0.810		16.2	30
1,3-Butadiene	0.597	0.533		10.7	30
Bromomethane	1.233	1.007		18.3	30
Chloroethane	0.430	0.356		17.2	30
Ethanol	0.371	0.234		36.9 #	30
Acetone	1.717	1.201		30.1 #	30
Trichlorofluoromethane	4.265	3.340		21.7	30
Isopropylalcohol	1.526	1.070		29.9	30
Acrylonitrile	0.540	0.459		15.0	30
1,1-Dichloroethene	1.885	1.499		20.5	30
Methylene Chloride	1.279	0.884		30.9 #	30
Carbon Disulfide	2.768	2.193		20.8	30
Trichlorotrifluoroethane	2.697	2.010		25.5	30
Trans-1,2-Dichloroethene	1.532	1.401		8.6	30
1,1-Dichloroethane	1.943	1.692		12.9	30
Methyl tert-butyl ether(MTBE)	2.719	2.509		7.7	30
Methyl Ethyl Ketone	1.618	1.377		14.9	30
Cis-1,2-Dichloroethene	1.506	1.393		7.5	30
Hexane	1.136	1.032		9.2	30
Chloroform	2.881	2.572		10.7	30
Ethyl acetate	1.833	1.566		14.6	30
Tetrahydrofuran	0.709	0.647		8.7	30
1,2-Dichloroethane	2.174	1.986		8.6	30
1,1,1-Trichloroethane	3.240	2.770		14.5	30
Benzene	2.966	2.602		12.3	30
Carbon Tetrachloride	3.661	3.143		14.1	30
Cyclohexane	1.151	1.073		6.8	30
1,2-dichloropropane	0.230	0.223		3.0	30
Bromodichloromethane	0.938	0.860		8.3	30
Trichloroethene	0.459	0.425		7.4	30
1,4-Dioxane	0.200	0.173		13.5	30
Heptane	0.243	0.239		1.6	30

(#) Maximum %D not met.

FORM VII AIR

7B
AIR CONTINUING CALIBRATION CHECK
Full Scan

Lab Name: Phoenix Environmental Labs Client: AIRTEK

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBY03105

Instrument: CHEM24 Calibration Date: 04/18/17 Time: 03:33

Lab File Id: 0417_32.D Init. Calib. Date(s): 04/11/17 04/12/17

Heated Purge (Y/N): Y Init. Calib. Times: 19:43 02:00

GC Column: zb-1ms Method File: 24AIR_0411.M

COMPOUND	RRF	RRF50	RRF MIN	%D	% D LIMITS
cis-1,3-Dichloropropene	0.571	0.568		0.5	30
4-Methyl-2-pentanone(MIBK)	0.592	0.540		8.8	30
trans-1,3-Dichloropropene	0.609	0.659		-8.2	30
1,1,2-Trichloroethane	0.429	0.402		6.3	30
Toluene	1.079	1.043		3.3	30
Dibromochloromethane	0.997	0.975		2.2	30
2-Hexanone(MBK)	0.570	0.551		3.3	30
1,2-Dibromoethane(EDB)	0.793	0.751		5.3	30
Tetrachloroethene	0.644	0.601		6.7	30
1,1,1,2-Tetrachloroethane	1.005	0.943		6.2	30
Chlorobenzene	1.689	1.520		10.0	30
Ethylbenzene	2.604	2.524		3.1	30
m,p-Xylene	2.255	2.117		6.1	30
Bromoform	1.754	1.673		4.6	30
Styrene	1.410	1.413		-0.2	30
1,1,2,2-Tetrachloroethane	1.659	1.490		10.2	30
o-Xylene	2.145	2.054		4.2	30
Isopropylbenzene	2.779	2.617		5.8	30
4-Ethyltoluene	3.008	2.849		5.3	30
1,3,5-Trimethylbenzene	2.651	2.484		6.3	30
1,2,4-Trimethylbenzene	2.636	2.516		4.6	30
Benzyl chloride	2.092	2.083		0.4	30
1,3-Dichlorobenzene	1.770	1.618		8.6	30
1,4-Dichlorobenzene	1.687	1.605		4.9	30
sec-Butylbenzene	3.562	3.226		9.4	30
4-Isopropyltoluene	3.309	3.024		8.6	30
1,2-Dichlorobenzene	1.703	1.537		9.7	30
n-Butylbenzene	2.867	2.868		0.0	30
1,2,4-Trichlorobenzene	0.937	0.982		-4.8	30
Hexachlorobutadiene	1.605	1.480		7.8	30
% Bromofluorobenzene	1.314	1.293		1.6	30

(#) Maximum %D not met.

FORM VII AIR

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_32.D
Acq On : 18 Apr 2017 3:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb;air4u
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Apr 18 08:50:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.938	130	99665	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	331449	10.000	ng		0.00
53) Chlorobenzene-d5	9.207	82	190545	10.000	ng		0.00
80) Bromochloromethane(sim)	3.938	130	99665	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	361985	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	198286	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	246457	9.842	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.40%				
Target Compounds							Qvalue
2) Propylene	1.512	41	47147	8.621	ppbv		94
3) Dichlorodifluoromethane	1.545	85	334237	8.594	ppbv		99
4) Chloromethane	1.605	52	20671	8.075	ppbv#		80
5) 1,2-Dichlorotetrafluor...	1.647	85	270395	8.535	ppbv		94
6) Vinyl Chloride	1.689	62	80760	8.376	ppbv		100
7) 1,3-Butadiene	1.740	54	53169	8.943	ppbv		96
8) Bromomethane	1.850	94	100376	8.167	ppbv#		97
9) Chloroethane	1.918	64	35452	8.267	ppbv		95
10) Ethanol	1.994	45	23289	6.290	ppbv		95
12) Acetone	2.181	43	119727	6.997	ppbv		96
13) Trichlorofluoromethane	2.232	101	332848	7.830	ppbv		99
14) Isopropylalcohol	2.308	45	106678	7.015	ppbv#		92
15) Acrylonitrile	2.367	53	45747	8.492	ppbv		95
16) 1,1-Dichloroethene	2.520	61	149411	7.954	ppbv		93
17) Methylene Chloride	2.579	49	88131	6.914	ppbv#		84
20) Carbon Disulfide	2.715	76	218568	7.922	ppbv		100
21) Trichlorotrifluoroethane	2.723	101	200293	7.451	ppbv		89
22) Trans-1,2-Dichloroethene	3.091	61	139659	9.148	ppbv		91
23) 1,1-Dichloroethane	3.218	63	168617	8.709	ppbv		99
24) Methyl tert-butyl ethe...	3.291	73	250090	9.229	ppbv		96
25) Methyl Ethyl Ketone	3.511	43	137208	8.510	ppbv		95
26) Cis-1,2-Dichloroethene	3.811	61	138860	9.248	ppbv		90
27) Hexane	4.011	57	102810	9.079	ppbv		95
28) Chloroform	4.065	83	256388	8.930	ppbv		97
29) Ethyl acetate	4.058	43	156049	8.543	ppbv		97
30) Tetrahydrofuran	4.431	42	64518	9.131	ppbv#		84
31) 1,2-Dichloroethane	4.761	62	197935	9.137	ppbv#		95
32) 1,1,1-Trichloroethane	5.035	97	276100	8.551	ppbv		99
33) Benzene	5.512	78	259371	8.773	ppbv		98
34) Carbon Tetrachloride	5.660	117	313295	8.586	ppbv		99
35) Cyclohexane	5.772	56	106952	9.320	ppbv		95
37) 1,2-dichloropropane	6.299	63	74038	9.733	ppbv#		87
38) Bromodichloromethane	6.473	83	285209	9.178	ppbv		96
39) Trichloroethene	6.513	130	140851	9.252	ppbv#		88
41) 1,4-Dioxane	6.553	88	57375	8.663	ppbv		99
43) Heptane	6.840	71	79080	9.807	ppbv#		94
44) cis-1,3-Dichloropropene	7.247	75	188228	9.945	ppbv		94
45) 4-Methyl-2-pentanone(M...	7.333	43	179088	9.126	ppbv		99
46) trans-1,3-Dichloropropene	7.661	75	218524	10.831	ppbv#		90
47) 1,1,2-Trichloroethane	7.764	97	133384	9.387	ppbv		98
48) Toluene	7.963	91	345788	9.667	ppbv		97
49) Dibromochloromethane	8.251	129	323084	9.775	ppbv		99

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_32.D
Acq On : 18 Apr 2017 3:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb;air4u
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Apr 18 08:50:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	8.238	43	182577	9.672	ppbv#	90
51)	1,2-Dibromoethane(EDB)	8.423	107	248943	9.469	ppbv	96
52)	Tetrachloroethene	8.766	166	199058	9.330	ppbv#	90
54)	1,1,1,2-Tetrachloroethane	9.238	131	179738	9.384	ppbv	98
55)	Chlorobenzene	9.238	112	289706	9.001	ppbv	94
56)	Ethylbenzene	9.503	91	480957	9.695	ppbv	97
57)	m,p-Xylene	9.617	91	806704	18.771	ppbv	92
58)	Bromoform	9.624	173	318848	9.538	ppbv	100
59)	Styrene	9.821	104	269303	10.022	ppbv	94
60)	1,1,2,2-Tetrachloroethane	9.874	83	283920	8.980	ppbv	97
61)	o-Xylene	9.874	91	391333	9.572	ppbv	93
64)	Isopropylbenzene	10.200	105	498644	9.416	ppbv	97
66)	4-Ethyltoluene	10.540	105	542896	9.473	ppbv	95
67)	1,3,5-Trimethylbenzene	10.583	105	473352	9.371	ppbv	93
68)	1,2,4-Trimethylbenzene	10.784	105	479440	9.545	ppbv	91
70)	Benzyl chloride	10.843	91	396950	9.959	ppbv#	92
71)	1,3-Dichlorobenzene	10.848	146	308302	9.140	ppbv#	95
72)	1,4-Dichlorobenzene	10.881	146	305879	9.516	ppbv#	95
73)	sec-Butylbenzene	10.919	105	614636	9.056	ppbv	93
74)	4-Isopropyltoluene	10.994	119	576140	9.139	ppbv#	91
75)	1,2-Dichlorobenzene	11.049	146	292960	9.030	ppbv#	95
76)	n-Butylbenzene	11.200	91	546402	10.001	ppbv	93
77)	1,2,4-Trichlorobenzene	11.889	180	187120	10.483	ppbv#	97
79)	Hexachlorobutadiene	12.113	225	281979	9.218	ppbv	100
81]	1,2-Dichlorotetrafluor...	1.650	85	293423	9.615	ppbv	91
82]	Vinyl Chloride(sim)	1.689	62	80760	9.803	ppbv	100
83]	Bromomethane(sim)	1.845	94	109349	8.621	ug/l	99
84]	Trichlorofluoromethane...	2.232	101	332848	7.687	ppbv	99
85]	Trans-1,2-Dichloroethe...	3.087	61	151100	9.818	ppbv	94
86]	1,1-Dichloroethene(sim)	2.520	61	149411	8.595	ppbv	93
87]	1,1-Dichloroethane(sim)	3.221	63	181682	9.604	ppbv	100
88]	Cis-1,2-Dichloroethene...	3.811	61	138860	10.828	ppbv	90
89]	1,2-Dichloroethane(sim)	4.764	62	195873	9.591	ppbv#	94
90]	1,1,1-Trichloroethane(...	5.035	97	276100	9.680	ppbv#	99
91]	Carbon Tetrachloride(sim)	5.656	117	332550	9.574	ppbv	100
92]	Trichlorotrifluoroetha...	2.723	101	200293	7.722	ppbv	100
94]	1,2-dichloropropane(sim)	6.299	63	74038	11.116	ppbv#	87
95]	Bromodichloromethane(sim)	6.469	83	306989	11.013	ppbv	96
96]	Trichloroethene(sim)	6.513	130	140851	11.112	ppbv#	91
97]	1,4-Dioxane(sim)	6.556	88	62145	9.374	ppbv	99
98]	cis-1,3-Dichloropropen...	7.247	75	188228	11.837	ppbv	94
99]	1,1,2-Trichloroethane(...	7.767	97	146705	10.033	ppbv	99
100]	Dibromochloromethane(sim)	8.251	129	323084	11.067	ppbv	99
101]	1,2-Dibromoethane(EDB)...	8.419	107	272989	10.978	ppbv	96
102]	Tetrachloroethene(sim)	8.766	166	199058	11.586	ppbv	90
104]	Bromoform(sim)	9.624	173	318848	11.197	ppbv	100
105]	1,1,1,2-Tetrachloroeth...	9.233	131	198472	9.987	ppbv	100
106]	m,p-Xylene(sim)	9.617	91	806813	20.101	ppbv#	91
107]	1,1,2,2-Tetrachloroeth...	9.877	83	307025	8.745	ppbv	97
110]	Benzyl chloride(sim)	10.843	91	396950	11.330	ppbv	92
111]	1,3-Dichlorobenzene(sim)	10.851	146	349041	9.667	ppbv#	95
112]	1,4-Dichlorobenzene(sim)	10.881	146	305879	10.204	ppbv	95
113]	sec-Butylbenzene(sim)	10.916	105	650892	9.531	ppbv	93
114]	4-Isopropyltoluene(sim)	10.994	119	576140	10.106	ppbv#	91
115]	1,2-Dichlorobenzene(sim)	11.051	146	329614	8.855	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_32.D
Acq On : 18 Apr 2017 3:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb;air4u
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Apr 18 08:50:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

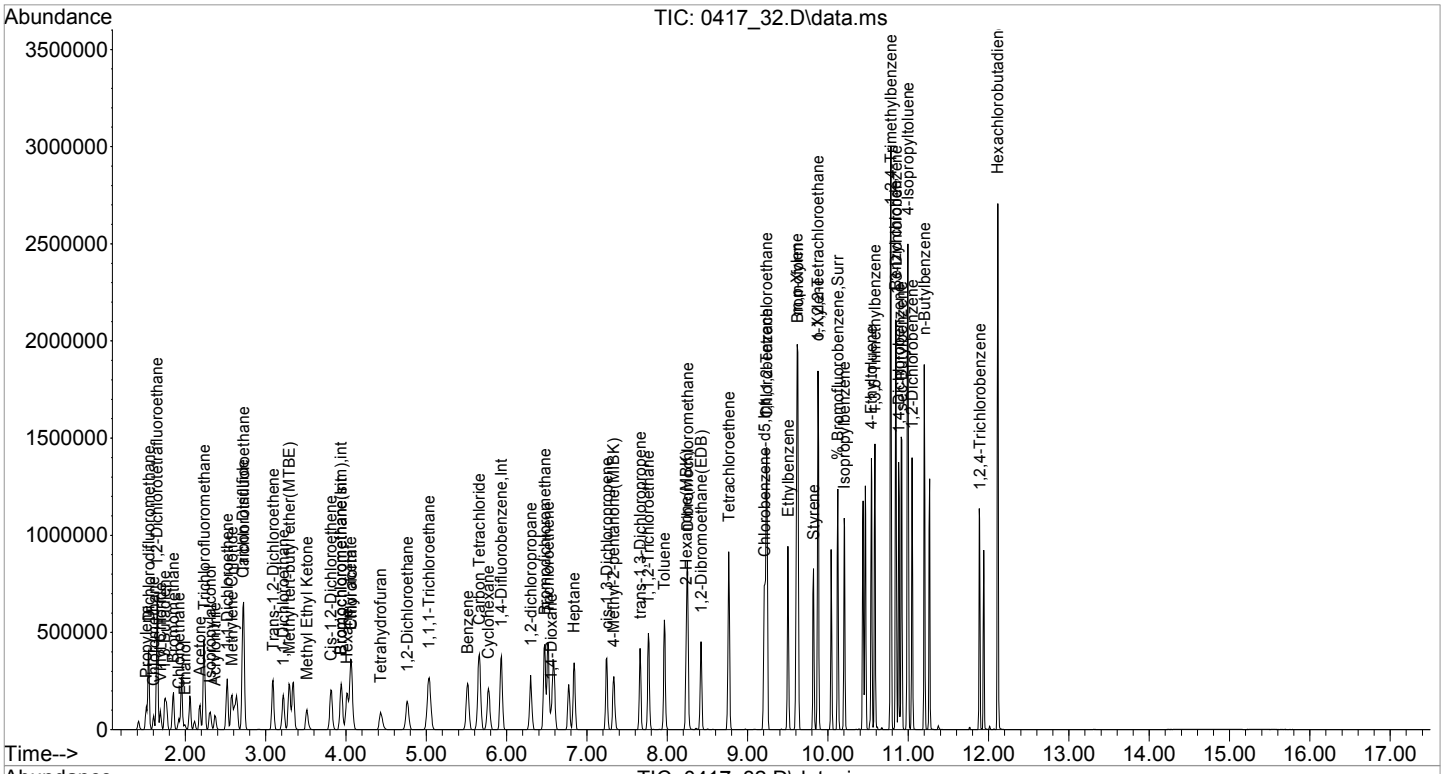
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.200	91	546402	11.232	ppbv	93
117] 1,2,4-Trichlorobenzene...	11.887	180	213592	13.716	ppbv	95
119] Hexachlorobutadiene(sim)	12.116	225	307376	8.922	ppbv	98

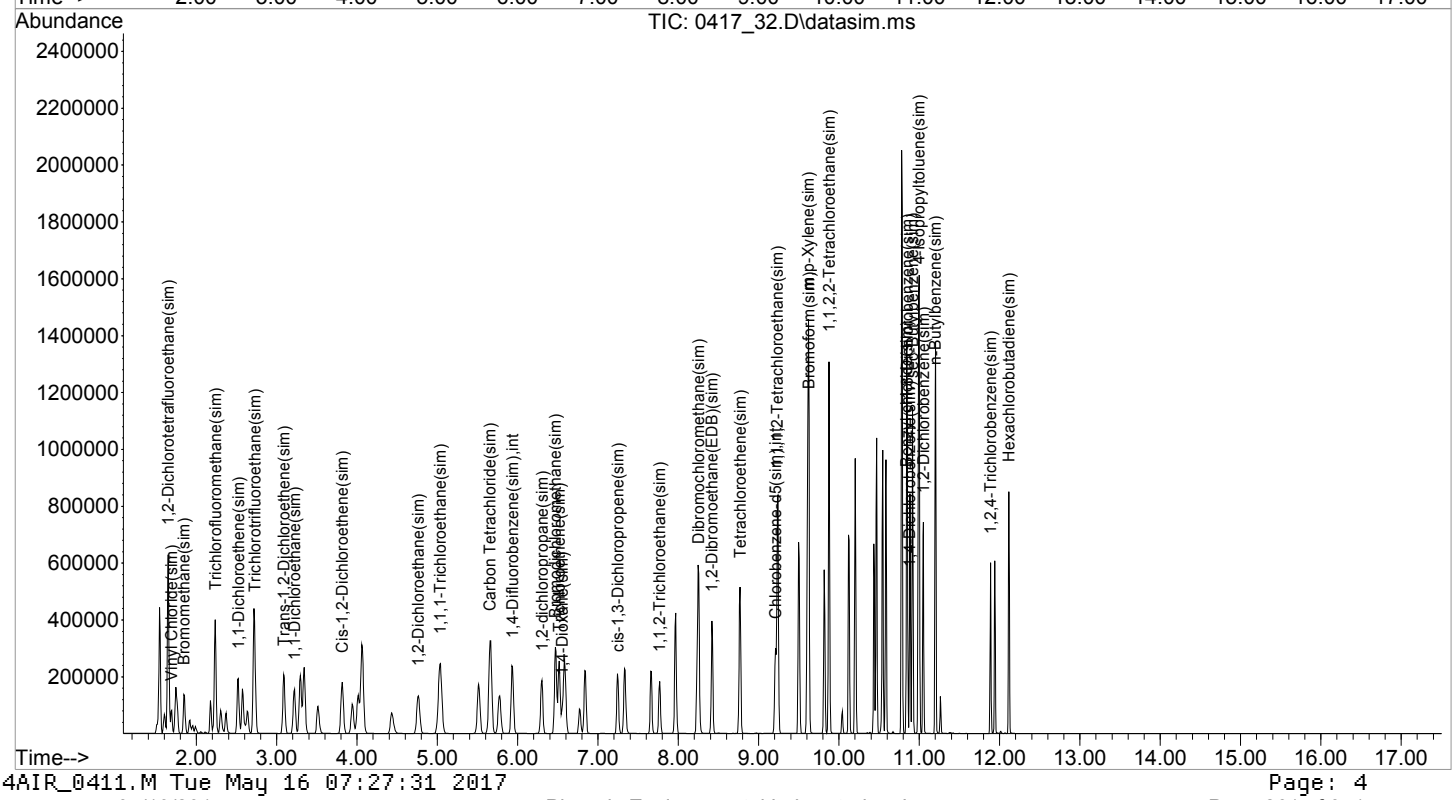
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_32.D
Acq On : 18 Apr 2017 3:33 am
Operator : Keith
Client ID : CCAL 10
Lab ID : 10ppb;air4u
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Apr 18 08:50:12 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration





1

AIR ANALYSIS DATA SHEET

CLIENT ID: BY03107 LCS

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107 LCS

Canister: LCS Lab File ID: 0412_35.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	7.80		0.581	0.581	r
75-71-8	Dichlorodifluoromethane	11.1		0.202	0.202	r
74-87-3	Chloromethane	7.56		0.485	0.485	r
76-14-2	1,2-Dichlorotetrafluoroethane	10.2		0.143	0.143	r
75-01-4	Vinyl Chloride	8.45		0.098	0.098	r
106-99-0	1,3-Butadiene	8.25		0.452	0.452	r
74-83-9	Bromomethane	8.51		0.258	0.258	r
75-00-3	Chloroethane	7.38		0.379	0.379	r
64-17-5	Ethanol	4.47		0.531	0.531	r
67-64-1	Acetone	9.18		0.421	0.421	r
75-69-4	Trichlorofluoromethane	10.9		0.178	0.178	r
67-63-0	Isopropylalcohol	7.41		0.407	0.407	r
107-13-1	Acrylonitrile	7.94		0.461	0.461	r
75-35-4	1,1-Dichloroethene	9.69		0.252	0.252	r
75-09-2	Methylene Chloride	7.95		0.288	0.288	r
75-15-0	Carbon Disulfide	8.69		0.321	0.321	r
76-13-1	Trichlorotrifluoroethane	9.68		0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene	9.59		0.252	0.252	r
75-34-3	1,1-Dichloroethane	10.3		0.247	0.247	r
1634-04-4	Methyl tert-butyl ether(MTBE)	9.84		0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	8.16		0.339	0.339	r
156-59-2	Cis-1,2-Dichloroethene	9.00		0.252	0.252	r
110-54-3	Hexane	8.42		0.284	0.284	r
67-66-3	Chloroform	9.61		0.205	0.205	r
141-78-6	Ethyl acetate	9.79		0.278	0.278	r
109-99-9	Tetrahydrofuran	8.76		0.339	0.339	r
107-06-2	1,2-Dichloroethane	10.5		0.247	0.247	r
71-55-6	1,1,1-Trichloroethane	11.0		0.183	0.183	r
71-43-2	Benzene	8.46		0.313	0.313	r
56-23-5	Carbon Tetrachloride	11.6		0.040	0.040	r
110-82-7	Cyclohexane	10.7		0.291	0.291	r
78-87-5	1,2-dichloropropane	8.58		0.217	0.217	r
75-27-4	Bromodichloromethane	9.78		0.149	0.149	r
79-01-6	Trichloroethene	10.1		0.047	0.047	r
123-91-1	1,4-Dioxane	9.35		0.278	0.278	r
142-82-5	Heptane	9.98		0.244	0.244	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

AIR ANALYSIS DATA SHEET

CLIENT ID: BY03107 LCS

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107 LCS

Canister: LCS Lab File ID: 0412_35.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
10061-01-5	cis-1,3-Dichloropropene	10.0		0.220	0.220	r
108-10-1	4-Methyl-2-pentanone(MIBK)	11.2		0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	10.3		0.220	0.220	r
79-00-5	1,1,2-Trichloroethane	9.55		0.183	0.183	r
108-88-3	Toluene	10.4		0.266	0.266	r
124-48-1	Dibromochloromethane	10.7		0.117	0.117	r
591-78-6	2-Hexanone(MBK)	11.4		0.244	0.244	r
106-93-4	1,2-Dibromoethane(EDB)	10.2		0.130	0.130	r
127-18-4	Tetrachloroethene	11.5		0.037	0.037	r
630-20-6	1,1,1,2-Tetrachloroethane	10.1		0.146	0.146	r
108-90-7	Chlorobenzene	9.12		0.217	0.217	r
100-41-4	Ethylbenzene	10.2		0.230	0.230	r
179601-23-1	m,p-Xylene	21.4		0.230	0.230	r
75-25-2	Bromoform	10.4		0.097	0.097	r
100-42-5	Styrene	10.6		0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane	8.70		0.146	0.146	r
95-47-6	o-Xylene	10.4		0.230	0.230	r
98-82-8	Isopropylbenzene	10.3		0.204	0.204	r
622-96-8	4-Ethyltoluene	11.3		0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	10.4		0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	11.4		0.204	0.204	r
100-44-7	Benzyl chloride	10.6		0.193	0.193	r
541-73-1	1,3-Dichlorobenzene	11.1		0.166	0.166	r
106-46-7	1,4-Dichlorobenzene	11.7		0.166	0.166	r
135-98-8	sec-Butylbenzene	11.4		0.182	0.182	r
99-87-6	4-Isopropyltoluene	11.9		0.182	0.182	r
95-50-1	1,2-Dichlorobenzene	10.6		0.166	0.166	r
104-51-8	n-Butylbenzene	11.8		0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene	14.3		0.135	0.135	r
87-68-3	Hexachlorobutadiene	11.7		0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (Not Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_35.D
Acq On : 13 Apr 2017 02:19 pm
Operator : CORTEX\ms
Client ID : BY03107 LCS
Lab ID : BY03107 LCS
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:33:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.987	130	126006	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.890	114	355051	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	176655	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.987	130	126006	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	428403	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	190983	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	230446	9.592	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.90%				
Target Compounds							Qvalue
2) Propylene	3.643	41	102411	7.799	ppbv	#	88
3) Dichlorodifluoromethane	3.716	85	504053	11.119	ppbv	#	95
4) Chloromethane	3.878	50	118677	7.562	ppbv	#	1
5) 1,2-Dichlorotetrafluor...	3.975	85	397924	10.228	ppbv		93
6) Vinyl Chloride	4.081	62	106934	8.451	ppbv		96
7) 1,3-Butadiene	4.211	54	89556	8.254	ppbv	#	38
8) Bromomethane	4.446	94	106049	8.510	ppbv	#	85
9) Chloroethane	4.600	64	42881	7.382	ppbv	#	57
11) Ethanol	4.722	45	38066m	4.473	ppbv		
12) Acetone	5.087	43	358591	9.183	ppbv	#	69
13) Trichlorofluoromethane	5.208	101	582287	10.867	ppbv		98
14) Isopropylalcohol	5.281	45	285097	7.414	ppbv	#	79
15) Acrylonitrile	5.435	53	96492	7.936	ppbv	#	85
16) 1,1-Dichloroethene	5.673	61	264900	9.692	ppbv	#	82
17) Methylene Chloride	5.756	49	221073	7.947	ppbv	#	69
20) Carbon Disulfide	5.965	76	246392	8.685	ppbv		99
21) Trichlorotrifluoroethane	5.923	101	287740	9.677	ppbv	#	85
22) Trans-1,2-Dichloroethene	6.339	61	204131	9.594	ppbv		88
23) 1,1-Dichloroethane	6.454	63	234718	10.341	ppbv		94
24) Methyl tert-butyl ethe...	6.480	73	256669	9.844	ppbv	#	84
25) Methyl Ethyl Ketone	6.663	43	221688	8.156	ppbv	#	86
26) Cis-1,2-Dichloroethene	6.894	61	133904	8.999	ppbv		92
27) Hexane	6.987	57	92369	8.420	ppbv	#	20
28) Chloroform	7.049	83	254419	9.608	ppbv	#	85
29) Ethyl acetate	6.987	61	24762	9.786	ppbv	#	1
30) Tetrahydrofuran	7.243	42	93910	8.762	ppbv	#	78
31) 1,2-Dichloroethane	7.406	62	234514	10.473	ppbv		99
32) 1,1,1-Trichloroethane	7.530	97	342449	10.984	ppbv	#	92
33) Benzene	7.740	78	198143	8.464	ppbv	#	79
34) Carbon Tetrachloride	7.815	117	453859	11.589	ppbv		98
35) Cyclohexane	7.873	41	104510	10.693	ppbv	#	48
37) 1,2-dichloropropane	8.113	63	68375	8.582	ppbv	#	1
38) Bromodichloromethane	8.205	83	288680	9.778	ppbv		98
39) Trichloroethene	8.221	130	152370	10.082	ppbv		95
41) 1,4-Dioxane	8.205	88	47863	9.353	ppbv	#	85
43) Heptane	8.329	43	131176	9.975	ppbv	#	75
44) cis-1,3-Dichloropropene	8.594	75	138925	10.018	ppbv		94
45) 4-Methyl-2-pentanone(M...	8.594	43	237236	11.241	ppbv	#	84
46) trans-1,3-Dichloropropene	8.830	75	146177	10.344	ppbv		98
47) 1,1,2-Trichloroethane	8.922	97	106064	9.552	ppbv		97
48) Toluene	9.055	91	257728	10.381	ppbv	#	97
49) Dibromochloromethane	9.266	129	384932	10.702	ppbv		100

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_35.D
Acq On : 13 Apr 2017 02:19 pm
Operator : CORTEX\ms
Client ID : BY03107 LCS
Lab ID : BY03107 LCS
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:33:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 2-Hexanone(MBK)	9.147	43	225123	11.431	ppbv#	75
51) 1,2-Dibromoethane(EDB)	9.393	107	216850	10.196	ppbv	99
52) Tetrachloroethene	9.611	166	231115	11.491	ppbv	98
54) 1,1,1,2-Tetrachloroethane	9.934	131	217342	10.134	ppbv	98
55) Chlorobenzene	9.949	112	259404	9.117	ppbv	93
56) Ethylbenzene	10.127	91	372855	10.173	ppbv	97
57) m,p-Xylene	10.216	91	639365	21.375	ppbv	98
58) Bromoform	10.282	173	421148	10.376	ppbv	99
59) Styrene	10.408	104	212422	10.580	ppbv#	87
60) 1,1,2,2-Tetrachloroethane	10.460	83	222410	8.700	ppbv#	92
61) o-Xylene	10.467	91	320525	10.400	ppbv	98
64) Isopropylbenzene	10.778	105	423293	10.318	ppbv	96
66) 4-Ethyltoluene	11.141	105	477304	11.296	ppbv	99
67) 1,3,5-Trimethylbenzene	11.178	105	393461	10.392	ppbv	98
68) 1,2,4-Trimethylbenzene	11.423	105	436140	11.376	ppbv#	96
70) Benzyl chloride	11.519	91	355019	10.573	ppbv#	96
71) 1,3-Dichlorobenzene	11.534	146	360982	11.105	ppbv	99
72) 1,4-Dichlorobenzene	11.571	146	355119	11.662	ppbv	98
73) sec-Butylbenzene	11.586	105	556699	11.383	ppbv#	93
74) 4-Isopropyltoluene	11.682	119	559450	11.858	ppbv	93
75) 1,2-Dichlorobenzene	11.786	146	336970	10.556	ppbv	97
76) n-Butylbenzene	11.942	91	450474	11.818	ppbv	94
77) 1,2,4-Trichlorobenzene	12.913	180	278987	14.272	ppbv	96
79) Hexachlorobutadiene	13.224	225	362070	11.704	ppbv	99
81] Dichlorodifluoromethan...	3.719	85	621925	11.002	ppbv	95
82] 1,2-Dichlorotetrafluor...	3.975	85	397941	9.723	ppbv	93
83] Vinyl Chloride(sim)	4.084	62	126239	7.947	ppbv	97
84] Bromomethane(sim)	4.446	94	106049	7.140	ppbv#	85
85] Trichlorofluoromethane...	5.211	101	731424	10.467	ppbv	100
86] 1,2-Dichloroethane(sim)	7.406	62	234514	10.297	ppbv	99
87] 1,1,1-Trichloroethane(...	7.525	97	428522	10.706	ppbv#	95
88] Carbon Tetrachloride(sim)	7.815	117	453859	11.449	ppbv	98
89] 1,1-Dichloroethene(sim)	5.676	61	315546	9.580	ppbv#	84
90] Carbon Disulfide(sim)	5.965	76	246392	8.268	ppbv	99
91] Trichlorotrifluoroetha...	5.926	101	367056	9.486	ppbv	99
92] Trans-1,2-Dichloroethe...	6.339	61	204131	8.839	ppbv	88
93] 1,1-Dichloroethane(sim)	6.457	63	277038	9.620	ppbv#	95
94] Cis-1,2-Dichloroethene...	6.894	61	133904	9.330	ppbv	92
95] Chloroform(sim)	7.044	83	321643	9.472	ppbv#	87
96] Benzene(sim)	7.740	78	198143	7.917	ppbv#	79
98] 1,2-dichloropropane(sim)	8.113	63	68504	8.023	ppbv#	1
99] Bromodichloromethane(sim)	8.208	85	234401	9.964	ppbv#	41
100] Trichloroethene(sim)	8.221	130	152193	9.762	ppbv	97
101] 1,4-Dioxane(sim)	8.208	88	54685	10.268	ppbv#	86
102] cis-1,3-Dichloropropen...	8.594	75	138925	11.222	ppbv#	94
103] 1,1,2-Trichloroethane(...	8.924	97	138426	9.412	ppbv	94
104] Dibromochloromethane(sim)	9.266	129	385024	10.708	ppbv	100
105] 1,2-Dibromoethane(EDB)...	9.389	107	280291	10.638	ppbv	100
106] Tetrachloroethene(sim)	9.611	166	231115	11.757	ppbv	98
108] Bromoform(sim)	10.282	173	421148	9.035	ppbv	99
109] Chlorobenzene(sim)	9.945	112	315754	7.844	ppbv#	91
110] Ethylbenzene(sim)	10.127	91	372855	9.507	ppbv#	96
111] m,p-Xylene(sim)	10.218	91	707584	20.697	ppbv	97
112] Styrene(sim)	10.408	104	212422	10.626	ppbv#	88
113] 1,1,2,2-Tetrachloroeth...	10.463	83	278607	7.875	ppbv#	96

Quantitation Report (Not Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_35.D
Acq On : 13 Apr 2017 02:19 pm
Operator : CORTEX\ms
Client ID : BY03107 LCS
Lab ID : BY03107 LCS
ALS Vial : 1 Sample Multiplier: 1

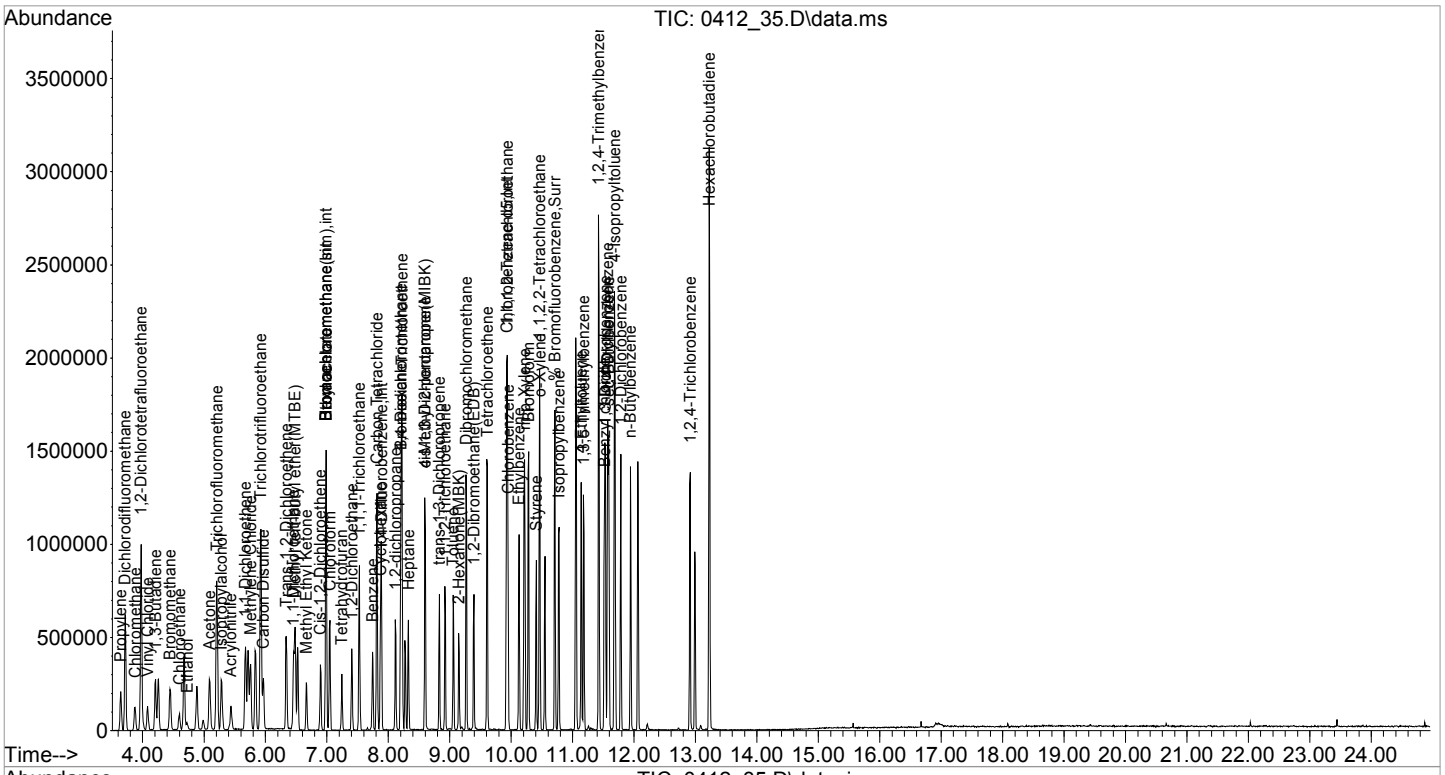
Quant Time: Apr 13 15:33:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

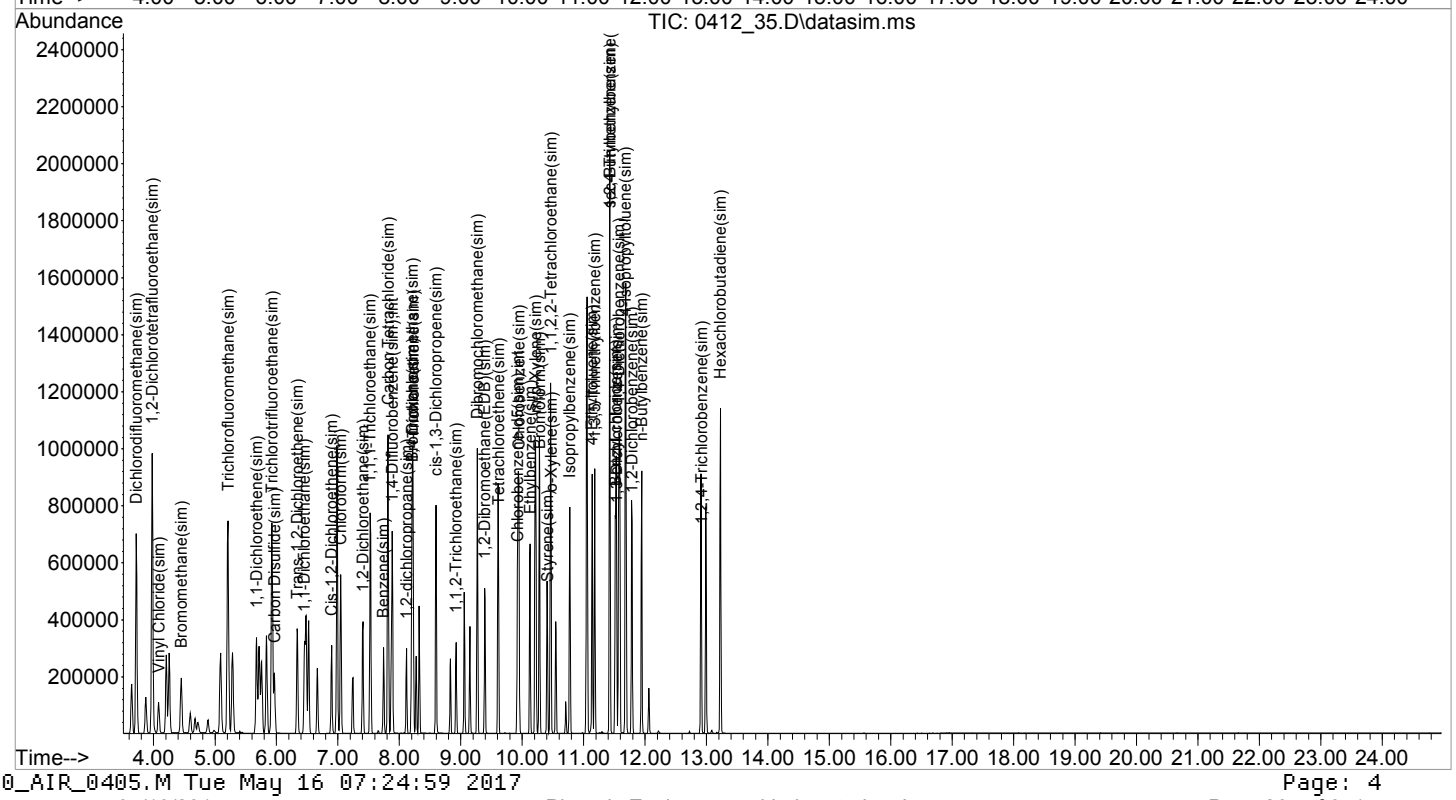
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114] o-Xylene(sim)	10.467	91	320525	10.476	ppbv	98
115] Isopropylbenzene(sim)	10.774	105	469645	9.698	ppbv#	67
117] 4-Ethyltoluene(sim)	11.137	105	503784	11.153	ppbv	98
118] 1,3,5-Trimethylbenzene...	11.178	105	393461	10.129	ppbv	96
119] 1,2,4-Trimethylbenzene...	11.426	105	470430	12.279	ppbv#	93
121] Benzyl chloride(sim)	11.515	91	390947	12.019	ppbv	95
122] 1,3-Dichlorobenzene(sim)	11.534	146	361079	10.659	ppbv	99
123] 1,4-Dichlorobenzene(sim)	11.574	146	463821	12.321	ppbv	97
124] sec-Butylbenzene(sim)	11.423	105	435820	12.788	ppbv	80
125] 4-Isopropyltoluene(sim)	11.678	119	586912	12.683	ppbv#	90
126] 1,2-Dichlorobenzene(sim)	11.786	146	336970	10.113	ppbv	98
127] n-Butylbenzene(sim)	11.945	91	499519	13.105	ppbv#	46
128] 1,2,4-Trichlorobenzene...	12.913	180	278939	16.486	ppbv	97
130] Hexachlorobutadiene(sim)	13.224	225	361958	10.213	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_35.D
Acq On : 13 Apr 2017 02:19 pm
Operator : CORTEX\ms
Client ID : BY03107 LCS
Lab ID : BY03107 LCS
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 15:33:09 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





AIR ANALYSIS DATA SHEET

CLIENT ID: BY03107 BLANK

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107 BL

Canister: BL Lab File ID: 0412_38.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
74-87-3	Chloromethane	0.484	U	0.484	0.484	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.277	U	0.277	0.277	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
75-71-8	Dichlorodifluoromethane(sim)	0.202	U	0.202	0.202	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.257	U	0.257	0.257	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.040	U	0.040	0.040	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-15-0	Carbon Disulfide(sim)	0.321	U	0.321	0.321	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.256	U	0.256	0.256	r
67-66-3	Chloroform(sim)	0.205	U	0.205	0.205	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

AIR ANALYSIS DATA SHEET

CLIENT ID: BY03107 BLANK

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107 BL

Canister: BL Lab File ID: 0412_38.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
78-87-5	1,2-dichloropropane(sim)	0.216	U	0.216	0.216	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
127-18-4	Tetrachloroethene(sim)	0.037	U	0.037	0.037	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
108-90-7	Chlorobenzene(sim)	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene(sim)	0.230	U	0.230	0.230	r
179601-23-1	m,p-Xylene(sim)	0.230	U	0.230	0.230	r
100-42-5	Styrene(sim)	0.235	U	0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
95-47-6	o-Xylene(sim)	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene(sim)	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene(sim)	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
135-98-8	sec-Butylbenzene(sim)	0.182	U	0.182	0.182	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_38.D
Acq On : 13 Apr 2017 04:05 pm
Operator : CORTEX\ms
Client ID : BY03107 BLANK
Lab ID : BY03107 BLANK
ALS Vial : 1 Sample Multiplier: 1

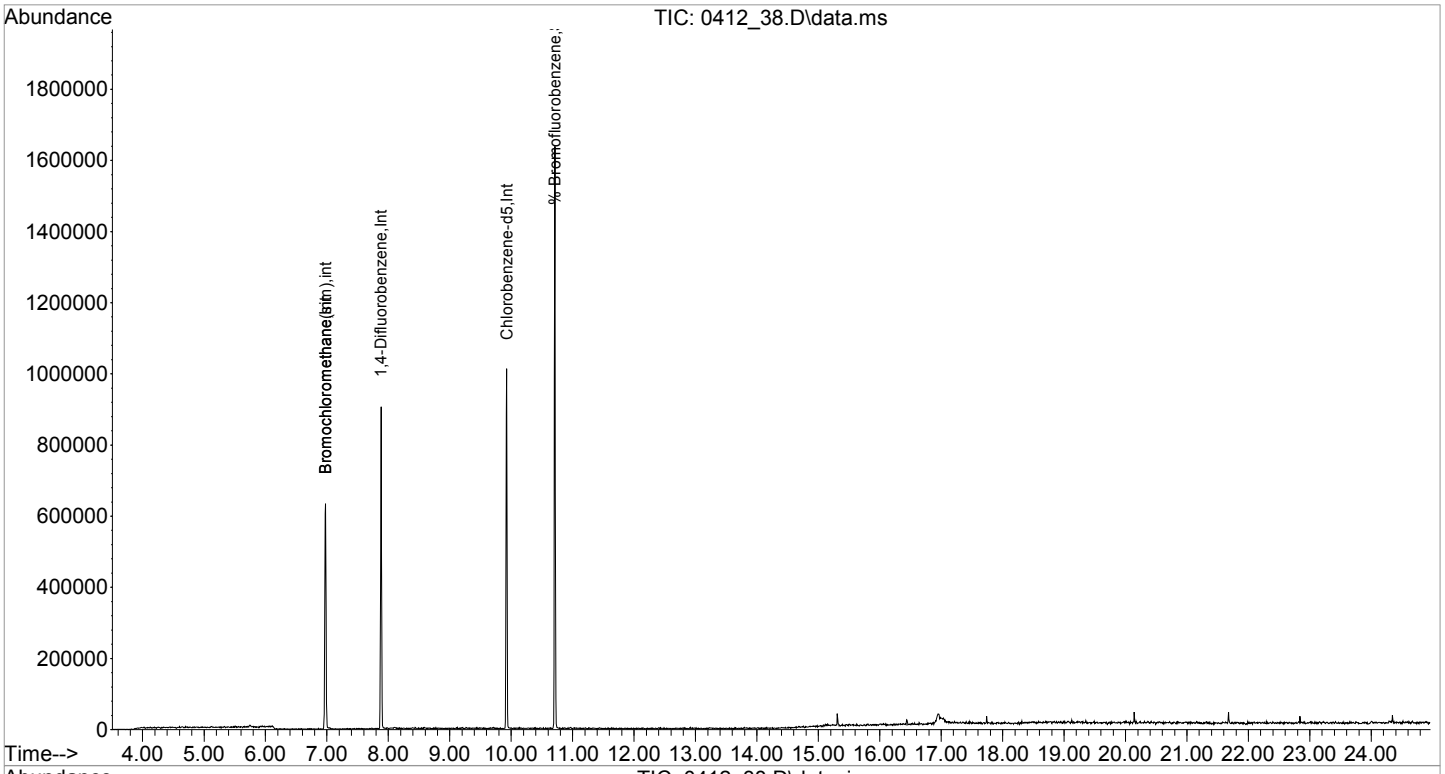
Quant Time: Apr 14 13:34:45 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

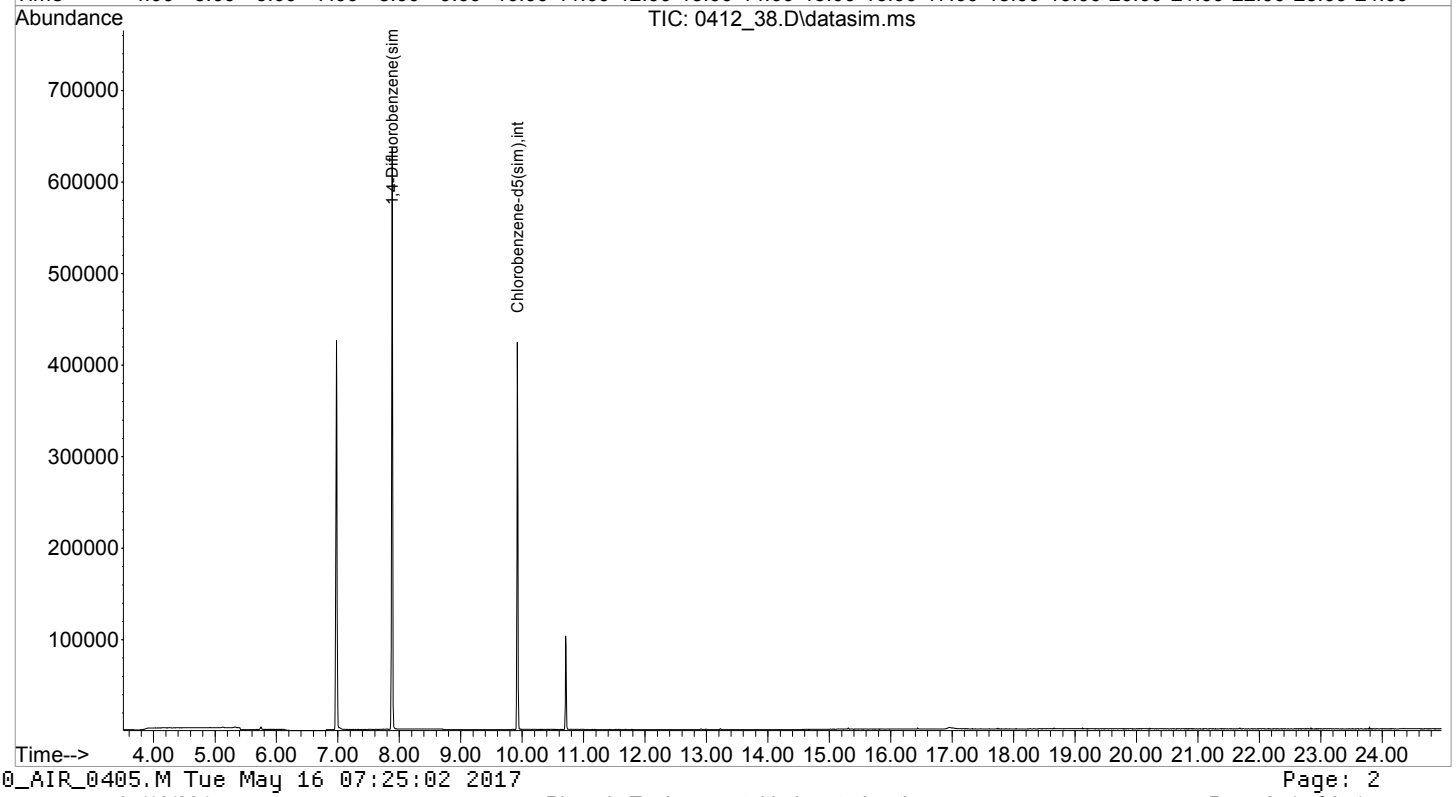
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	131929	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	350857	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	138439	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	131929	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	426141	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	145597	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	207047	10.997	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.00%				
Target Compounds							Qvalue

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_38.D
Acq On : 13 Apr 2017 04:05 pm
Operator : CORTEX\ms
Client ID : BY03107 BLANK
Lab ID : BY03107 BLANK
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 13:34:45 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration





AIR ANALYSIS DATA SHEET

CLIENT ID: OA-1 DUP

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107 DUP

Canister: 21333 Lab File ID: 0412_43.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	1.40		0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.520		0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	190	ES	0.531	0.531	r
67-64-1	Acetone	13.0	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.270		0.178	0.178	r
67-63-0	Isopropylalcohol	2.40	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	2.30	S	0.288	0.288	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.690		0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	1.60		0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	0.330		0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.360		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	1.80		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	0.300		0.037	0.037	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
179601-23-1	m,p-Xylene	0.790		0.230	0.230	r
95-47-6	o-Xylene	0.280		0.230	0.230	r
95-63-6	1,2,4-Trimethylbenzene	0.270		0.204	0.204	r
135-98-8	sec-Butylbenzene	0.182	U	0.182	0.182	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.110		0.040	0.040	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

AIR ANALYSIS DATA SHEET

CLIENT ID: OA-1 DUP

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY03107 DUP

Canister: 21333 Lab File ID: 0412_43.D

Instrument: CHEM20 Column: zb-1ms Date Received: 04/12/17

Purge Volume 200 (cc) Date Analyzed: 04/13/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
75-15-0	Carbon Disulfide(sim)	0.321	U	0.321	0.321	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
67-66-3	Chloroform(sim)	0.205	U	0.205	0.205	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
108-90-7	Chlorobenzene(sim)	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene(sim)	0.230	U	0.230	0.230	r
100-42-5	Styrene(sim)	0.235	U	0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
98-82-8	Isopropylbenzene(sim)	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene(sim)	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_43.D
Acq On : 13 Apr 2017 08:35 pm
Operator : CORTEX\ms
Client ID : OA-1 DUP
Lab ID : BY03107 DUP
ALS Vial : 1 Sample Multiplier: 1

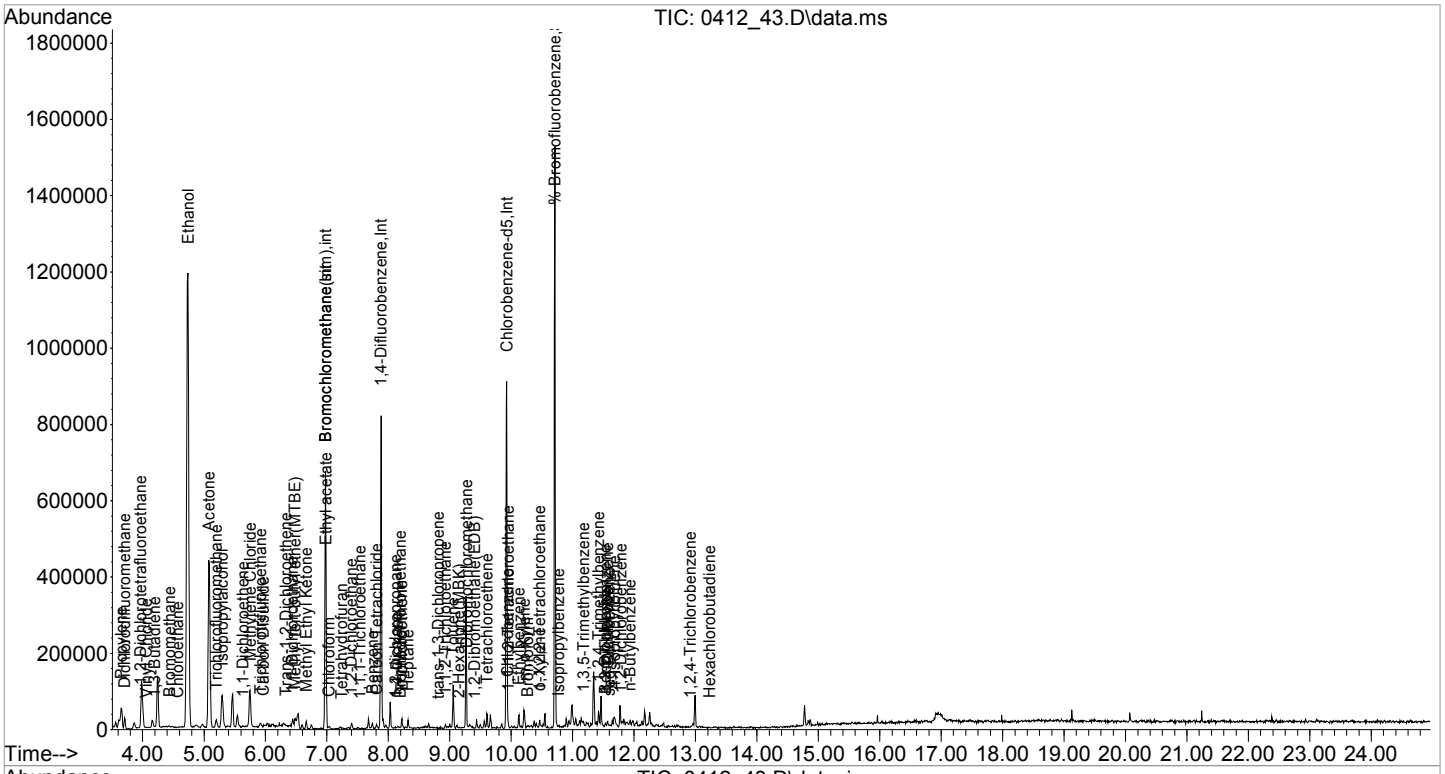
Quant Time: Apr 14 14:15:29 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration

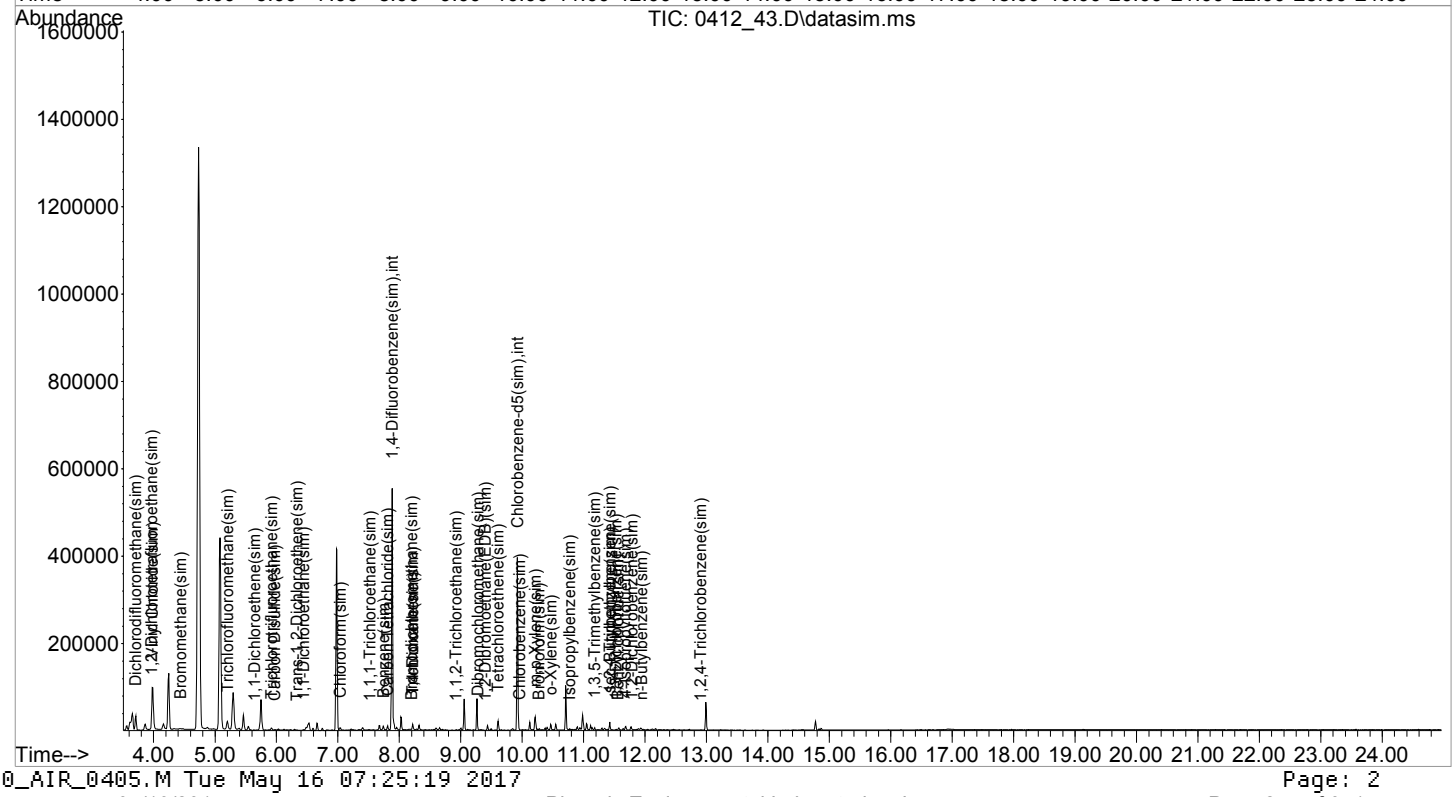
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	115779	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	316602	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	124809	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	115779	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	375960	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	135181	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	198653	11.703	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 117.00%				
Target Compounds							Qvalue
2) Propylene	3.651	41	17471	1.448	ppbv	#	47
3) Dichlorodifluoromethane	3.707	85	21603	0.519	ppbv	#	90
11) Ethanol	4.737	45	1519253	194.280	ppbv		93
12) Acetone	5.078	43	452321	12.607	ppbv	#	68
13) Trichlorofluoromethane	5.200	101	13252	0.269	ppbv	#	91
14) Isopropylalcohol	5.297	45	84368	2.388	ppbv	#	72
17) Methylene Chloride	5.750	49	58497	2.289	ppbv	#	68
25) Methyl Ethyl Ketone	6.662	43	17302	0.693	ppbv	#	84
29) Ethyl acetate	6.987	61	3823	1.644	ppbv	#	1
33) Benzene	7.740	78	7027	0.327	ppbv	#	79
34) Carbon Tetrachloride	7.806	117	3976	0.110	ppbv		90
43) Heptane	8.320	43	4249	0.362	ppbv	#	76
48) Toluene	9.055	91	40130	1.813	ppbv		93
52) Tetrachloroethene	9.604	166	5433	0.303	ppbv		88
56) Ethylbenzene	10.126	91	6909	0.267	ppbv		96
57) m,p-Xylene	10.208	91	16612	0.786	ppbv		97
61) o-Xylene	10.460	91	5991	0.275	ppbv		97
68) 1,2,4-Trimethylbenzene	11.422	105	7344	0.271	ppbv		92
81] Dichlorodifluoromethan...	3.710	85	27473	0.529	ppbv		95
85] Trichlorofluoromethane...	5.203	101	17250	0.269	ppbv		99
88] Carbon Tetrachloride(sim)	7.806	117	3976m	0.109	ppbv	#	
96] Benzene(sim)	7.740	78	7027	0.306	ppbv	#	79
106] Tetrachloroethene(sim)	9.604	166	5327	0.309	ppbv		87
111] m,p-Xylene(sim)	10.211	91	18094	0.748	ppbv		98
114] o-Xylene(sim)	10.460	91	5991	0.277	ppbv		94
119] 1,2,4-Trimethylbenzene...	11.425	105	8444	0.311	ppbv	#	86
124] sec-Butylbenzene(sim)	11.422	105	7344	0.304	ppbv		73

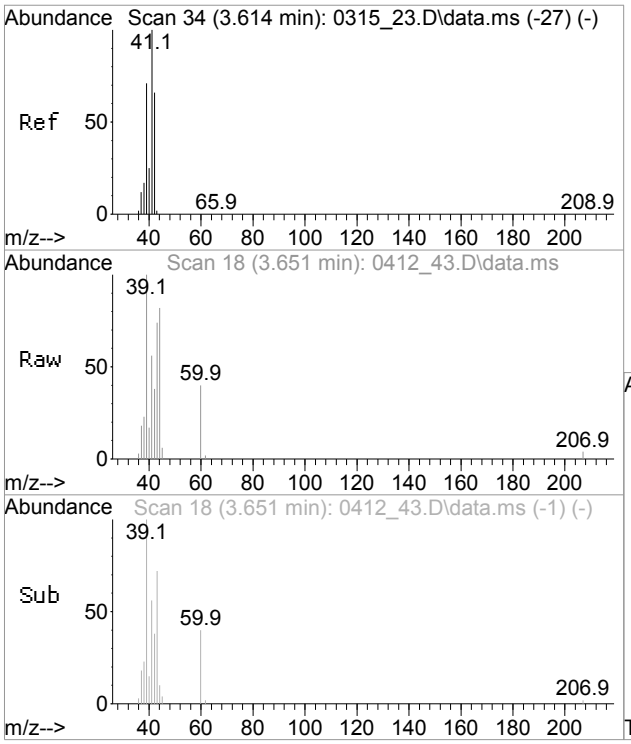
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\04APR\12\
Data File : 0412_43.D
Acq On : 13 Apr 2017 08:35 pm
Operator : CORTEX\ms
Client ID : OA-1 DUP
Lab ID : BY03107 DUP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 14:15:29 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0405.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Thu Apr 06 08:58:59 2017
Response via : Initial Calibration



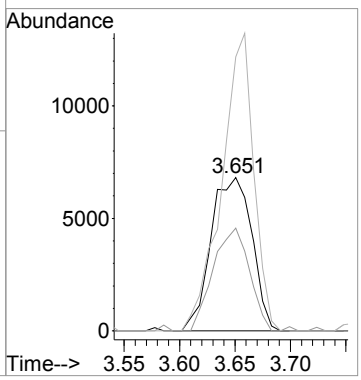


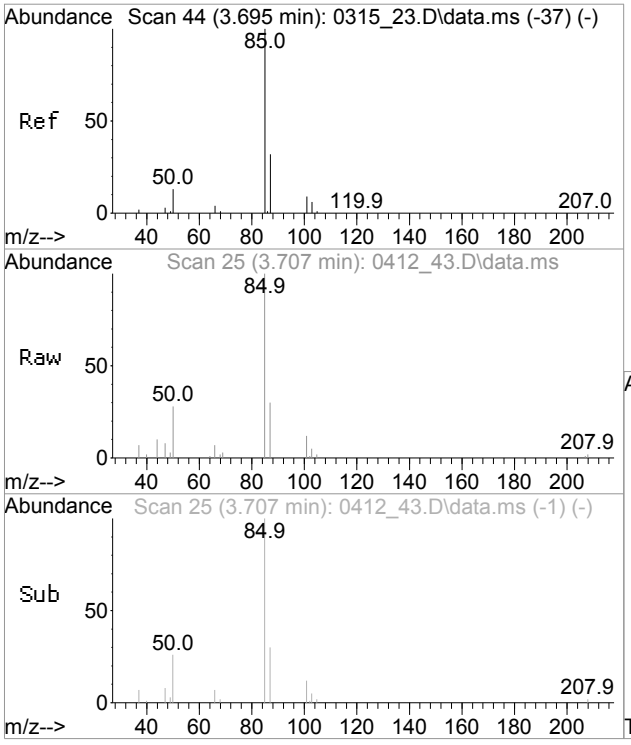


#2
Propylene
Concen: 1.45 ppbv
RT: 3.651 min Scan# 18
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 41 Resp: 17471

Ion	Ratio	Lower	Upper
41	100		
42	59.4	52.7	79.1
39	152.1	59.1	88.7#

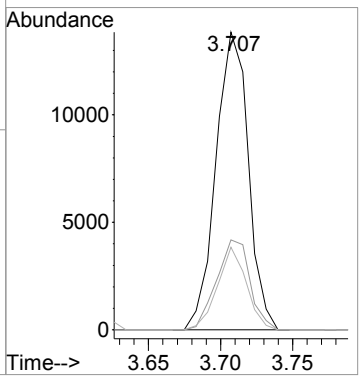


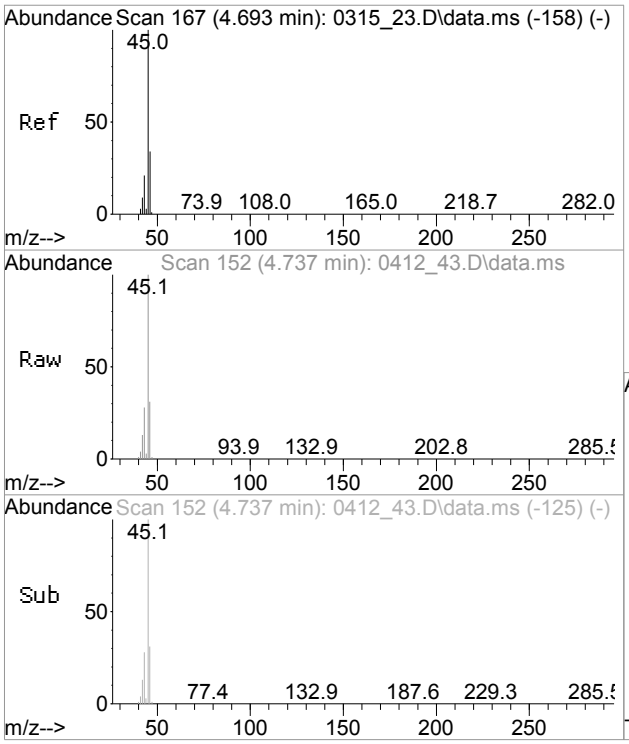


#3
Dichlorodifluoromethane
Concen: 0.52 ppbv
RT: 3.707 min Scan# 25
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 85 Resp: 21603

Ion	Ratio	Lower	Upper
85	100		
87	31.1	26.1	39.1
50	24.8	10.5	15.7#

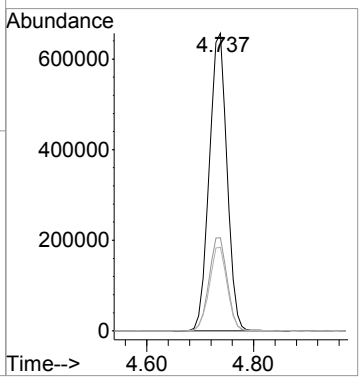


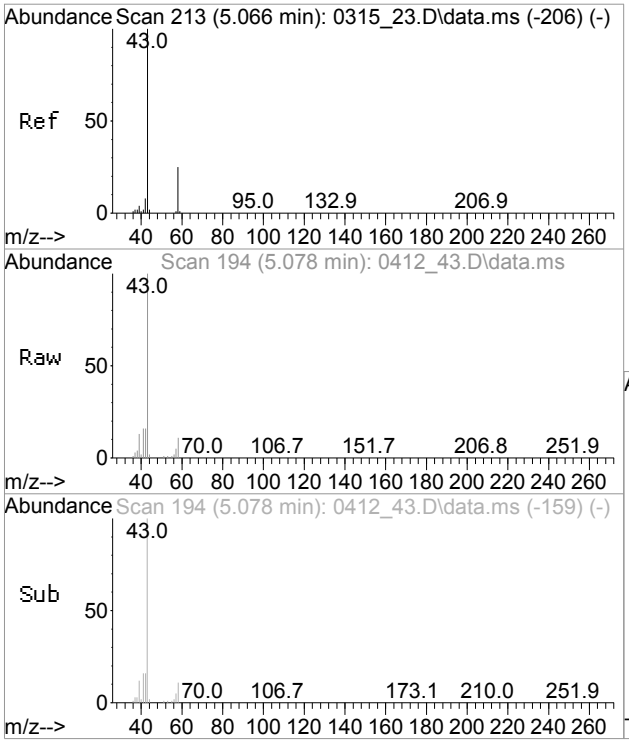


#11
Ethanol
Concen: 194.28 ppbv
RT: 4.737 min Scan# 152
Delta R.T. 0.016 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 45 Resp: 1519253

Ion	Ratio	Lower	Upper
45	100		
46	32.0	28.5	42.7
43	28.4	19.7	29.5

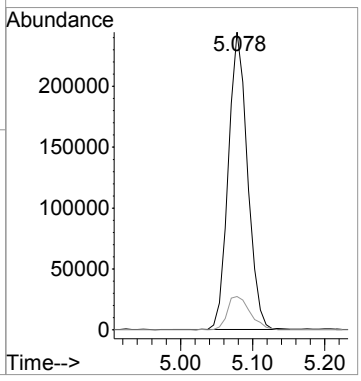


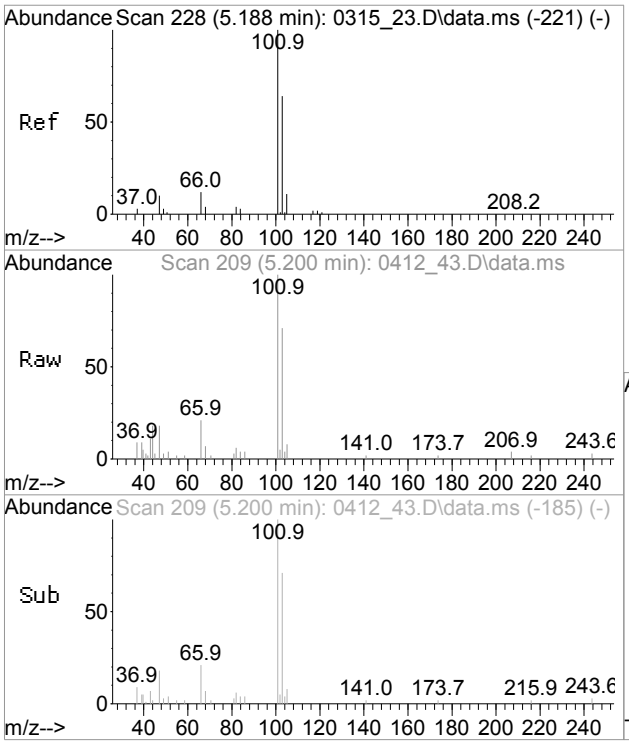


#12
Acetone
Concen: 12.61 ppbv
RT: 5.078 min Scan# 194
Delta R.T. -0.016 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 43 Resp: 452321

Ion	Ratio	Lower	Upper
43	100		
58	13.3	24.8	37.2#

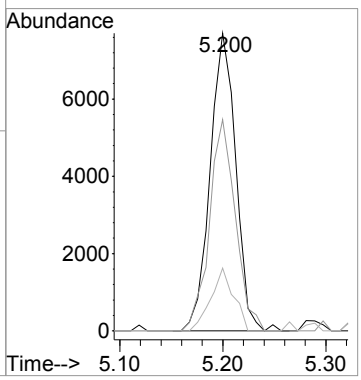


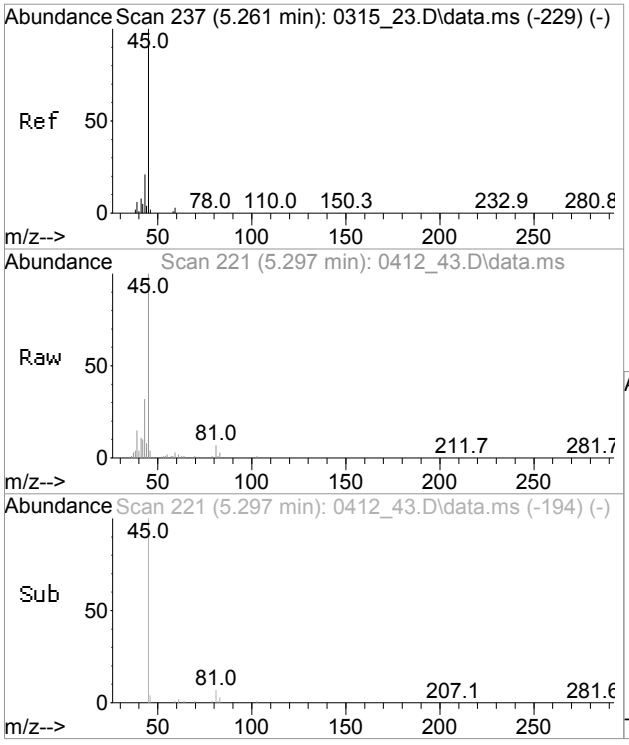


#13
Trichlorofluoromethane
Concen: 0.27 ppbv
RT: 5.200 min Scan# 209
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:101 Resp: 13252

Ion	Ratio	Lower	Upper
101	100		
103	71.9	51.8	77.8
66	18.7	11.1	16.7#

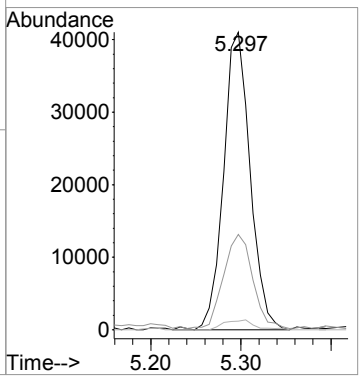


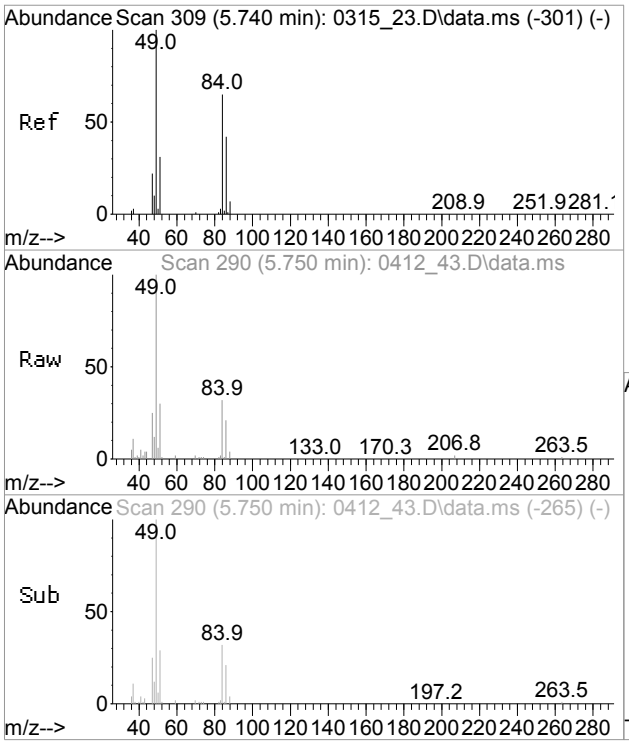


#14
Isopropylalcohol
Concen: 2.39 ppbv
RT: 5.297 min Scan# 221
Delta R.T. 0.016 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 45 Resp: 84368

Ion	Ratio	Lower	Upper
45	100		
43	34.5	15.4	23.0#
59	3.8	3.0	4.4

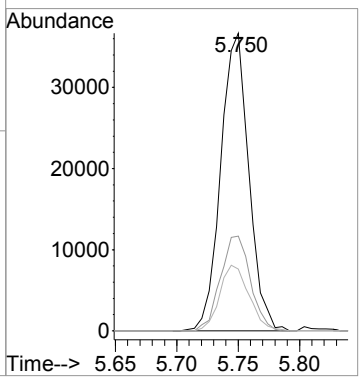


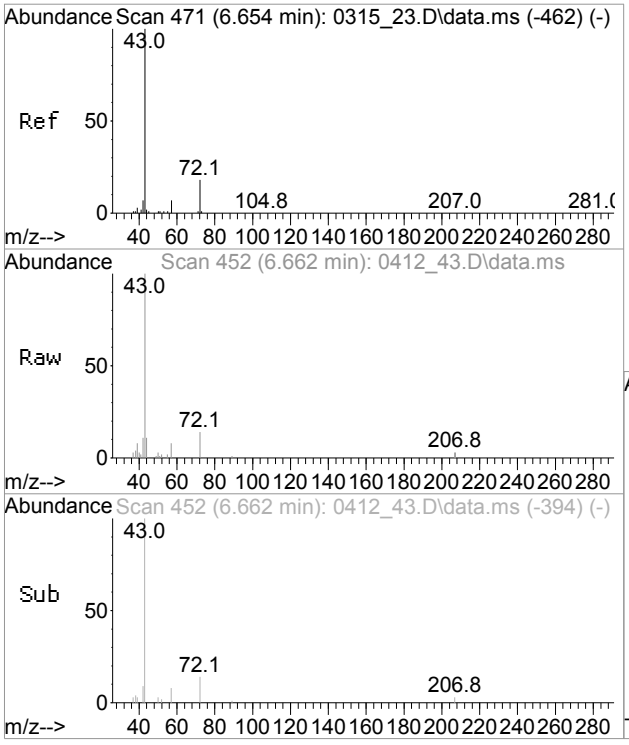


#17
Methylene Chloride
Concen: 2.29 ppbv
RT: 5.750 min Scan# 290
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 49 Resp: 58497

Ion	Ratio	Lower	Upper
49	100		
84	33.9	49.2	73.8#
86	23.1	31.5	47.3#

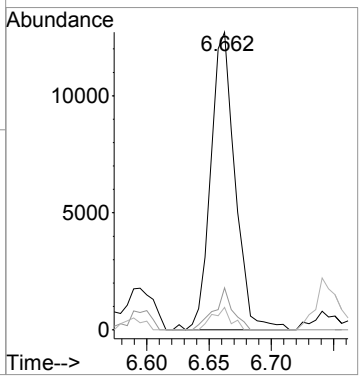


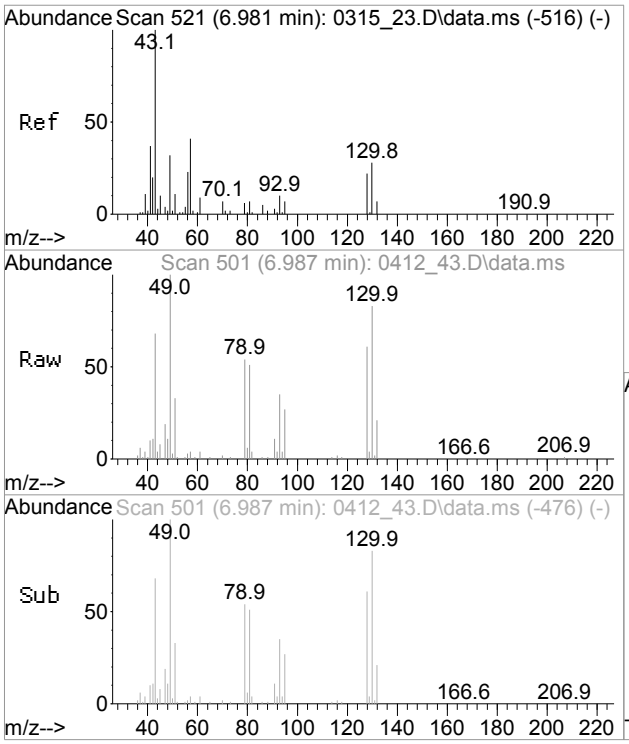


#25
Methyl Ethyl Ketone
Concen: 0.69 ppbv
RT: 6.662 min Scan# 452
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 43 Resp: 17302

Ion	Ratio	Lower	Upper
43	100		
72	10.7	15.9	23.9#
57	5.7	5.6	8.4

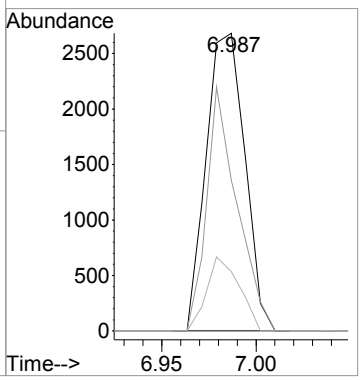


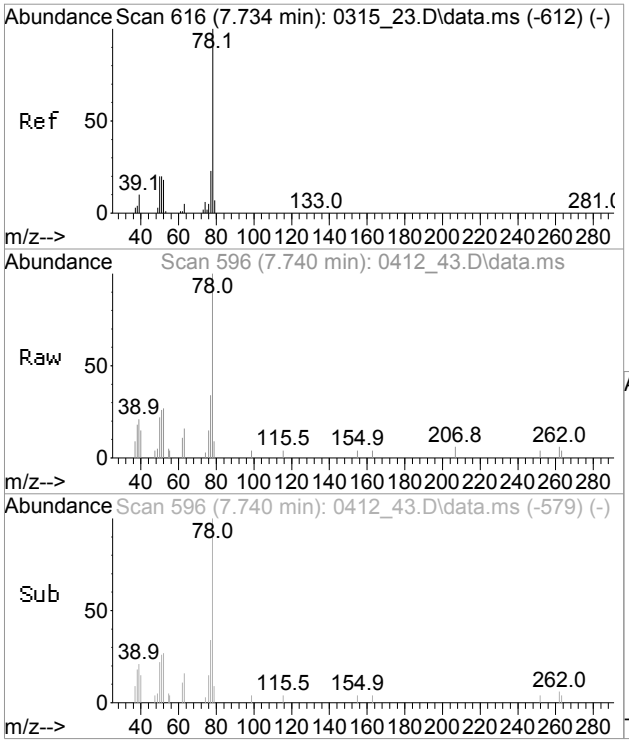


#29
Ethyl acetate
Concen: 1.64 ppbv
RT: 6.987 min Scan# 501
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 61 Resp: 3823

Ion	Ratio	Lower	Upper
61	100		
70	64.4	8.3	12.5#
88	20.9	5.8	8.6#

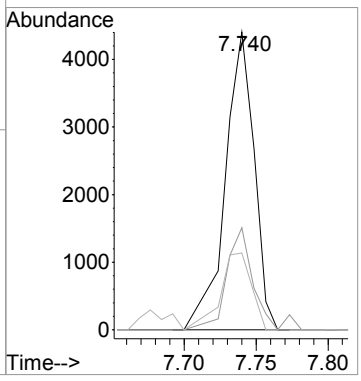


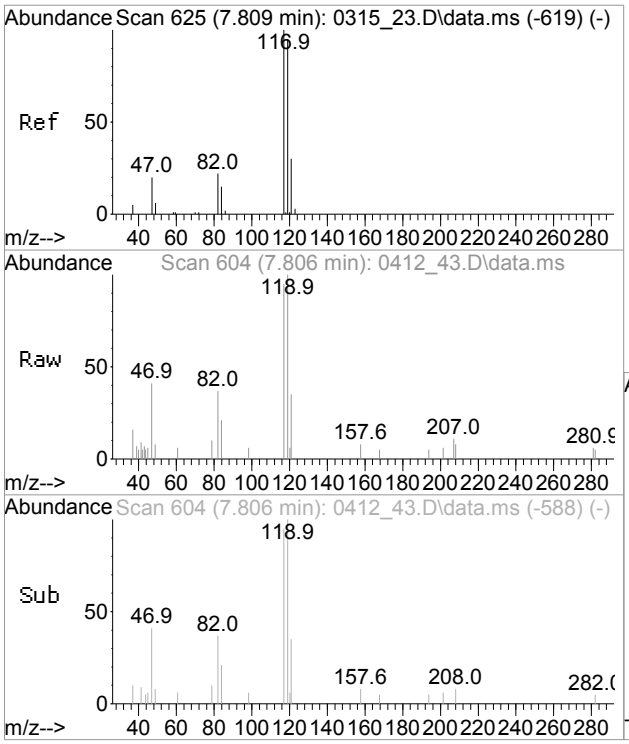


#33
Benzene
Concen: 0.33 ppbv
RT: 7.740 min Scan# 596
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 78 Resp: 7027

Ion	Ratio	Lower	Upper
78	100		
77	32.2	18.6	27.8#
51	29.1	14.9	22.3#

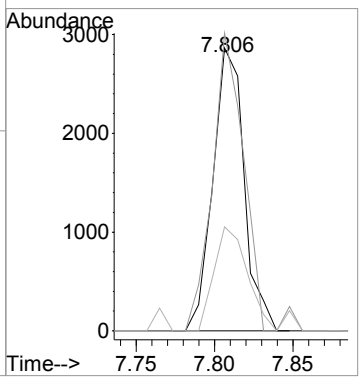


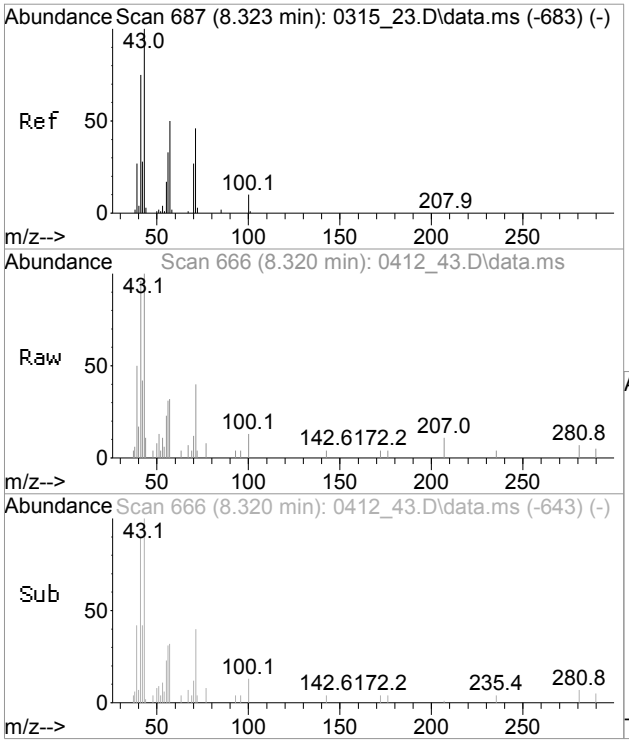


#34
Carbon Tetrachloride
Concen: Below Cal
RT: 7.806 min Scan# 604
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:117 Resp: 3976

Ion	Ratio	Lower	Upper
117	100		
119	104.0	75.9	115.9
121	39.2	10.8	50.8

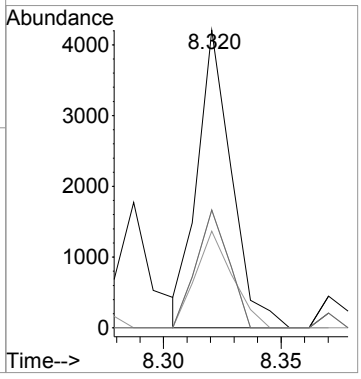


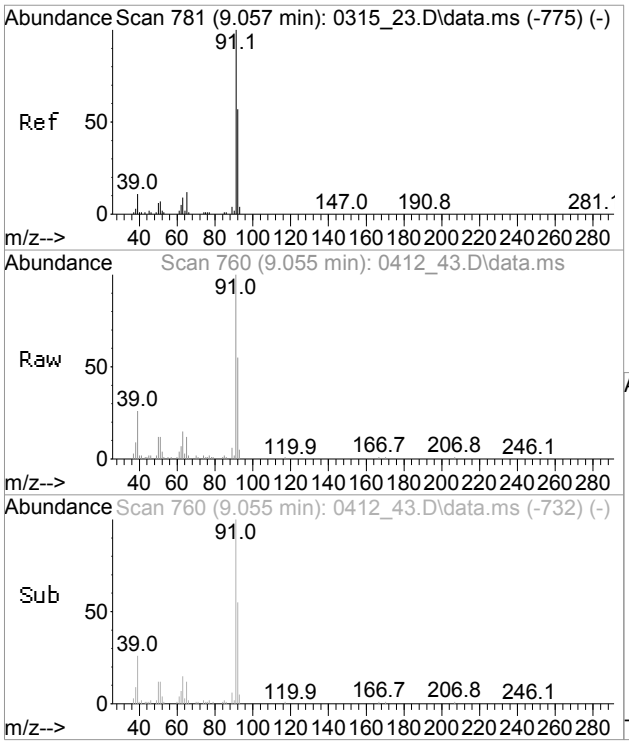


#43
Heptane
Concen: 0.36 ppbv
RT: 8.320 min Scan# 666
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 43 Resp: 4249

Ion	Ratio	Lower	Upper
43	100		
57	35.2	43.0	64.4#
71	38.0	43.6	65.4#
71	38.0	43.6	65.4#

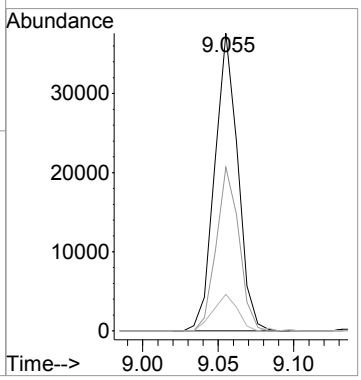


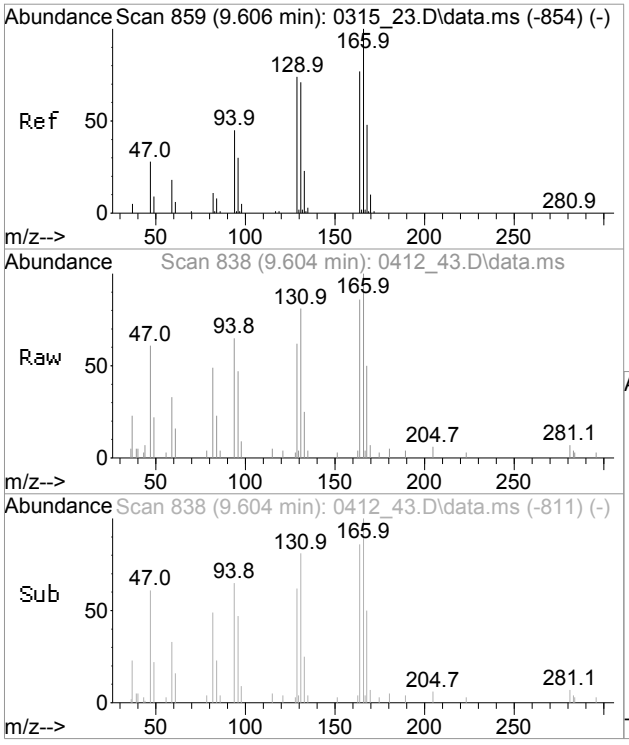


#48
Toluene
Concen: 1.81 ppbv
RT: 9.055 min Scan# 760
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 91 Resp: 40130

Ion	Ratio	Lower	Upper
91	100		
92	53.9	47.7	71.5
65	13.4	9.5	14.3

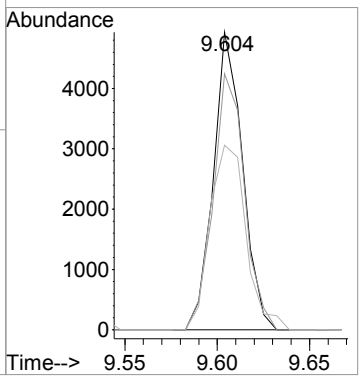


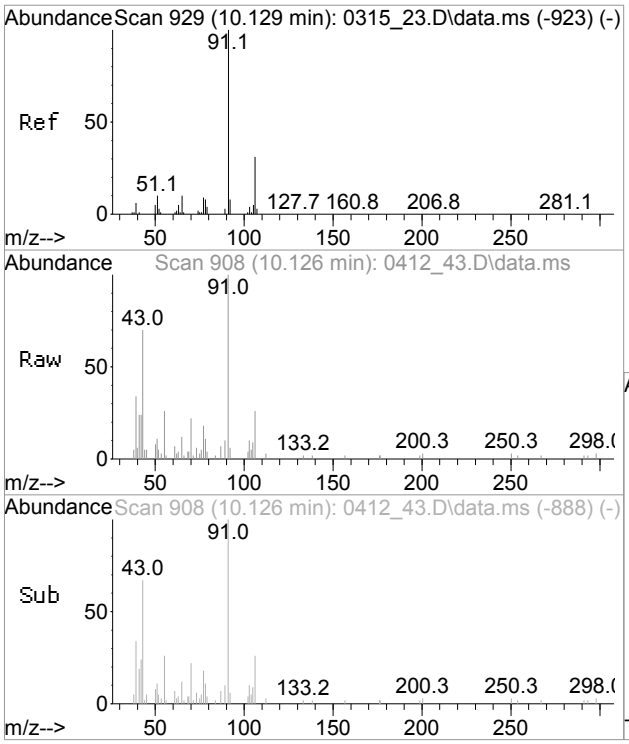


#52
Tetrachloroethene
Concen: 0.30 ppbv
RT: 9.604 min Scan# 838
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:166 Resp: 5433

Ion	Ratio	Lower	Upper
166	100		
164	92.2	62.2	93.4
129	77.1	56.6	84.8

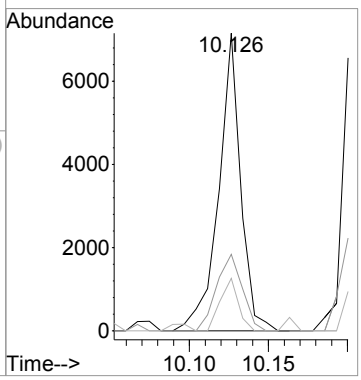


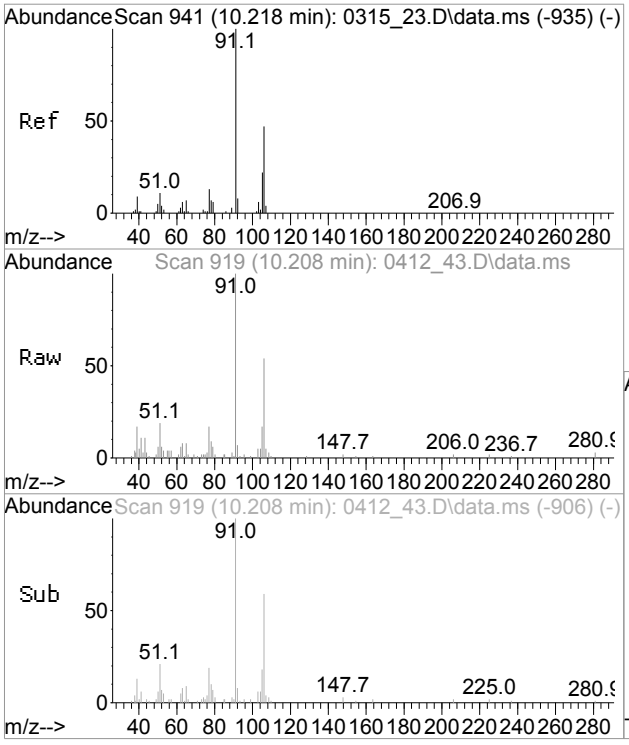


#56
Ethylbenzene
Concen: 0.27 ppbv
RT: 10.126 min Scan# 908
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 91 Resp: 6909

Ion	Ratio	Lower	Upper
91	100		
106	30.2	10.8	50.8
77	14.5	0.0	28.9

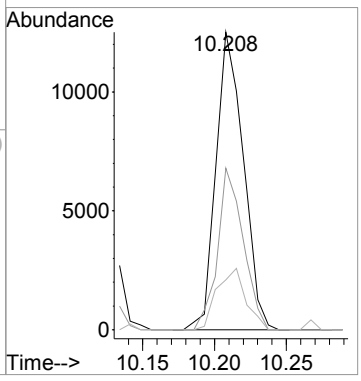


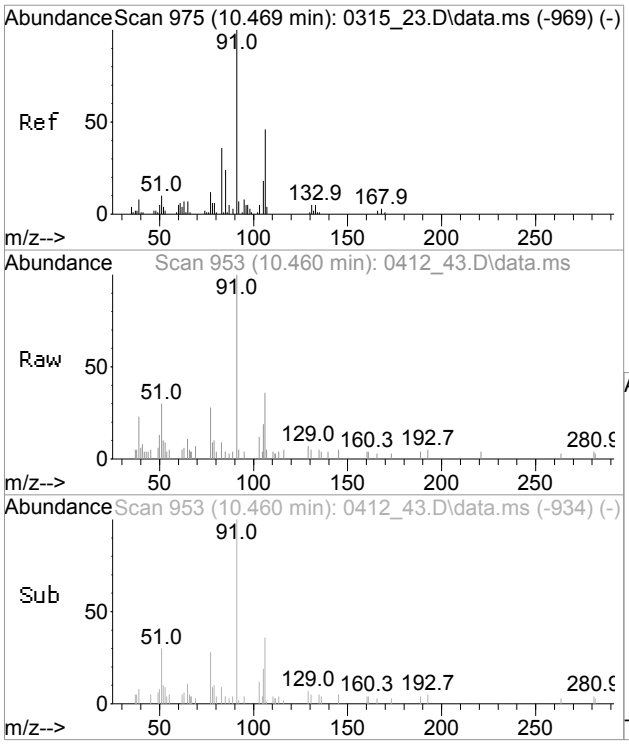


#57
m,p-Xylene
Concen: 0.79 ppbv
RT: 10.208 min Scan# 919
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 91 Resp: 16612

Ion	Ratio	Lower	Upper
91	100		
106	51.0	38.7	58.1
105	21.7	16.6	25.0

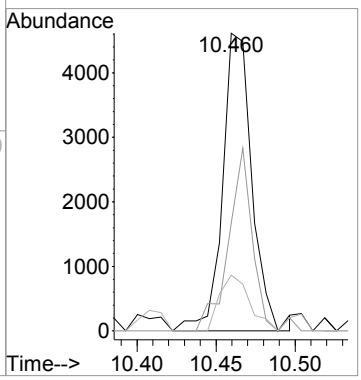


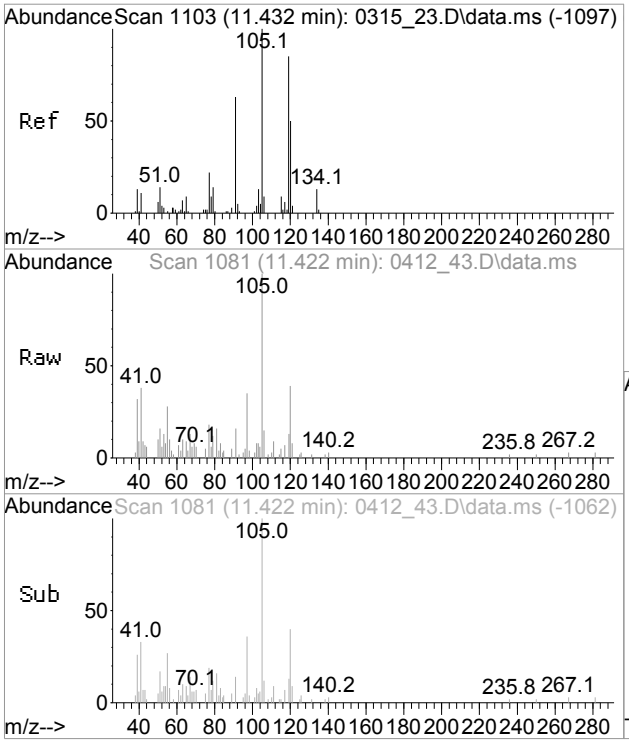


#61
o-Xylene
Concen: 0.28 ppbv
RT: 10.460 min Scan# 953
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 91 Resp: 5991

Ion	Ratio	Lower	Upper
91	100		
106	49.1	37.4	56.2
105	19.2	14.1	21.1

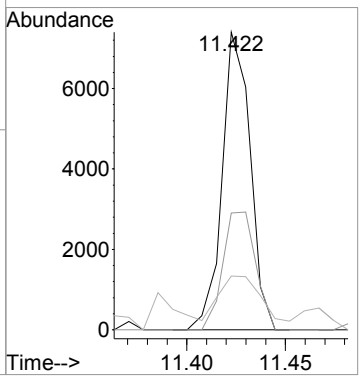


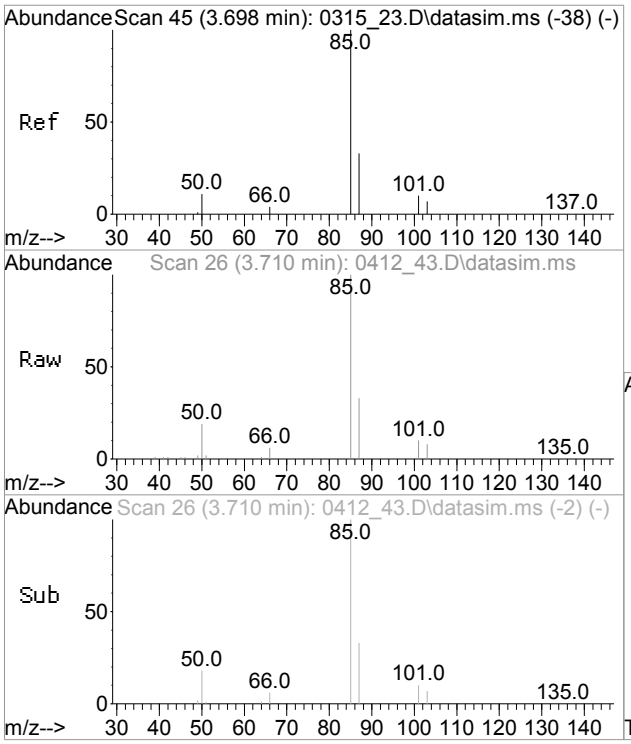


#68
1,2,4-Trimethylbenzene
Concen: 0.27 ppbv
RT: 11.422 min Scan# 1081
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:105 Resp: 7344

Ion	Ratio	Lower	Upper
105	100		
120	46.3	43.5	65.3
77	26.2	20.2	30.4

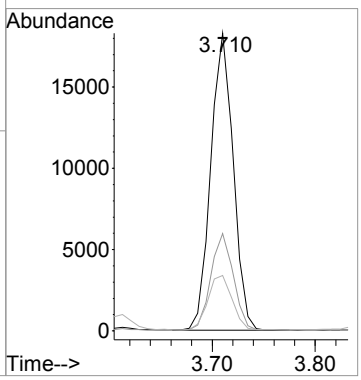


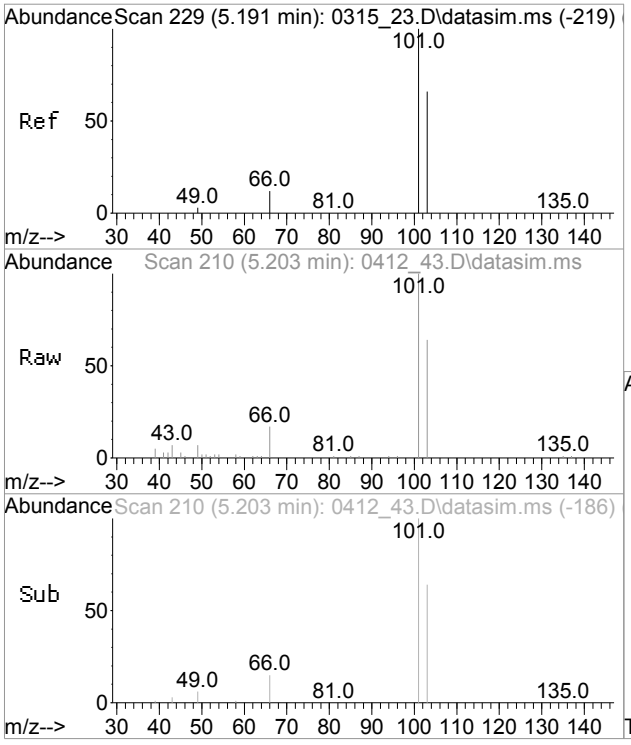


#81
Dichlorodifluoromethane(sim)
Concen: 0.53 ppbv
RT: 3.710 min Scan# 26
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 85 Resp: 27473

Ion	Ratio	Lower	Upper
85	100		
87	32.5	12.7	52.7
50	19.7	0.0	32.3

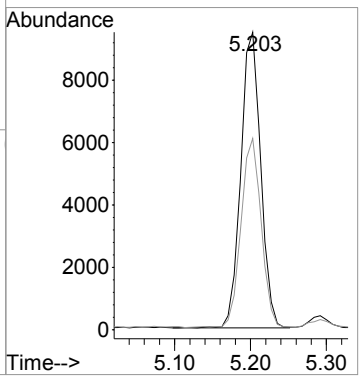


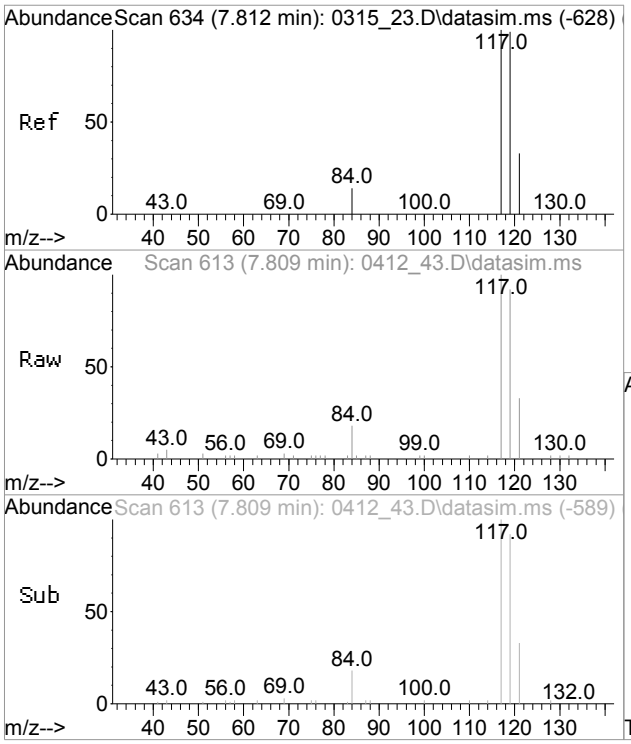


#85
Trichlorofluoromethane(sim)
Concen: 0.27 ppbv
RT: 5.203 min Scan# 210
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:101 Resp: 17250

Ion	Ratio	Lower	Upper
101	100		
103	64.5	52.0	78.0

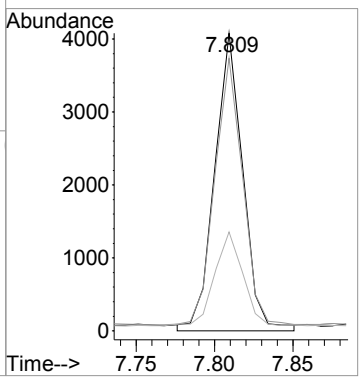


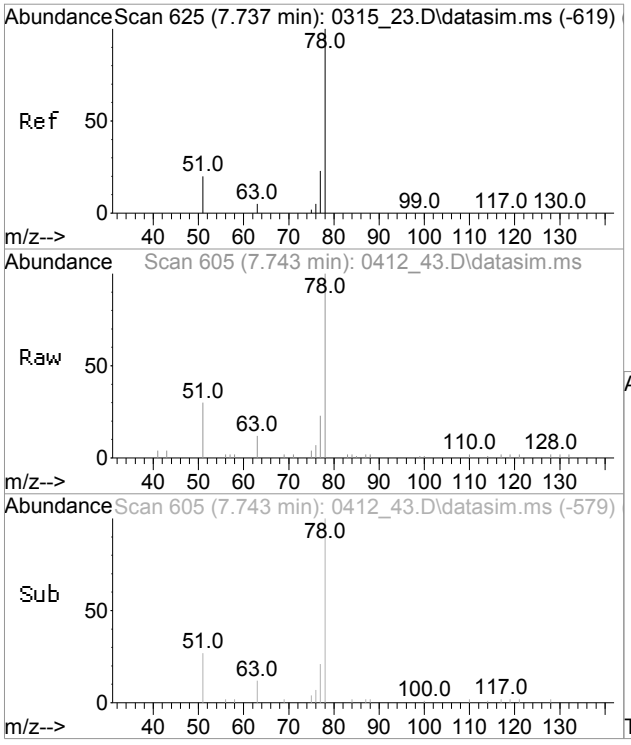


#88
Carbon Tetrachloride(sim)
Concen: 0.11 ppbv m
RT: 7.806 min Scan# 613
Delta R.T. -0.008 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:117 Resp: 3976

Ion	Ratio	Lower	Upper
117	100		
119	104.0	76.7	115.1
121	39.2	24.6	37.0#

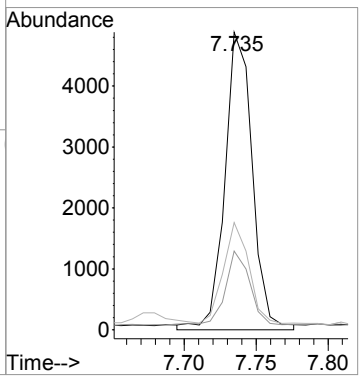


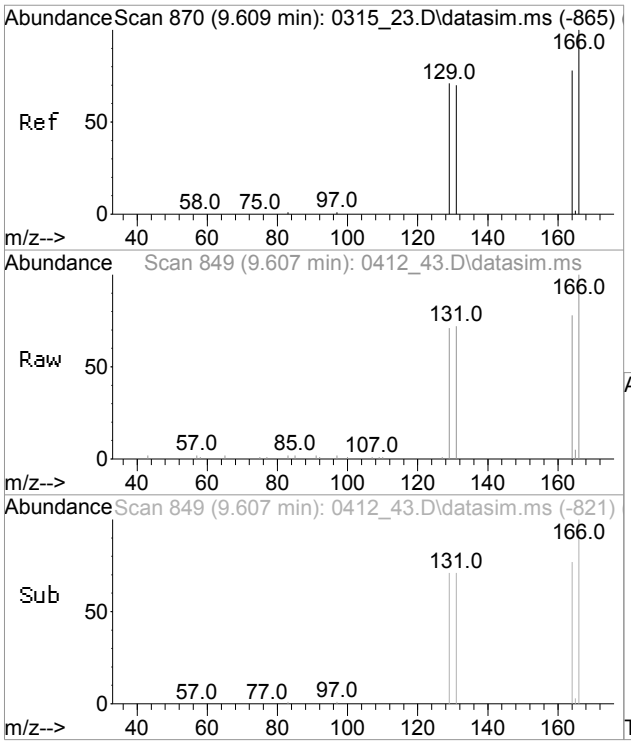


#96
Benzene(sim)
Concen: 0.31 ppbv
RT: 7.740 min Scan# 605
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 78 Resp: 7027

Ion	Ratio	Lower	Upper
78	100		
77	32.2	22.0	24.4#
51	29.1	14.9	22.3#

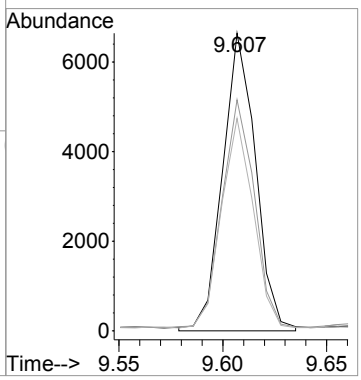


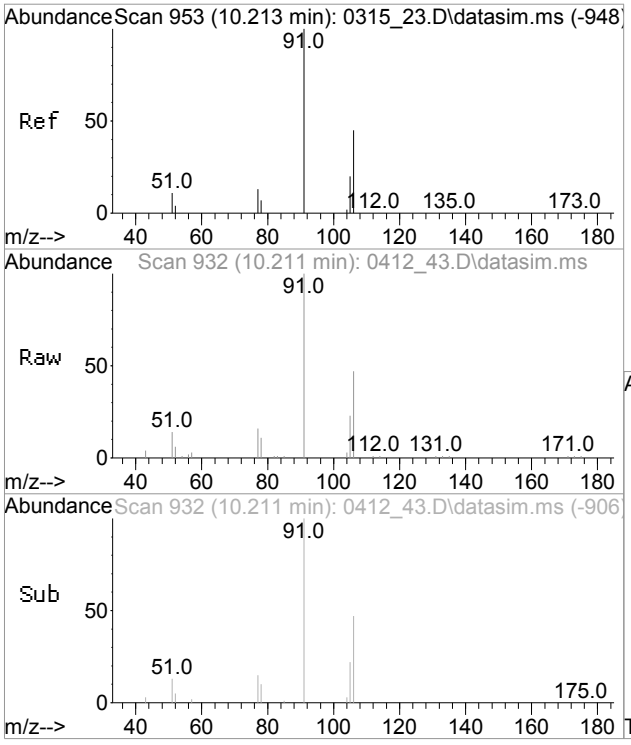


#106
Tetrachloroethene(sim)
Concen: 0.31 ppbv
RT: 9.604 min Scan# 849
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:166 Resp: 5327

Ion	Ratio	Lower	Upper
166	100		
164	92.2	57.8	97.8
129	78.6	50.7	90.7

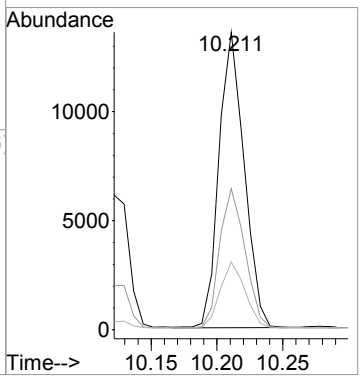


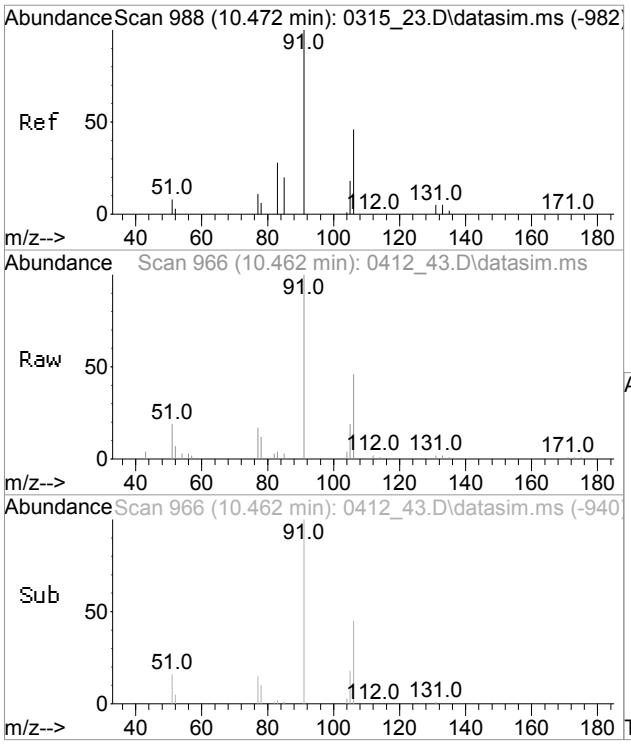


#111
m,p-Xylene(sim)
Concen: 0.75 ppbv
RT: 10.211 min Scan# 932
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 91 Resp: 18094

Ion	Ratio	Lower	Upper
91	100		
106	47.7	43.6	53.2
105	22.5	16.6	25.0

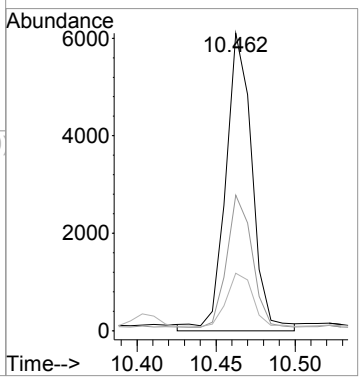


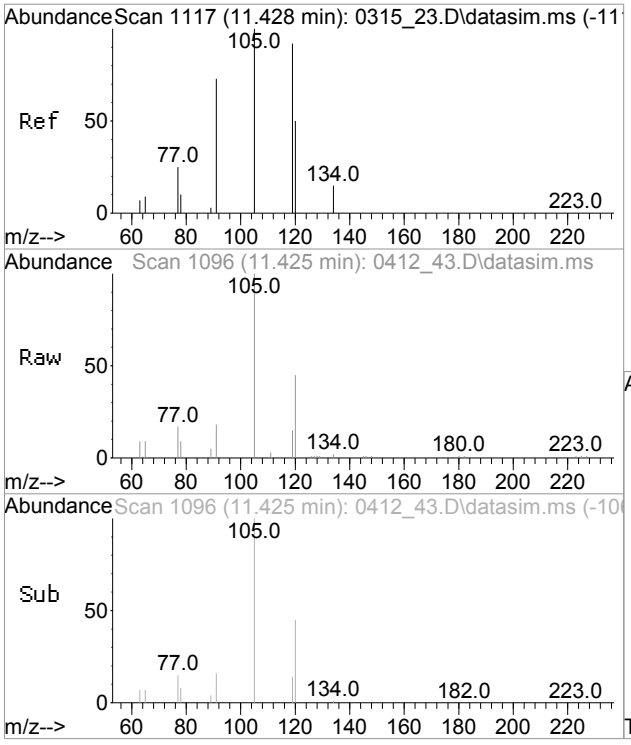


#114
o-Xylene(sim)
Concen: 0.28 ppbv
RT: 10.460 min Scan# 966
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion: 91 Resp: 5991

Ion	Ratio	Lower	Upper
91	100		
106	49.1	36.0	54.0
105	19.2	13.8	20.8

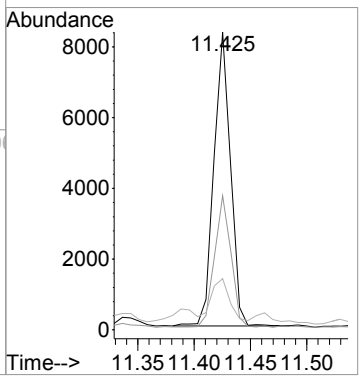


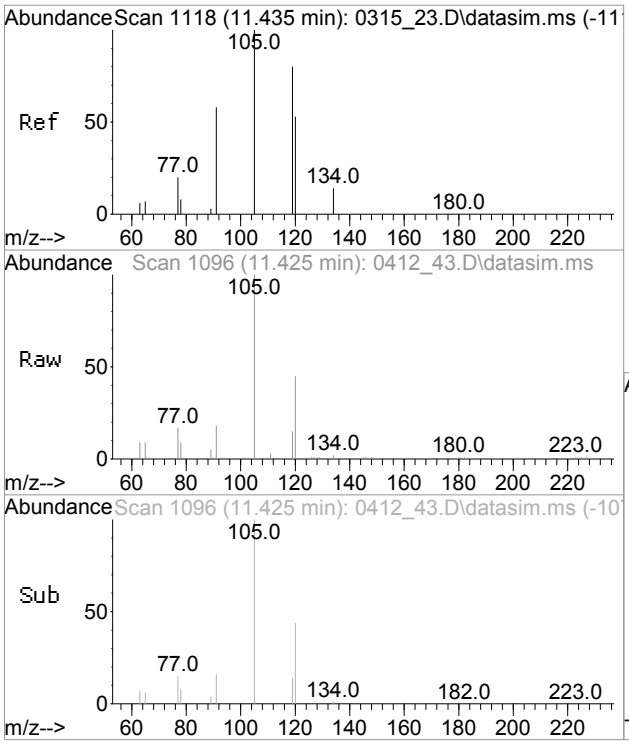


#119
1,2,4-Trimethylbenzene(sim)
Concen: 0.31 ppbv
RT: 11.425 min Scan# 1096
Delta R.T. 0.000 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:105 Resp: 8444

Ion	Ratio	Lower	Upper
105	100		
120	44.2	43.5	65.3
77	17.8	20.2	30.4#

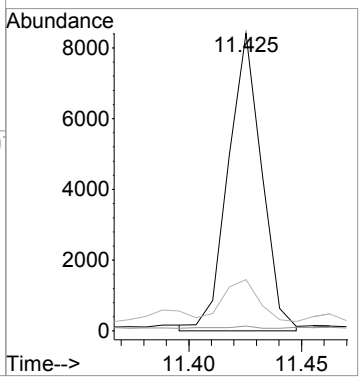




#124
sec-Butylbenzene(sim)
Concen: 0.30 ppbv
RT: 11.422 min Scan# 1096
Delta R.T. -0.007 min
Lab File: 0412_43.D
Acq: 13 Apr 2017 08:35 pm

Tgt Ion:105 Resp: 7344

Ion	Ratio	Lower	Upper
105	100		
134	1.3	0.0	35.9
77	21.6	0.0	34.1



AIR ANALYSIS DATA SHEET

CLIENT ID: BY04726 LCS

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726 LCS

Canister: LCS Lab File ID: 0417_04.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	8.90		0.581	0.581	r
75-71-8	Dichlorodifluoromethane	8.59		0.202	0.202	r
74-87-3	Chloromethane	8.98		0.485	0.485	r
76-14-2	1,2-Dichlorotetrafluoroethane	9.16		0.143	0.143	r
75-01-4	Vinyl Chloride	9.18		0.098	0.098	r
106-99-0	1,3-Butadiene	9.52		0.452	0.452	r
74-83-9	Bromomethane	8.68		0.258	0.258	r
75-00-3	Chloroethane	8.76		0.379	0.379	r
64-17-5	Ethanol	4.83		0.531	0.531	r
67-64-1	Acetone	7.84		0.421	0.421	r
75-69-4	Trichlorofluoromethane	8.52		0.178	0.178	r
67-63-0	Isopropylalcohol	8.48		0.407	0.407	r
107-13-1	Acrylonitrile	9.08		0.461	0.461	r
75-35-4	1,1-Dichloroethene	8.65		0.252	0.252	r
75-09-2	Methylene Chloride	7.47		0.288	0.288	r
75-15-0	Carbon Disulfide	8.98		0.321	0.321	r
76-13-1	Trichlorotrifluoroethane	8.40		0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene	9.30		0.252	0.252	r
75-34-3	1,1-Dichloroethane	9.01		0.247	0.247	r
1634-04-4	Methyl tert-butyl ether(MTBE)	9.48		0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	9.08		0.339	0.339	r
156-59-2	Cis-1,2-Dichloroethene	8.65		0.252	0.252	r
110-54-3	Hexane	9.13		0.284	0.284	r
67-66-3	Chloroform	8.52		0.205	0.205	r
141-78-6	Ethyl acetate	10.8		0.278	0.278	r
109-99-9	Tetrahydrofuran	9.90		0.339	0.339	r
107-06-2	1,2-Dichloroethane	8.84		0.247	0.247	r
71-55-6	1,1,1-Trichloroethane	8.41		0.183	0.183	r
71-43-2	Benzene	8.83		0.313	0.313	r
56-23-5	Carbon Tetrachloride	8.58		0.040	0.040	r
110-82-7	Cyclohexane	9.57		0.291	0.291	r
78-87-5	1,2-dichloropropane	9.53		0.217	0.217	r
75-27-4	Bromodichloromethane	8.65		0.149	0.149	r
79-01-6	Trichloroethene	9.03		0.047	0.047	r
123-91-1	1,4-Dioxane	9.19		0.278	0.278	r
142-82-5	Heptane	9.57		0.244	0.244	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

CLIENT ID

AIR ANALYSIS DATA SHEET

BY04726 LCS

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726 LCS

Canister: LCS Lab File ID: 0417_04.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
10061-01-5	cis-1,3-Dichloropropene	9.61		0.220	0.220	r
108-10-1	4-Methyl-2-pentanone(MIBK)	9.70		0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	9.08		0.220	0.220	r
79-00-5	1,1,2-Trichloroethane	9.29		0.183	0.183	r
108-88-3	Toluene	9.65		0.266	0.266	r
124-48-1	Dibromochloromethane	9.09		0.117	0.117	r
591-78-6	2-Hexanone(MBK)	9.54		0.244	0.244	r
106-93-4	1,2-Dibromoethane(EDB)	8.95		0.130	0.130	r
127-18-4	Tetrachloroethene	9.05		0.037	0.037	r
630-20-6	1,1,1,2-Tetrachloroethane	9.78		0.146	0.146	r
108-90-7	Chlorobenzene	9.09		0.217	0.217	r
100-41-4	Ethylbenzene	9.45		0.230	0.230	r
179601-23-1	m,p-Xylene	19.2		0.230	0.230	r
75-25-2	Bromoform	8.77		0.097	0.097	r
100-42-5	Styrene	10.2		0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane	8.99		0.146	0.146	r
95-47-6	o-Xylene	9.64		0.230	0.230	r
98-82-8	Isopropylbenzene	9.71		0.204	0.204	r
622-96-8	4-Ethyltoluene	9.42		0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	8.82		0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	8.99		0.204	0.204	r
100-44-7	Benzyl chloride	9.09		0.193	0.193	r
541-73-1	1,3-Dichlorobenzene	8.54		0.166	0.166	r
106-46-7	1,4-Dichlorobenzene	8.74		0.166	0.166	r
135-98-8	sec-Butylbenzene	8.53		0.182	0.182	r
99-87-6	4-Isopropyltoluene	8.69		0.182	0.182	r
95-50-1	1,2-Dichlorobenzene	8.79		0.166	0.166	r
104-51-8	n-Butylbenzene	9.41		0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene	10.6		0.135	0.135	r
87-68-3	Hexachlorobutadiene	9.03		0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_04.D
Acq On : 17 Apr 2017 11:08 am
Operator : Keith
Client ID : BY04726 LCS
Lab ID : BY04726 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 15:03:19 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.958	130	112224	10.000	ng		0.01
36) 1,4-Difluorobenzene	5.948	114	383897	10.000	ng		0.01
53) Chlorobenzene-d5	9.222	82	214466	10.000	ng		0.00
80) Bromochloromethane(sim)	3.958	130	112224	10.000	ng		0.01
93) 1,4-Difluorobenzene(sim)	5.951	114	415606	10.000	ng	#	0.01
103) Chlorobenzene-d5(sim)	9.218	82	228277	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.132	95	277597	9.849	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.50%				
Target Compounds							Qvalue
2) Propylene	1.520	41	54802	8.899	ppbv		94
3) Dichlorodifluoromethane	1.545	85	376259	8.592	ppbv		99
4) Chloromethane	1.613	52	25884	8.980	ppbv#		81
5) 1,2-Dichlorotetrafluor...	1.656	85	326844	9.162	ppbv		93
6) Vinyl Chloride	1.698	62	99605	9.175	ppbv		100
7) 1,3-Butadiene	1.749	54	63714	9.518	ppbv		97
8) Bromomethane	1.859	94	120078	8.676	ppbv#		98
9) Chloroethane	1.927	64	42320	8.764	ppbv		94
10) Ethanol	2.003	45	20139	4.831	ppbv		96
12) Acetone	2.189	43	151026	7.838	ppbv		100
13) Trichlorofluoromethane	2.240	101	407542	8.515	ppbv		99
14) Isopropylalcohol	2.316	45	145110	8.475	ppbv		94
15) Acrylonitrile	2.384	53	55072	9.079	ppbv		94
16) 1,1-Dichloroethene	2.528	61	182980	8.651	ppbv		93
17) Methylene Chloride	2.587	49	107269	7.474	ppbv#		84
20) Carbon Disulfide	2.732	76	279055	8.982	ppbv		100
21) Trichlorotrifluoroethane	2.732	101	254126	8.395	ppbv		88
22) Trans-1,2-Dichloroethene	3.104	61	159909	9.302	ppbv		91
23) 1,1-Dichloroethane	3.231	63	196487	9.013	ppbv		99
24) Methyl tert-butyl ethe...	3.305	73	289141	9.476	ppbv		94
25) Methyl Ethyl Ketone	3.525	43	164831	9.079	ppbv		94
26) Cis-1,2-Dichloroethene	3.831	61	146302	8.654	ppbv		90
27) Hexane	4.031	57	116411	9.130	ppbv		97
28) Chloroform	4.085	83	275405	8.519	ppbv		97
29) Ethyl acetate	4.078	43	221237	10.756	ppbv		98
30) Tetrahydrofuran	4.451	42	78746	9.897	ppbv#		83
31) 1,2-Dichloroethane	4.782	62	215619	8.839	ppbv#		91
32) 1,1,1-Trichloroethane	5.056	97	305578	8.405	ppbv		99
33) Benzene	5.533	78	293956	8.830	ppbv		98
34) Carbon Tetrachloride	5.674	117	352599	8.582	ppbv		100
35) Cyclohexane	5.793	56	123654	9.570	ppbv		96
37) 1,2-dichloropropane	6.320	63	83929	9.526	ppbv#		92
38) Bromodichloromethane	6.487	83	311346	8.651	ppbv		96
39) Trichloroethene	6.533	130	159304	9.034	ppbv#		88
41) 1,4-Dioxane	6.567	88	70470	9.187	ppbv		99
43) Heptane	6.853	71	89423	9.574	ppbv		95
44) cis-1,3-Dichloropropene	7.260	75	210710	9.612	ppbv		94
45) 4-Methyl-2-pentanone(M...	7.347	43	220462	9.700	ppbv		99
46) trans-1,3-Dichloropropene	7.675	75	212115	9.077	ppbv		95
47) 1,1,2-Trichloroethane	7.778	97	152810	9.285	ppbv		98
48) Toluene	7.977	91	399929	9.654	ppbv		97
49) Dibromochloromethane	8.265	129	348131	9.094	ppbv		98

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_04.D
Acq On : 17 Apr 2017 11:08 am
Operator : Keith
Client ID : BY04726 LCS
Lab ID : BY04726 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 15:03:19 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50)	2-Hexanone(MBK)	8.244	43	208678	9.544	ppbv#	89
51)	1,2-Dibromoethane(EDB)	8.430	107	272388	8.946	ppbv	96
52)	Tetrachloroethene	8.779	166	223699	9.052	ppbv#	90
54)	1,1,1,2-Tetrachloroethane	9.245	131	210880	9.782	ppbv	99
55)	Chlorobenzene	9.253	112	329206	9.088	ppbv	94
56)	Ethylbenzene	9.510	91	527481	9.447	ppbv	97
57)	m,p-Xylene	9.624	91	928820	19.202	ppbv	92
58)	Bromoform	9.632	173	330045	8.772	ppbv	99
59)	Styrene	9.829	104	307555	10.169	ppbv	94
60)	1,1,2,2-Tetrachloroethane	9.882	83	319995	8.993	ppbv	98
61)	o-Xylene	9.890	91	443480	9.638	ppbv	93
64)	Isopropylbenzene	10.208	105	578526	9.706	ppbv	97
66)	4-Ethyltoluene	10.551	105	607458	9.417	ppbv	96
67)	1,3,5-Trimethylbenzene	10.589	105	501595	8.823	ppbv	93
68)	1,2,4-Trimethylbenzene	10.789	105	508119	8.988	ppbv	91
70)	Benzyl chloride	10.848	91	407907	9.092	ppbv#	92
71)	1,3-Dichlorobenzene	10.854	146	324157	8.538	ppbv#	95
72)	1,4-Dichlorobenzene	10.892	146	316054	8.736	ppbv#	95
73)	sec-Butylbenzene	10.924	105	651571	8.529	ppbv	94
74)	4-Isopropyltoluene	11.005	119	616308	8.685	ppbv#	91
75)	1,2-Dichlorobenzene	11.054	146	321057	8.792	ppbv#	95
76)	n-Butylbenzene	11.205	91	578645	9.410	ppbv	93
77)	1,2,4-Trichlorobenzene	11.894	180	212425	10.573	ppbv#	97
79)	Hexachlorobutadiene	12.123	225	310826	9.028	ppbv	100
81]	1,2-Dichlorotetrafluor...	1.658	85	352717	10.265	ppbv	91
82]	Vinyl Chloride(sim)	1.698	62	99605	10.737	ppbv	100
83]	Bromomethane(sim)	1.853	94	129249	9.049	ug/l	99
84]	Trichlorofluoromethane...	2.240	101	407542	8.359	ppbv	99
85]	Trans-1,2-Dichloroethe...	3.101	61	172306	9.943	ppbv	94
86]	1,1-Dichloroethene(sim)	2.528	61	182980	9.348	ppbv	93
87]	1,1-Dichloroethane(sim)	3.234	63	209809	9.850	ppbv	100
88]	Cis-1,2-Dichloroethene...	3.831	61	146302	10.132	ppbv	90
89]	1,2-Dichloroethane(sim)	4.785	62	214351	9.321	ppbv#	95
90]	1,1,1-Trichloroethane(...	5.056	97	305578	9.515	ppbv#	99
91]	Carbon Tetrachloride(sim)	5.677	117	370328	9.468	ppbv	100
92]	Trichlorotrifluoroetha...	2.732	101	254126	8.701	ppbv	99
94]	1,2-dichloropropane(sim)	6.320	63	83929	10.975	ppbv#	92
95]	Bromodichloromethane(sim)	6.489	83	335316	10.478	ppbv	96
96]	Trichloroethene(sim)	6.533	130	159304	10.947	ppbv#	90
97]	1,4-Dioxane(sim)	6.570	88	75653	9.939	ppbv	100
98]	cis-1,3-Dichloropropen...	7.260	75	210710	11.542	ppbv	94
99]	1,1,2-Trichloroethane(...	7.781	97	167604	9.984	ppbv	99
100]	Dibromochloromethane(sim)	8.265	129	348131	10.386	ppbv	99
101]	1,2-Dibromoethane(EDB)...	8.433	107	296310	10.379	ppbv	96
102]	Tetrachloroethene(sim)	8.779	166	223699	11.340	ppbv	90
104]	Bromoform(sim)	9.632	173	330045	10.068	ppbv	100
105]	1,1,1,2-Tetrachloroeth...	9.248	131	231020	10.098	ppbv	100
106]	m,p-Xylene(sim)	9.624	91	928908	20.103	ppbv#	92
107]	1,1,2,2-Tetrachloroeth...	9.885	83	347075	8.587	ppbv	96
110]	Benzyl chloride(sim)	10.848	91	408415	10.125	ppbv	92
111]	1,3-Dichlorobenzene(sim)	10.857	146	365479	8.792	ppbv#	96
112]	1,4-Dichlorobenzene(sim)	10.892	146	316086	9.159	ppbv	95
113]	sec-Butylbenzene(sim)	10.922	105	689992	8.777	ppbv	93
114]	4-Isopropyltoluene(sim)	11.005	119	616308	9.390	ppbv#	91
115]	1,2-Dichlorobenzene(sim)	11.057	146	360029	8.401	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_04.D
Acq On : 17 Apr 2017 11:08 am
Operator : Keith
Client ID : BY04726 LCS
Lab ID : BY04726 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 15:03:19 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

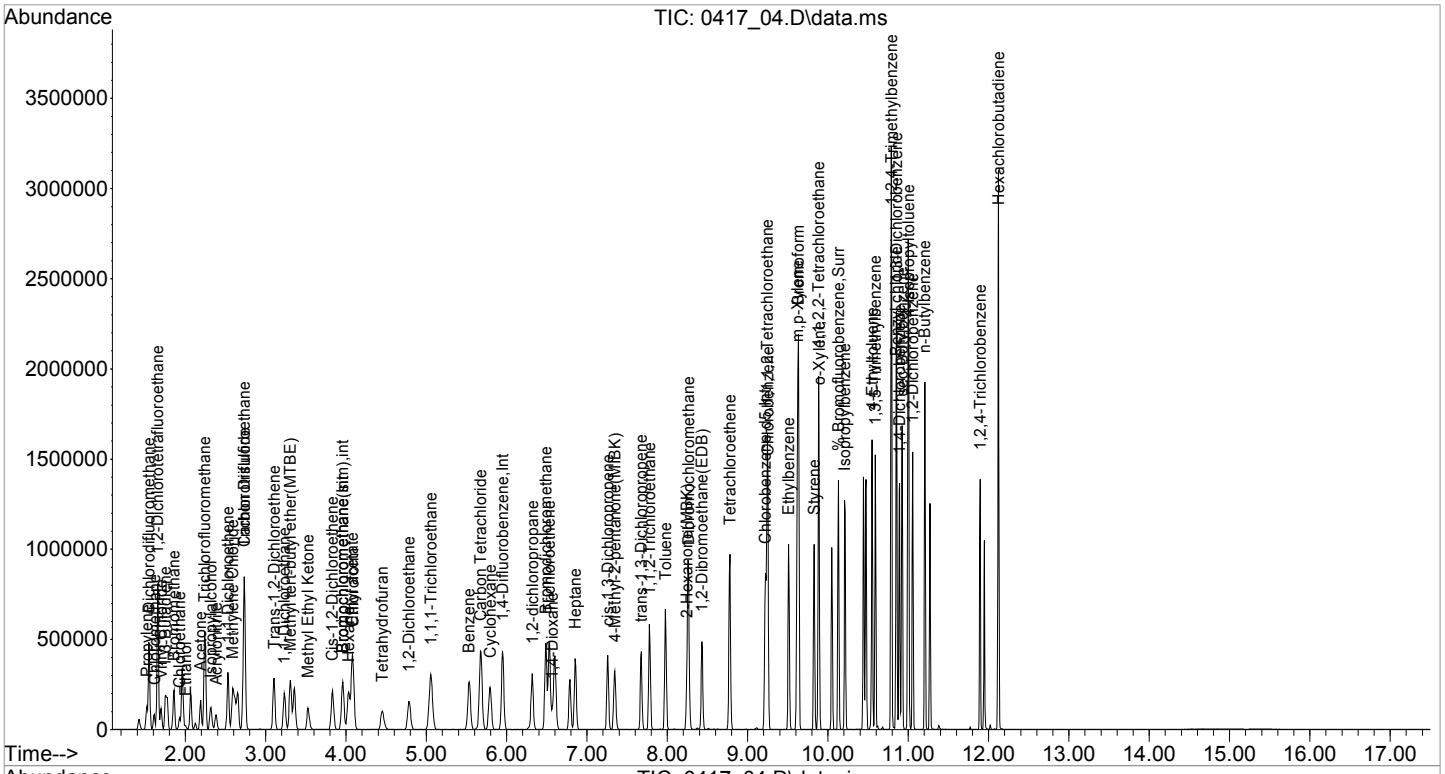
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116] n-Butylbenzene(sim)	11.205	91	578645	10.332	ppbv	93
117] 1,2,4-Trichlorobenzene...	11.892	180	242170	13.509	ppbv	95
119] Hexachlorobutadiene(sim)	12.121	225	335177	8.450	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_04.D
Acq On : 17 Apr 2017 11:08 am
Operator : Keith
Client ID : BY04726 LCS
Lab ID : BY04726 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 15:03:19 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration



AIR ANALYSIS DATA SHEET

CLIENT ID: BY04726 QC

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726

Canister: 19930 Lab File ID: 0417_21.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.360		0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	10.0	S	0.531	0.531	r
67-64-1	Acetone	11.0	S	0.421	0.421	r
67-63-0	Isopropylalcohol	6.10	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
75-15-0	Carbon Disulfide	0.670		0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	3.70		0.339	0.339	r
110-54-3	Hexane	1.20	S	0.284	0.284	r
67-66-3	Chloroform	0.205	U	0.205	0.205	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	2.00		0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.340		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	1.60		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	0.510		0.037	0.037	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	0.710		0.230	0.230	r
179601-23-1	m,p-Xylene	1.90		0.230	0.230	r
100-42-5	Styrene	0.250		0.235	0.235	r
95-47-6	o-Xylene	0.740		0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.420		0.204	0.204	r
541-73-1	1,3-Dichlorobenzene	0.210		0.166	0.166	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

CLIENT ID

AIR ANALYSIS DATA SHEET

BY04726 QC

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726

Canister: 19930 Lab File ID: 0417_21.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.190		0.178	0.178	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.077		0.040	0.040	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.070		0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
630-20-6	1,1,1,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
135-98-8	sec-Butylbenzene(sim)	0.182	U	0.182	0.182	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_21.D
Acq On : 17 Apr 2017 8:26 pm
Operator : Keith
Client ID : BY04726 QC
Lab ID : BY04726
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 18 09:03:27 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

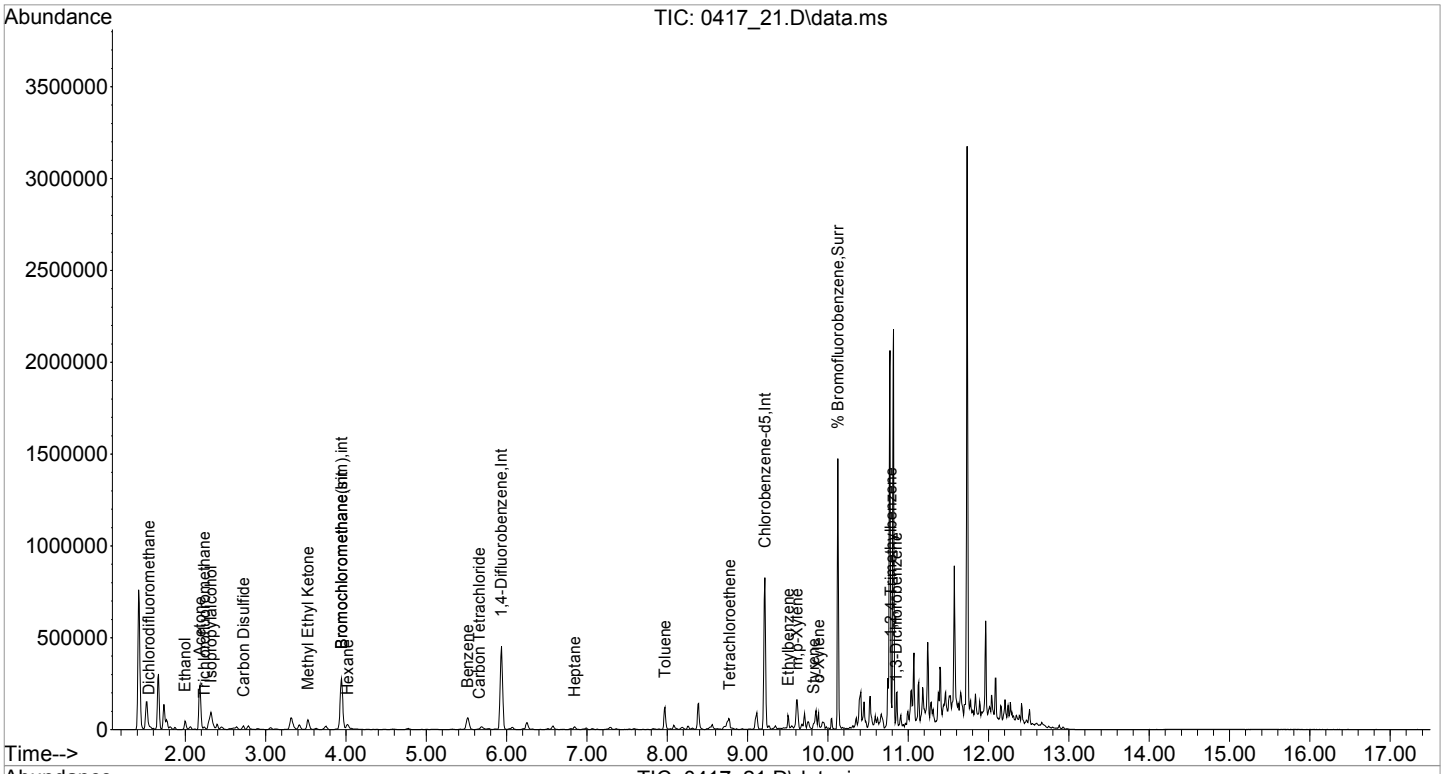
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	117626	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	396939	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	203638	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	117626	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	431018	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	211336	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	283501	10.593	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.90%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.545	85	16371	0.357	ppbv		99
10) Ethanol	1.994	45	44552	10.196	ppbv		96
12) Acetone	2.181	43	230162	11.396	ppbv		92
13) Trichlorofluoromethane	2.232	101	9536	0.190	ppbv		95
14) Isopropylalcohol	2.316	45	109288	6.090	ppbv		94
20) Carbon Disulfide	2.723	76	21898	0.672	ppbv		94
25) Methyl Ethyl Ketone	3.525	43	70885	3.725	ppbv		94
27) Hexane	4.018	57	15379	1.151	ppbv		92
33) Benzene	5.512	78	70768	2.028	ppbv		97
34) Carbon Tetrachloride	5.660	117	2876	0.067	ppbv		96
39) Trichloroethene	6.513	130	835	0.046	ppbv#		79
43) Heptane	6.847	71	3260	0.338	ppbv#		93
48) Toluene	7.970	91	70058	1.636	ppbv		96
52) Tetrachloroethene	8.773	166	12967	0.507	ppbv#		91
56) Ethylbenzene	9.503	91	37876	0.714	ppbv		95
57) m,p-Xylene	9.617	91	89486	1.948	ppbv		96
59) Styrene	9.821	104	7242	0.252	ppbv#		83
61) o-Xylene	9.882	91	32348	0.740	ppbv		92
68) 1,2,4-Trimethylbenzene	10.784	105	22488	0.419	ppbv#		1
71) 1,3-Dichlorobenzene	10.848	146	7543	0.209	ppbv#		93
102] Tetrachloroethene(sim)	8.773	166	12967	0.634	ppbv		91
106] m,p-Xylene(sim)	9.617	91	89486	2.092	ppbv		96

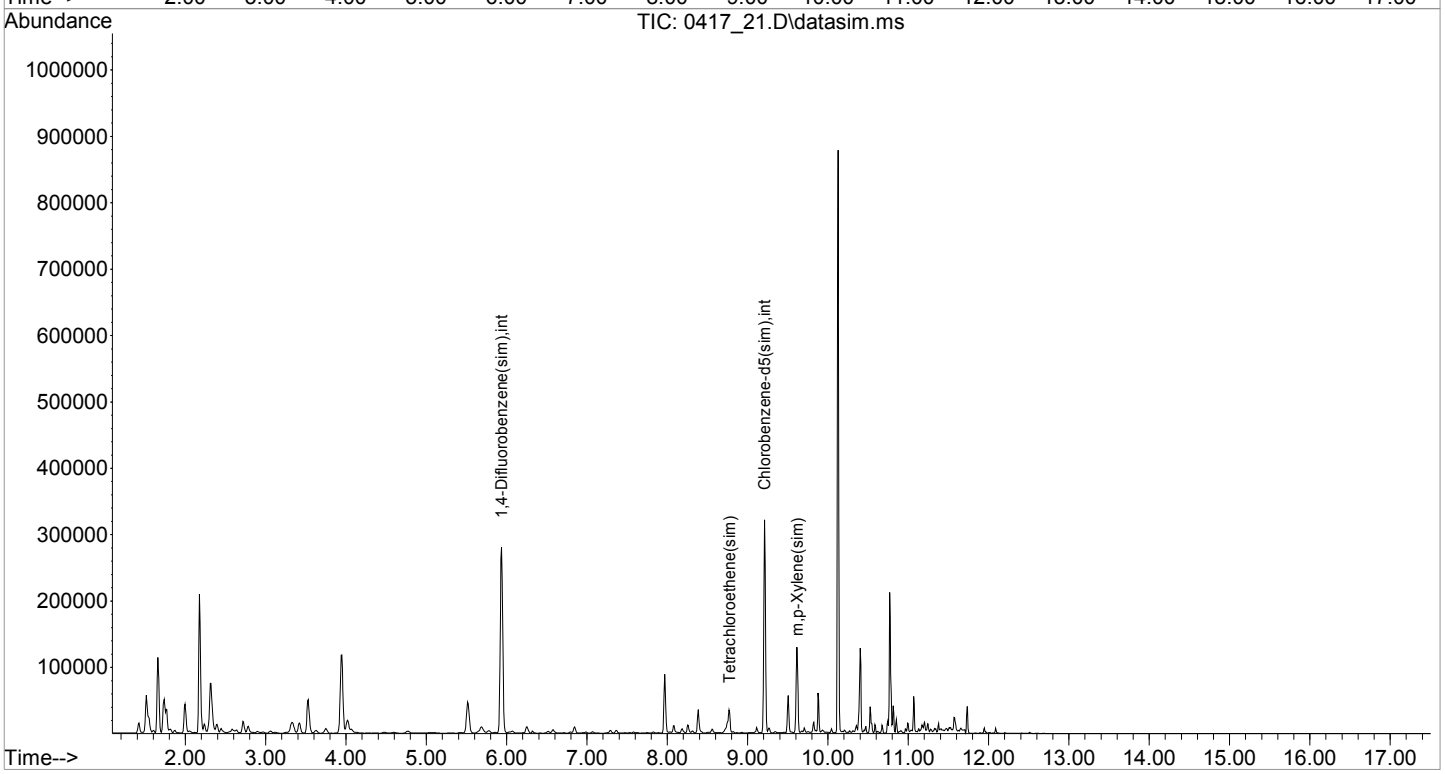
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

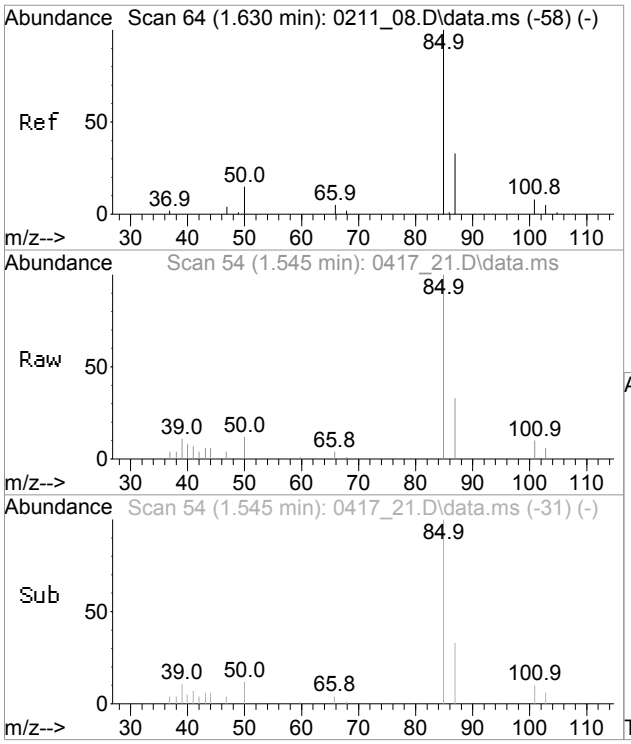
Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_21.D
Acq On : 17 Apr 2017 8:26 pm
Operator : Keith
Client ID : BY04726 QC
Lab ID : BY04726
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 18 09:03:27 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration



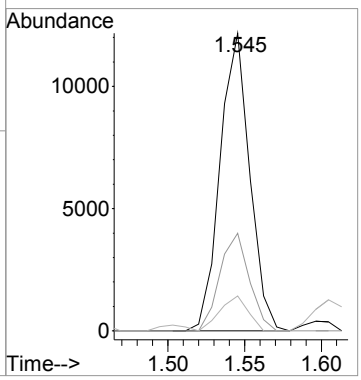


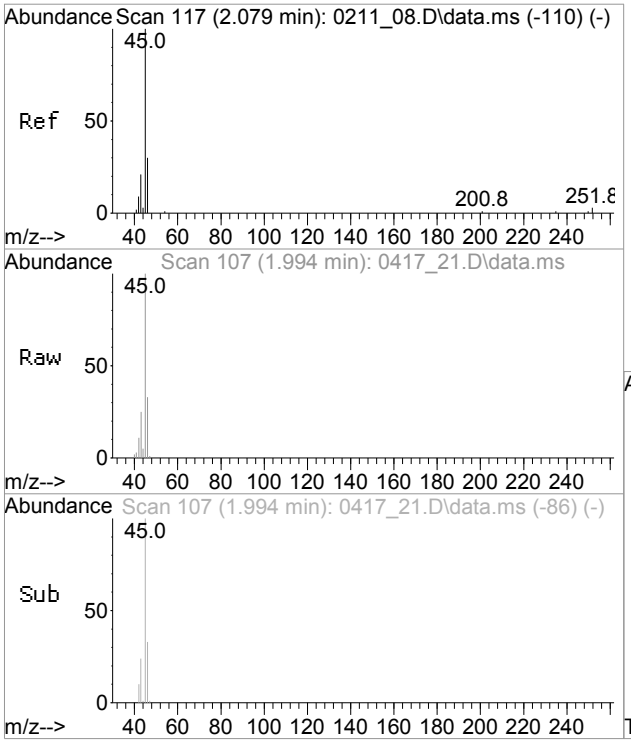


#3
Dichlorodifluoromethane
Concen: 0.36 ppbv
RT: 1.545 min Scan# 54
Delta R.T. -0.008 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 85 Resp: 16371

Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.1	39.1
50	11.1	10.0	15.0

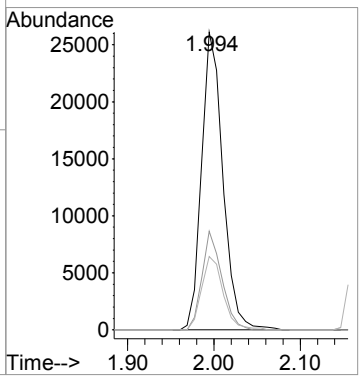


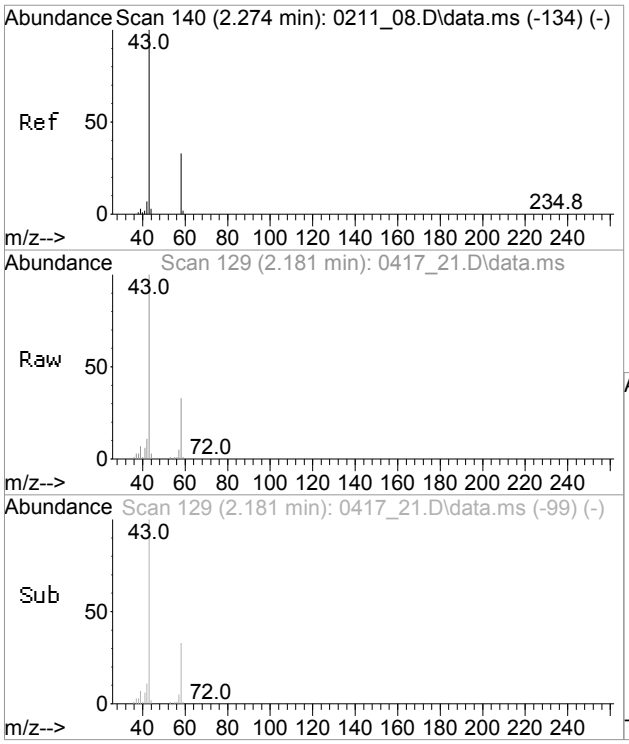


#10
Ethanol
Concen: 10.20 ppbv
RT: 1.994 min Scan# 107
Delta R.T. -0.025 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 45 Resp: 44552

Ion	Ratio	Lower	Upper
45	100		
46	30.7	25.7	38.5
43	24.9	17.7	26.5

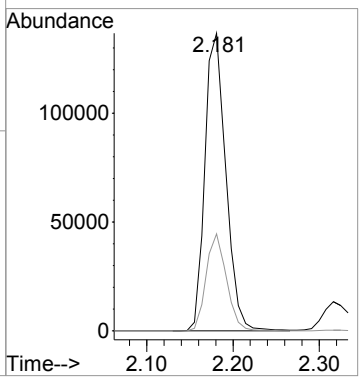


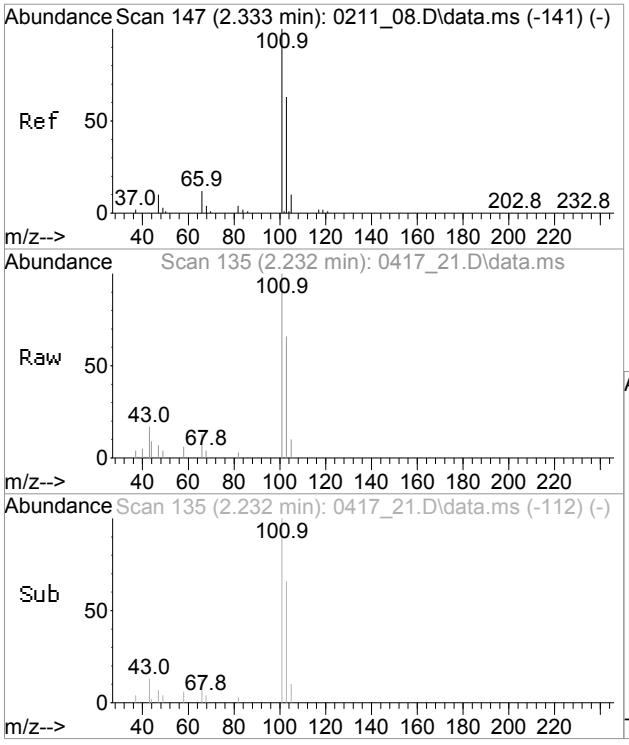


#12
Acetone
Concen: 11.40 ppbv
RT: 2.181 min Scan# 129
Delta R.T. -0.042 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 43 Resp: 230162

Ion	Ratio	Lower	Upper
43	100		
58	31.6	21.8	32.8

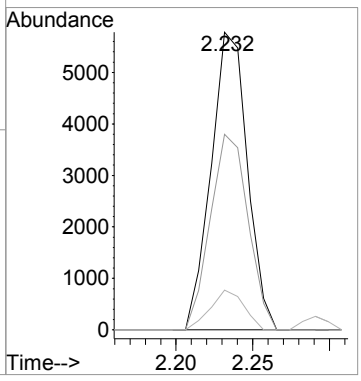


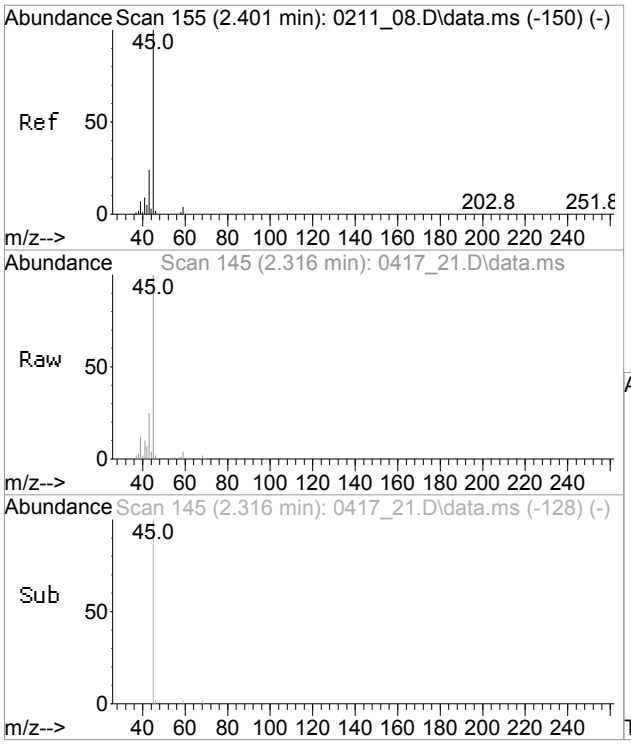


#13
Trichlorofluoromethane
Concen: 0.19 ppbv
RT: 2.232 min Scan# 135
Delta R.T. -0.008 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:101 Resp: 9536

Ion	Ratio	Lower	Upper
101	100		
103	68.3	51.5	77.3
66	12.4	8.7	13.1

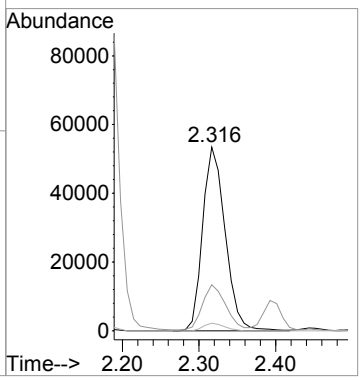


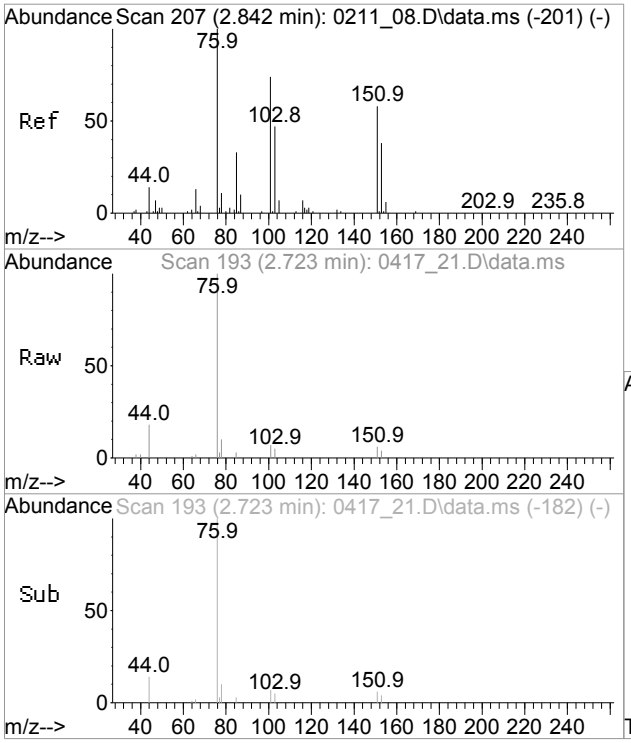


#14
Isopropylalcohol
Concen: 6.09 ppbv
RT: 2.316 min Scan# 145
Delta R.T. -0.059 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 45 Resp: 109288

Ion	Ratio	Lower	Upper
45	100		
43	25.0	17.3	25.9
59	3.9	3.0	4.6

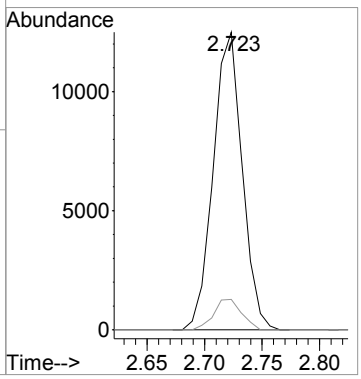


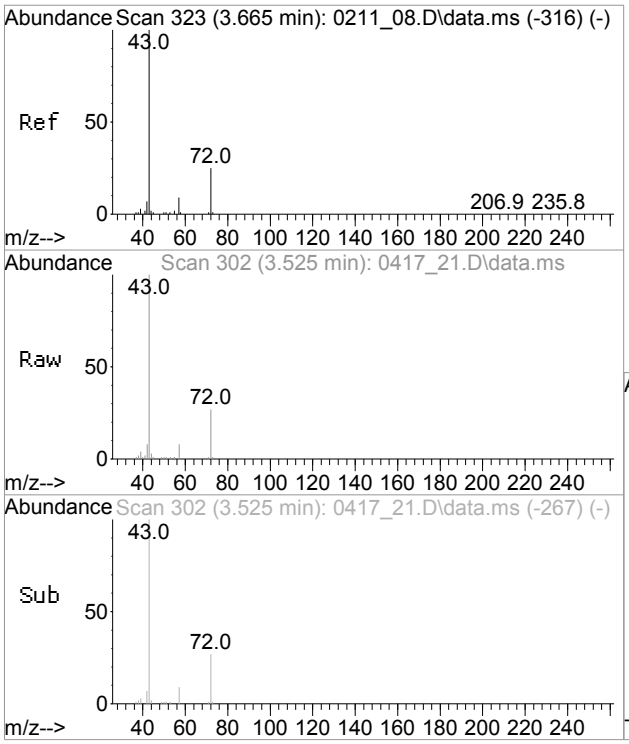


#20
Carbon Disulfide
Concen: 0.67 ppbv
RT: 2.723 min Scan# 193
Delta R.T. -0.008 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 76 Resp: 21898

Ion	Ratio	Lower	Upper
76	100		
78	9.9	9.7	14.5

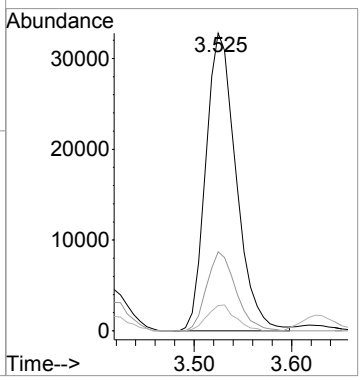


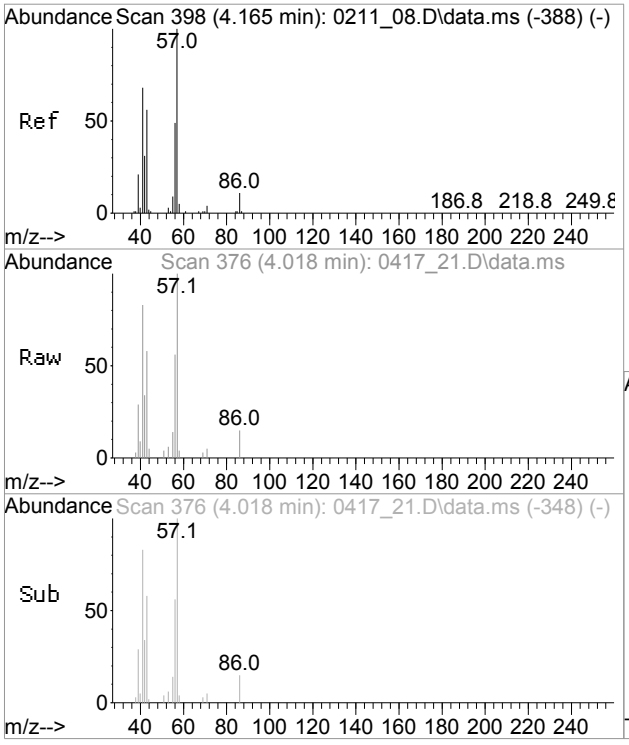


#25
Methyl Ethyl Ketone
Concen: 3.73 ppbv
RT: 3.525 min Scan# 302
Delta R.T. -0.067 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 43 Resp: 70885

Ion	Ratio	Lower	Upper
43	100		
72	25.5	17.7	26.5
57	8.1	5.9	8.9

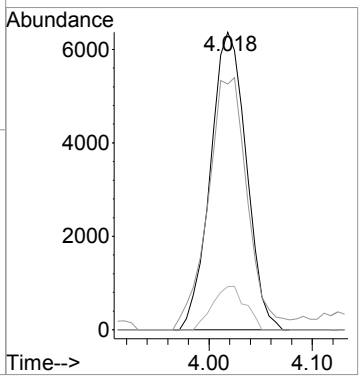


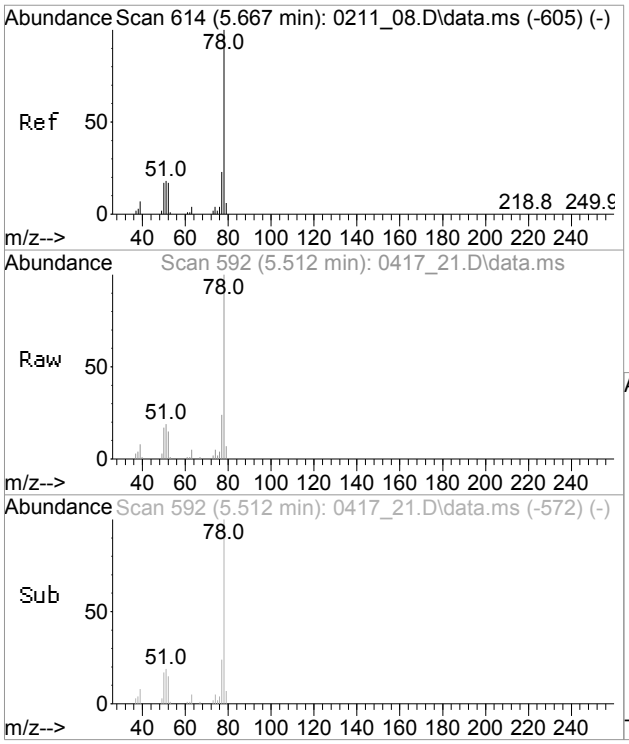


#27
Hexane
Concen: 1.15 ppbv
RT: 4.018 min Scan# 376
Delta R.T. -0.013 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 57 Resp: 15379

Ion	Ratio	Lower	Upper
57	100		
41	93.0	67.6	101.4
86	13.4	11.8	17.6

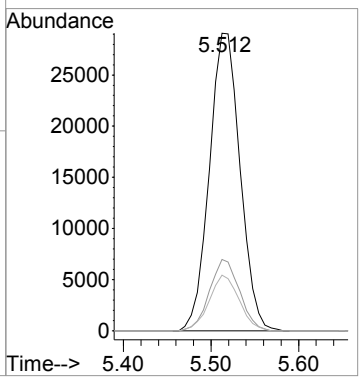


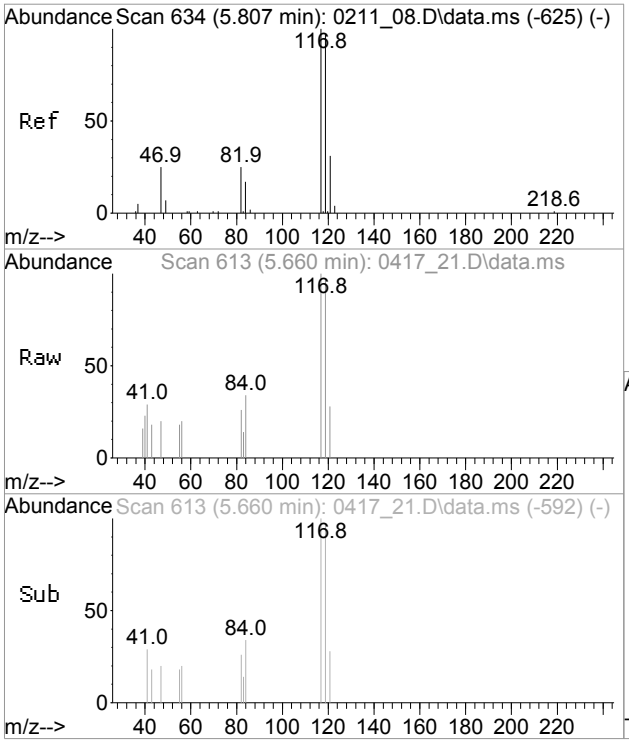


#33
Benzene
Concen: 2.03 ppbv
RT: 5.512 min Scan# 592
Delta R.T. -0.007 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 78 Resp: 70768

Ion	Ratio	Lower	Upper
78	100		
77	23.5	17.9	26.9
51	18.3	13.6	20.4

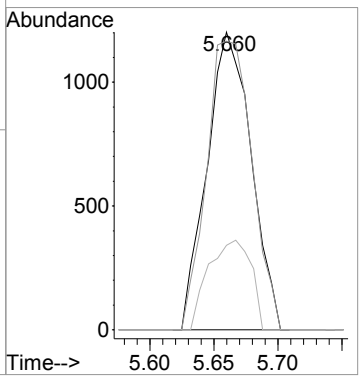


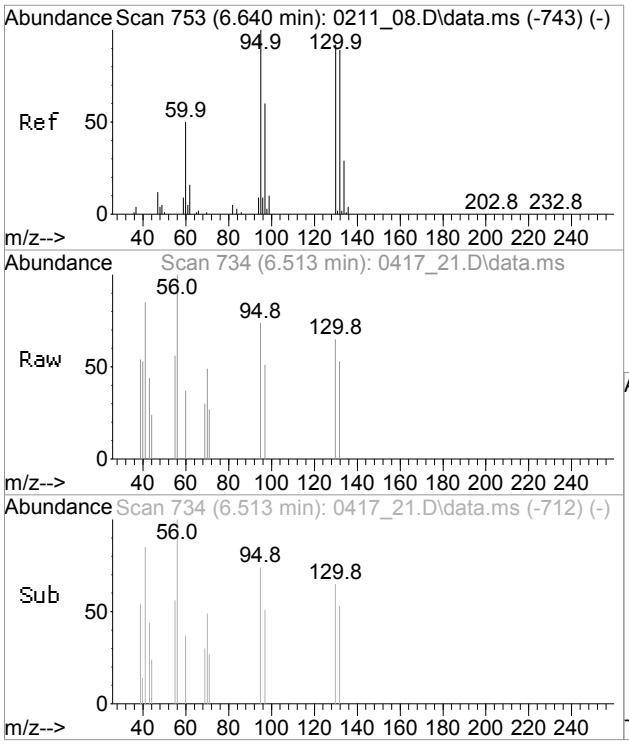


#34
Carbon Tetrachloride
Concen: Below Cal
RT: 5.660 min Scan# 613
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:117 Resp: 2876

Ion	Ratio	Lower	Upper
117	100		
119	100.2	75.6	115.6
121	29.1	10.7	50.7

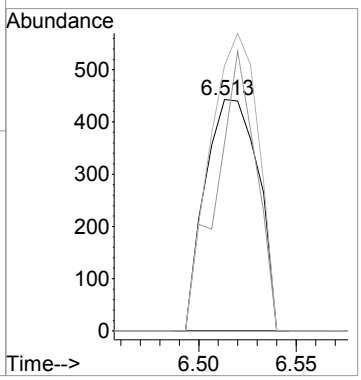


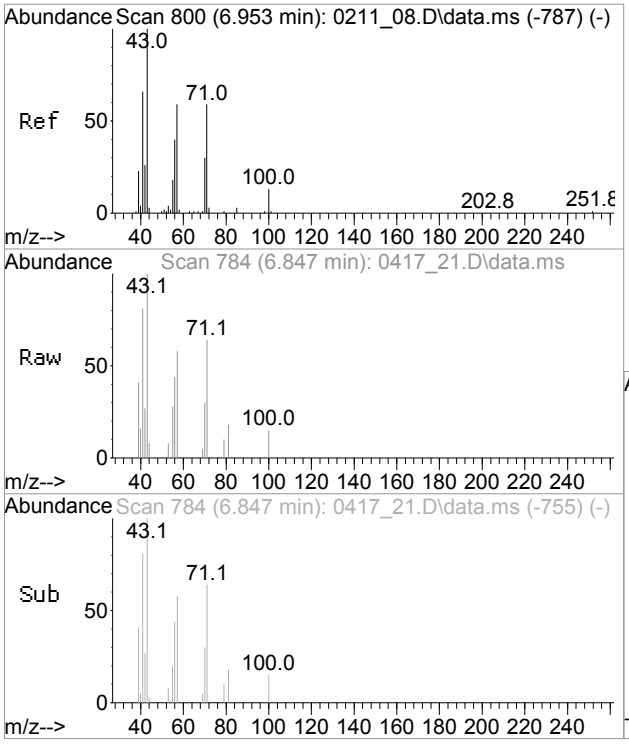


#39
Trichloroethene
Concen: Below Cal
RT: 6.513 min Scan# 734
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:130 Resp: 835

Ion	Ratio	Lower	Upper
130	100		
132	91.4	80.7	121.1
95	117.7	69.5	104.3#

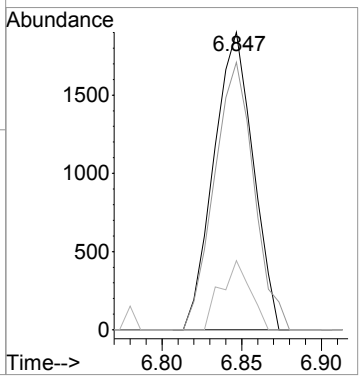


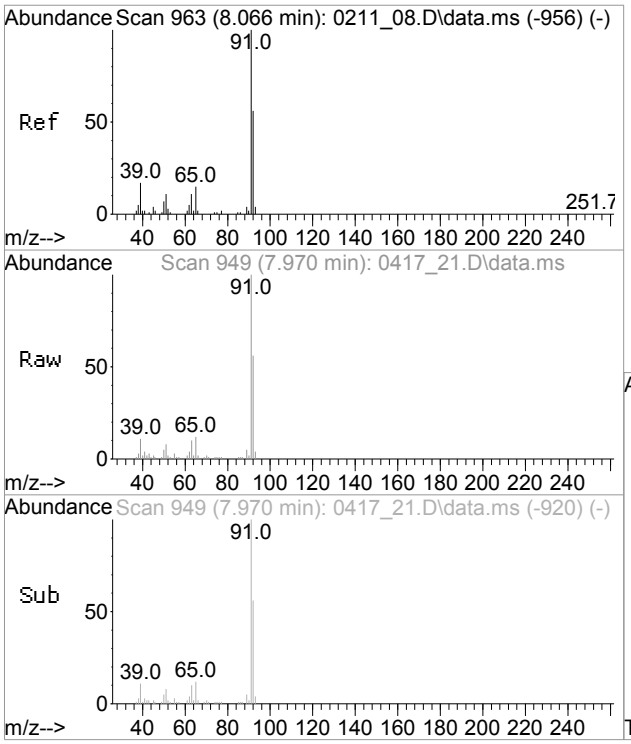


#43
Heptane
Concen: 0.34 ppbv
RT: 6.847 min Scan# 784
Delta R.T. -0.007 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 71 Resp: 3260

Ion	Ratio	Lower	Upper
71	100		
57	90.7	74.5	111.7
100	17.5	23.8	35.6#

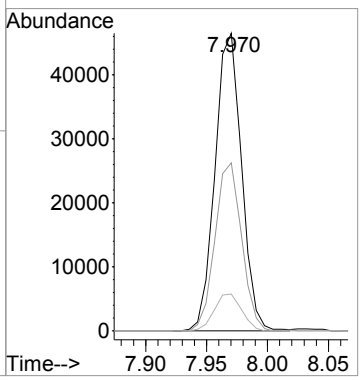


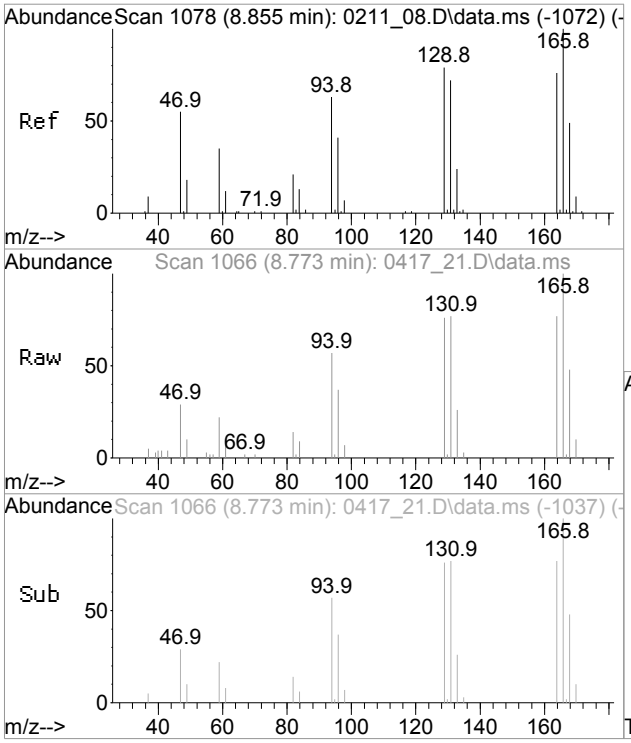


#48
Toluene
Concen: 1.64 ppbv
RT: 7.970 min Scan# 949
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 91 Resp: 70058

Ion	Ratio	Lower	Upper
91	100		
92	56.7	48.5	72.7
65	12.8	10.1	15.1

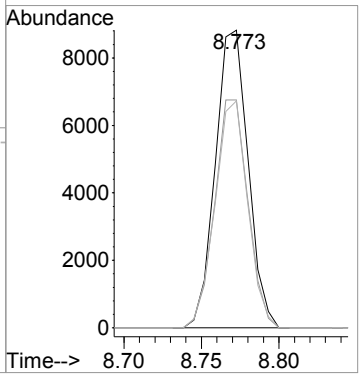


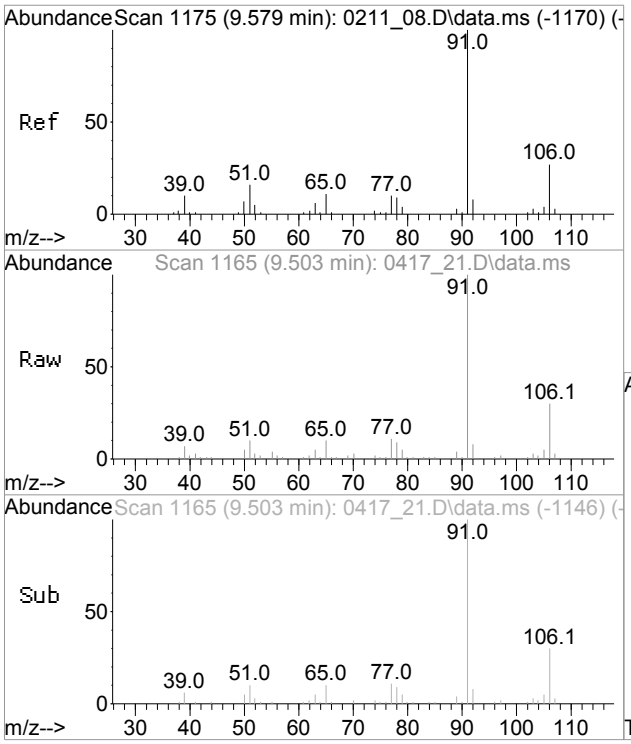


#52
Tetrachloroethene
Concen: 0.51 ppbv
RT: 8.773 min Scan# 1066
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:166 Resp: 12967

Ion	Ratio	Lower	Upper
166	100		
164	77.8	63.1	94.7
129	76.0	48.7	73.1#

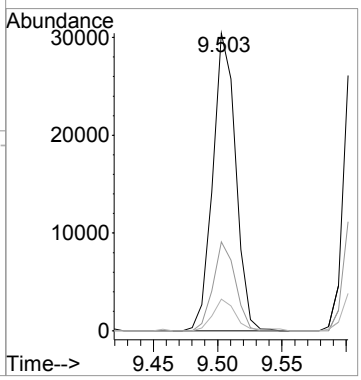


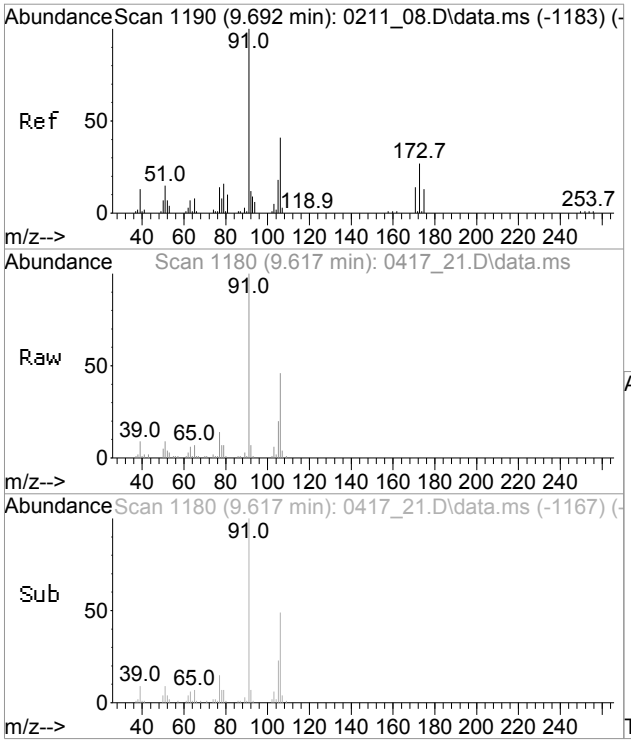


#56
Ethylbenzene
Concen: 0.71 ppbv
RT: 9.503 min Scan# 1165
Delta R.T. -0.008 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 91 Resp: 37876

Ion	Ratio	Lower	Upper
91	100		
106	29.0	11.8	51.8
77	11.0	0.0	29.3

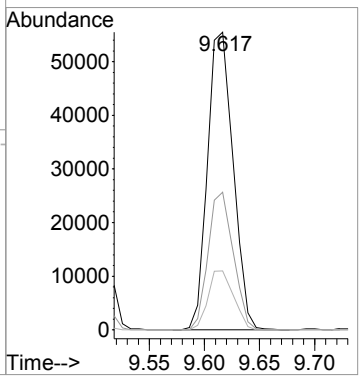


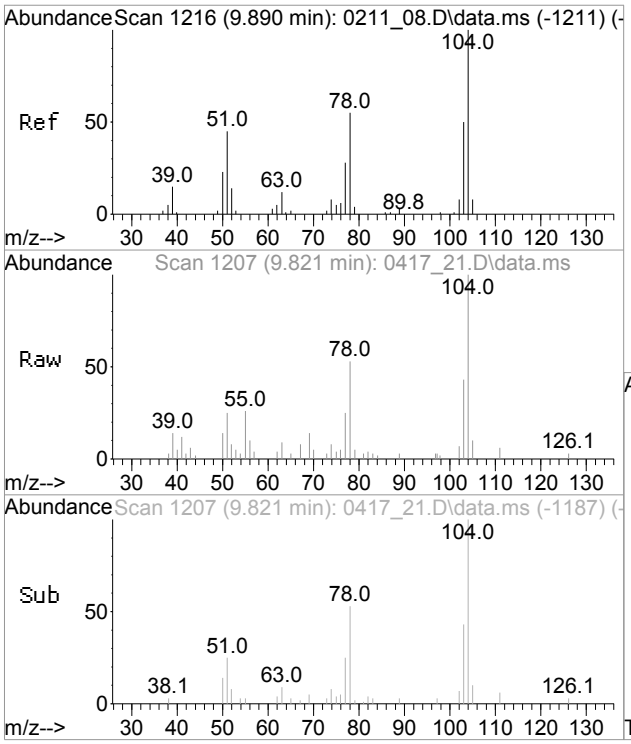


#57
m,p-Xylene
Concen: 1.95 ppbv
RT: 9.617 min Scan# 1180
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 91 Resp: 89486

Ion	Ratio	Lower	Upper
91	100		
106	45.3	38.8	58.2
105	19.7	17.0	25.6

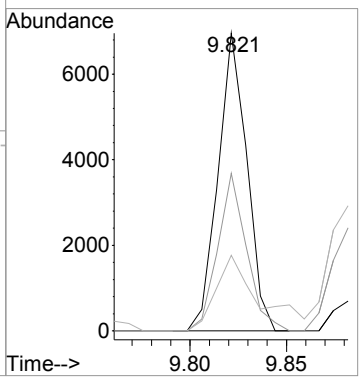


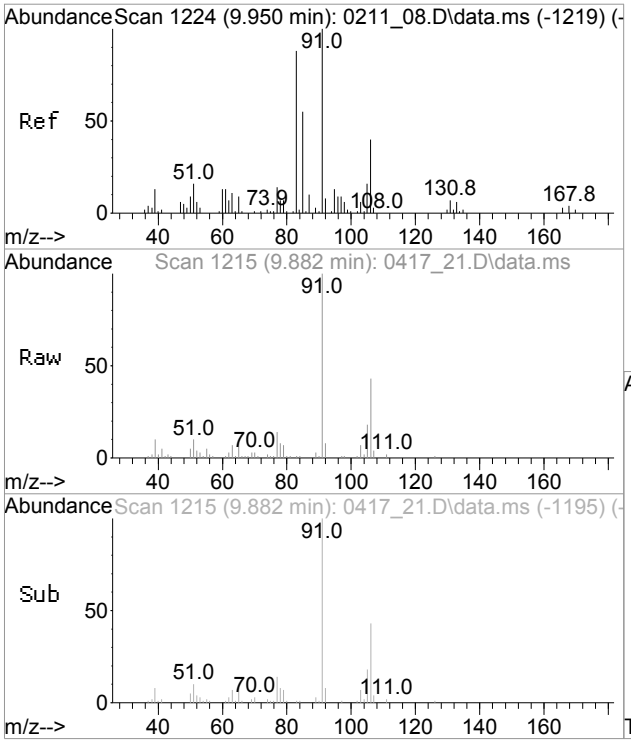


#59
Styrene
Concen: 0.25 ppbv
RT: 9.821 min Scan# 1207
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:104 Resp: 7242

Ion	Ratio	Lower	Upper
104	100		
78	53.1	36.4	54.6
51	38.1	20.2	30.2#

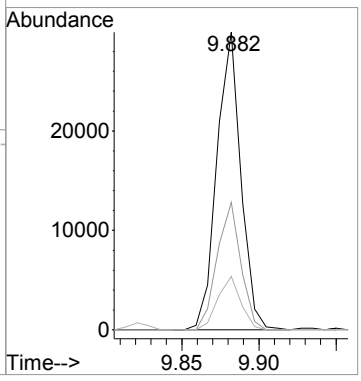


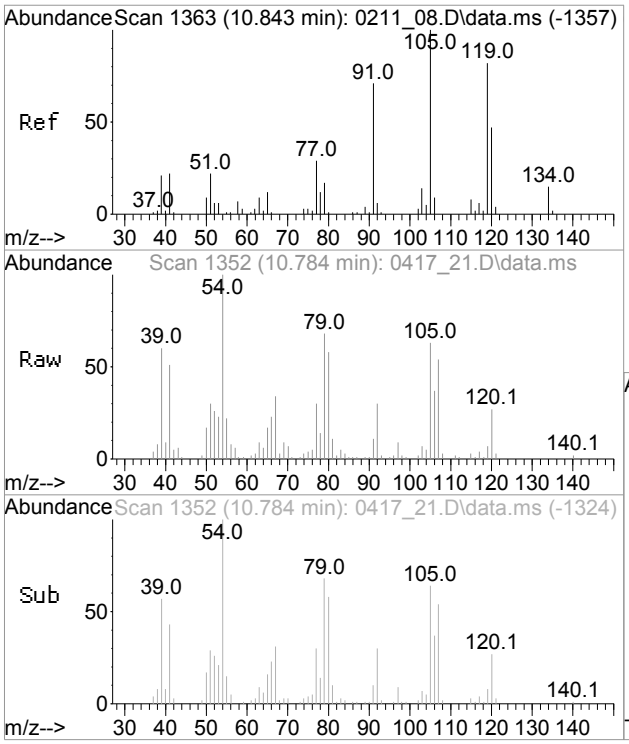


#61
o-Xylene
Concen: 0.74 ppbv
RT: 9.882 min Scan# 1215
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 91 Resp: 32348

Ion	Ratio	Lower	Upper
91	100		
106	42.2	39.1	58.7
105	17.3	15.2	22.8

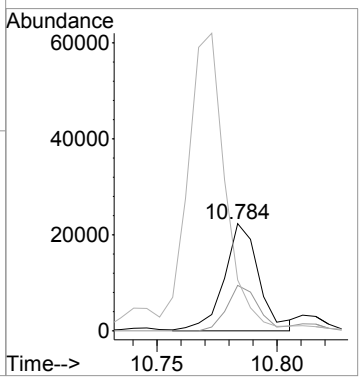


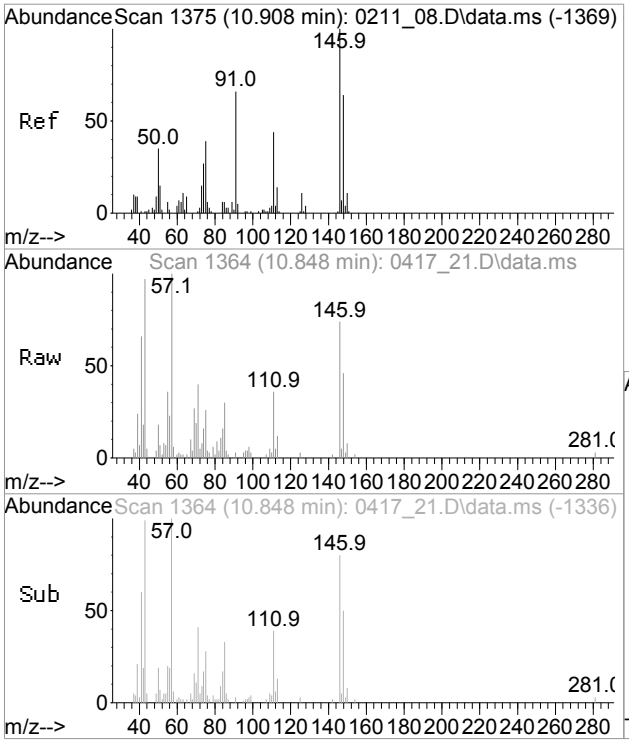


#68
1,2,4-Trimethylbenzene
Concen: 0.42 ppbv
RT: 10.784 min Scan# 1352
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:105 Resp: 22488

Ion	Ratio	Lower	Upper
105	100		
120	39.6	46.6	70.0#
77	321.0	18.8	28.2#

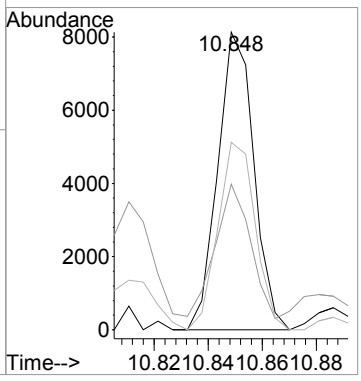


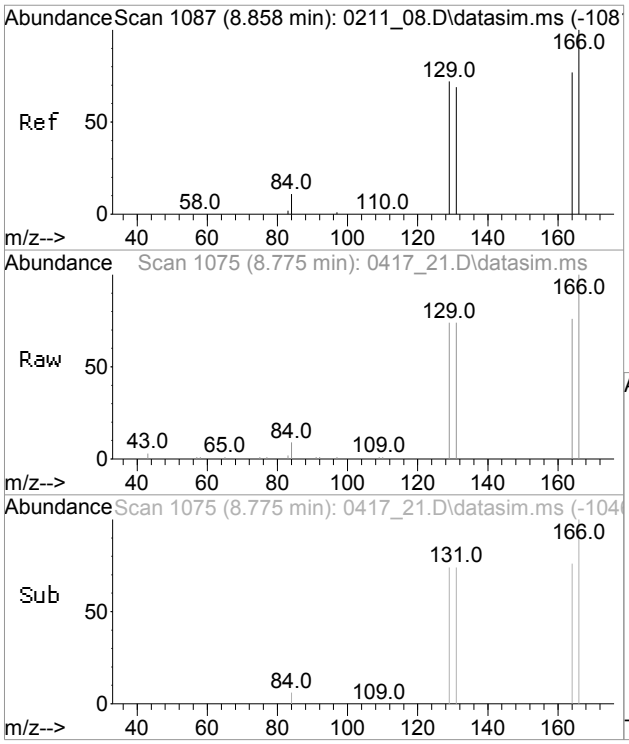


#71
1,3-Dichlorobenzene
Concen: 0.21 ppbv
RT: 10.848 min Scan# 1364
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:146 Resp: 7543

Ion	Ratio	Lower	Upper
146	100		
111	44.3	26.8	40.2#
148	65.3	51.8	77.8

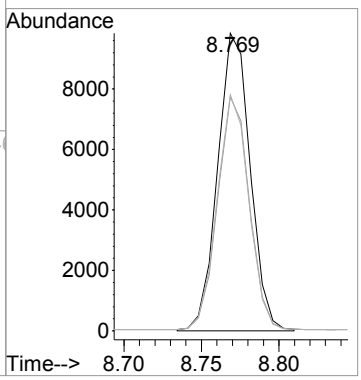


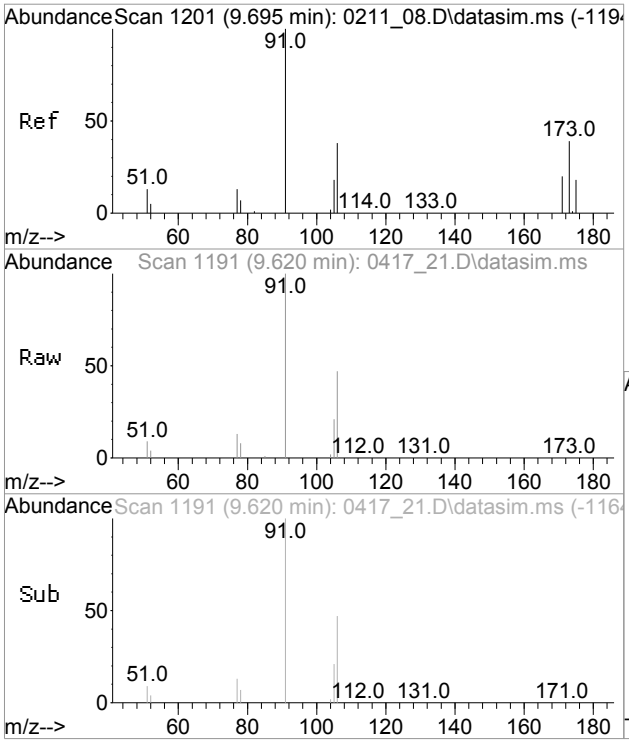


#102
Tetrachloroethene(sim)
Concen: 0.63 ppbv
RT: 8.773 min Scan# 1075
Delta R.T. -0.003 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion:166 Resp: 12967

Ion	Ratio	Lower	Upper
166	100		
164	77.8	58.9	98.9
129	76.0	40.9	80.9

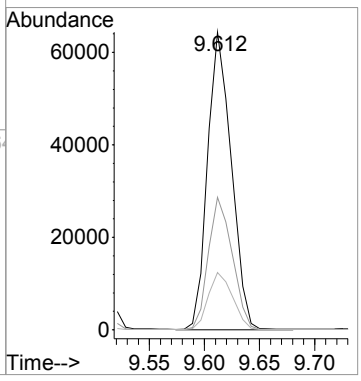




#106
m,p-Xylene(sim)
Concen: 2.09 ppbv
RT: 9.617 min Scan# 1191
Delta R.T. 0.000 min
Lab File: 0417_21.D
Acq: 17 Apr 2017 8:26 pm

Tgt Ion: 91 Resp: 89486

Ion	Ratio	Lower	Upper
91	100		
106	45.3	43.6	53.3
105	19.7	17.0	25.6



AIR ANALYSIS DATA SHEET

CLIENT ID: BY04726 BLANK

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726 BL

Canister: BL Lab File ID: 0417_06.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
67-66-3	Chloroform	0.205	U	0.205	0.205	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	0.313	U	0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	0.230	U	0.230	0.230	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
95-47-6	o-Xylene	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

AIR ANALYSIS DATA SHEET

CLIENT ID: BY04726 BLANK

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726 BL

Canister: BL Lab File ID: 0417_06.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.040	U	0.040	0.040	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
127-18-4	Tetrachloroethene(sim)	0.037	U	0.037	0.037	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
630-20-6	1,1,1,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
179601-23-1	m,p-Xylene(sim)	0.230	U	0.230	0.230	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
135-98-8	sec-Butylbenzene(sim)	0.182	U	0.182	0.182	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_06.D
Acq On : 17 Apr 2017 12:11 pm
Operator : Keith
Client ID : BY04726 BLANK
Lab ID : BY04726 BLANK
ALS Vial : 10 Sample Multiplier: 1

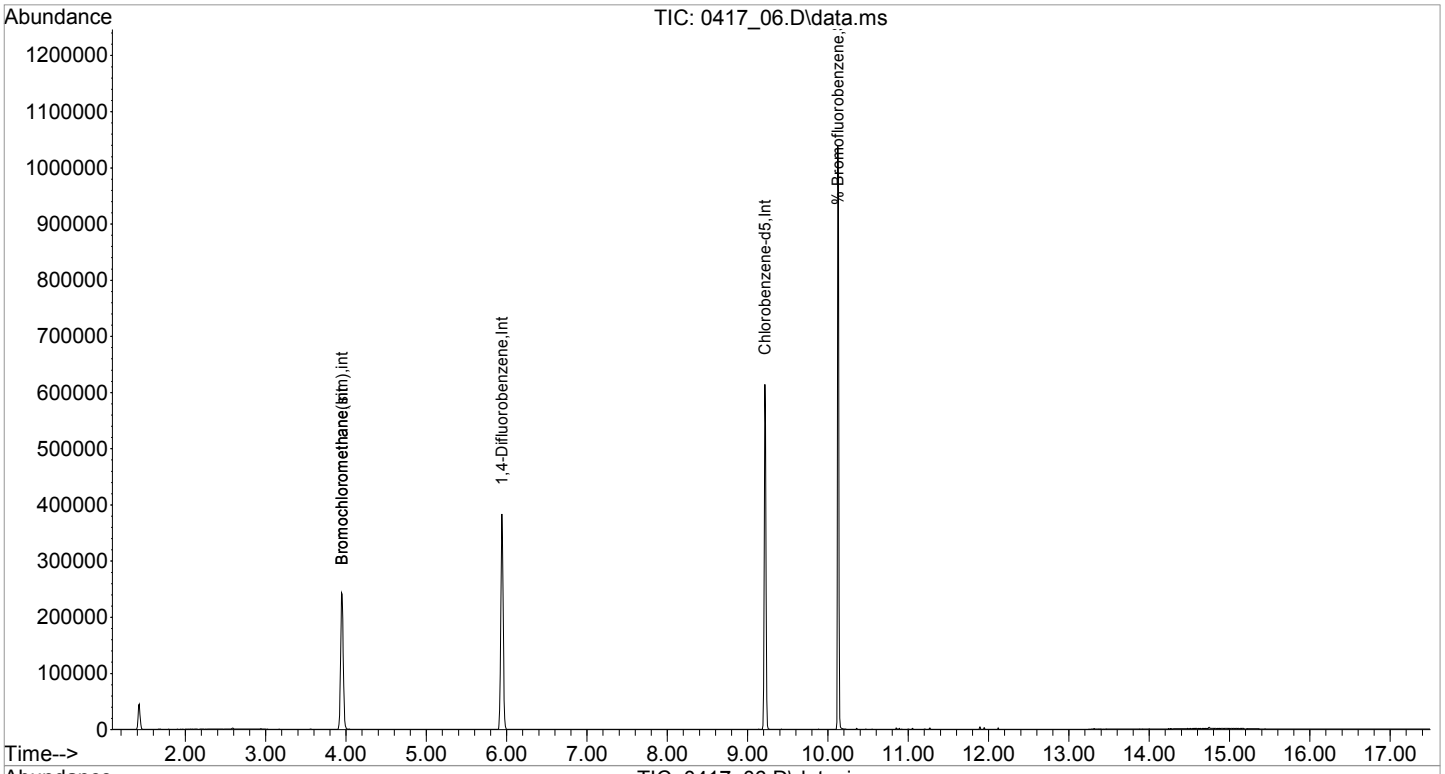
Quant Time: Apr 17 15:03:30 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

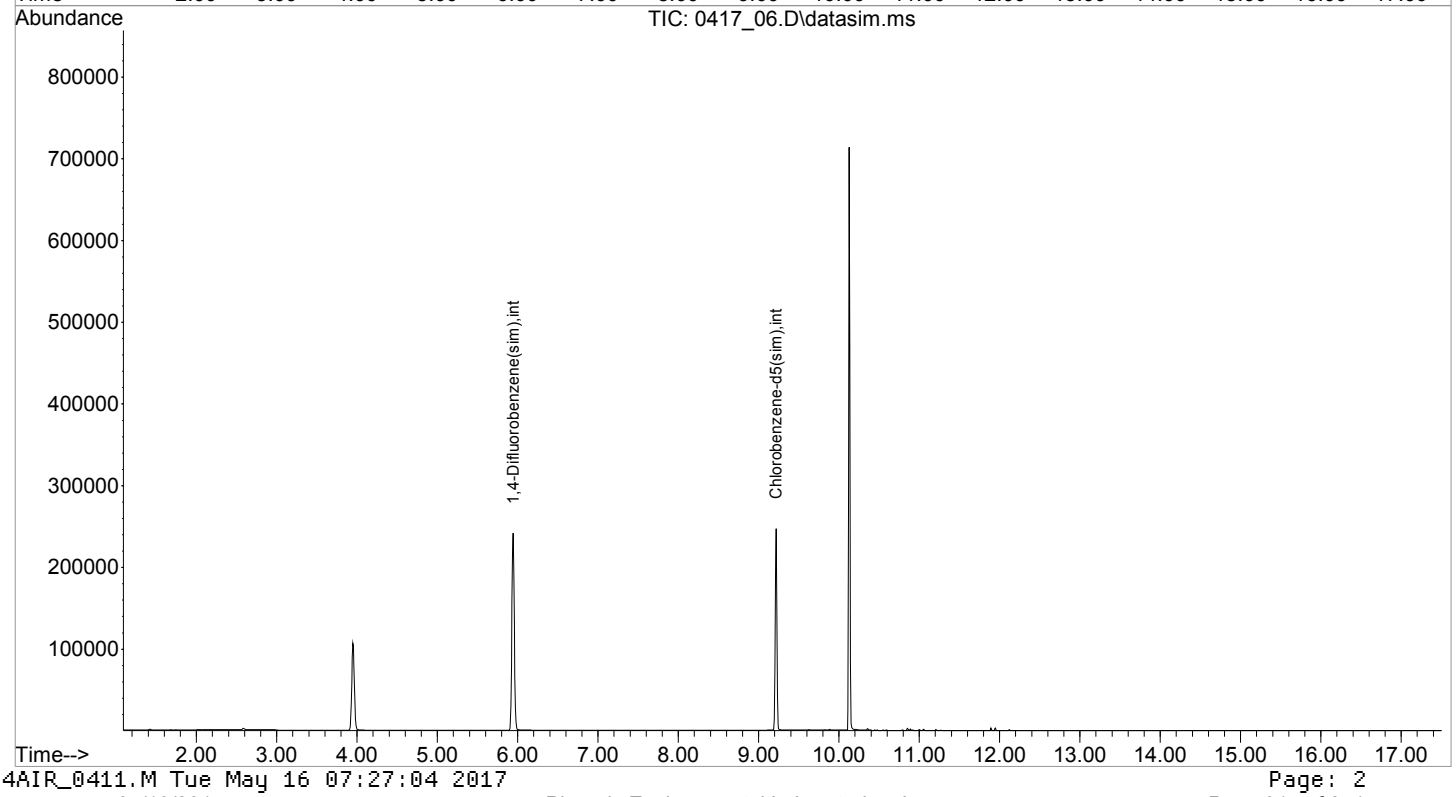
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.951	130	103133	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.941	114	331020	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	152139	10.000	ng		0.00
80) Bromochloromethane(sim)	3.951	130	103133	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.944	114	359028	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.218	82	160418	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.125	95	222899	11.148	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.50%				
Target Compounds							Qvalue

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_06.D
Acq On : 17 Apr 2017 12:11 pm
Operator : Keith
Client ID : BY04726 BLANK
Lab ID : BY04726 BLANK
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 17 15:03:30 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration





AIR ANALYSIS DATA SHEET

CLIENT ID: BY04726 DUP

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726 DUP

Canister: 19930 Lab File ID: 0417_22.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.320		0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	10.0	S	0.531	0.531	r
67-64-1	Acetone	10.0	S	0.421	0.421	r
67-63-0	Isopropylalcohol	6.00	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
75-15-0	Carbon Disulfide	0.660		0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	3.50		0.339	0.339	r
110-54-3	Hexane	1.20	S	0.284	0.284	r
67-66-3	Chloroform	0.205	U	0.205	0.205	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	1.80		0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.320		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	1.50		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	0.430		0.037	0.037	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	0.660		0.230	0.230	r
179601-23-1	m,p-Xylene	1.80		0.230	0.230	r
100-42-5	Styrene	0.250		0.235	0.235	r
95-47-6	o-Xylene	0.660		0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.370		0.204	0.204	r
541-73-1	1,3-Dichlorobenzene	0.180		0.166	0.166	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

AIR ANALYSIS DATA SHEET

CLIENT ID: BY04726 DUP

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: BY04726 DUP

Canister: 19930 Lab File ID: 0417_22.D

Instrument: CHEM24 Column: zb-1ms Date Received: 04/14/17

Purge Volume 200 (cc) Date Analyzed: 04/17/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.180		0.178	0.178	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.069		0.040	0.040	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
630-20-6	1,1,1,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
135-98-8	sec-Butylbenzene(sim)	0.182	U	0.182	0.182	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_22.D
Acq On : 17 Apr 2017 9:19 pm
Operator : Keith
Client ID : BY04726 DUP
Lab ID : BY04726 DUP
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 18 09:04:24 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration

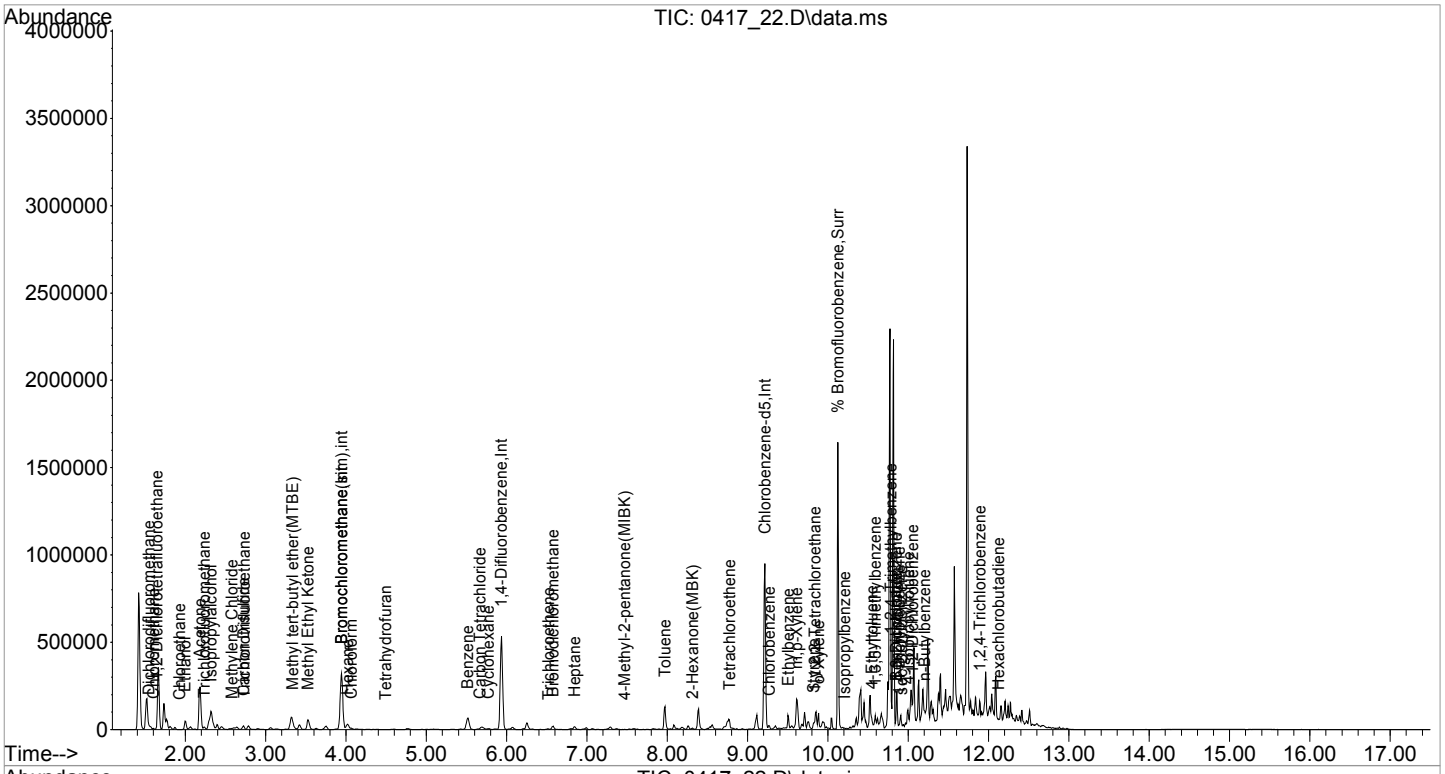
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	3.945	130	135120	10.000	ng		0.00
36) 1,4-Difluorobenzene	5.934	114	468748	10.000	ng		0.00
53) Chlorobenzene-d5	9.215	82	235083	10.000	ng		0.00
80) Bromochloromethane(sim)	3.945	130	135120	10.000	ng		0.00
93) 1,4-Difluorobenzene(sim)	5.937	114	505866	10.000	ng	#	0.00
103) Chlorobenzene-d5(sim)	9.210	82	242653	10.000	ng		0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.124	95	323159	10.460	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.60%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.545	85	16927	0.321	ppbv		99
10) Ethanol	1.994	45	50002	9.961	ppbv		96
12) Acetone	2.181	43	230894	9.953	ppbv		91
13) Trichlorofluoromethane	2.232	101	10347	0.180	ppbv		99
14) Isopropylalcohol	2.316	45	124273	6.028	ppbv		95
20) Carbon Disulfide	2.723	76	24657	0.659	ppbv#		92
25) Methyl Ethyl Ketone	3.524	43	76332	3.492	ppbv		94
27) Hexane	4.018	57	17766	1.157	ppbv		93
33) Benzene	5.512	78	72648	1.813	ppbv		98
34) Carbon Tetrachloride	5.667	117	2949	0.060	ppbv		95
43) Heptane	6.847	71	3638	0.319	ppbv#		93
48) Toluene	7.970	91	77514	1.532	ppbv		97
52) Tetrachloroethene	8.772	166	13027	0.432	ppbv#		91
56) Ethylbenzene	9.503	91	40131	0.656	ppbv		96
57) m,p-Xylene	9.609	91	96852	1.827	ppbv		96
59) Styrene	9.821	104	8122	0.245	ppbv#		87
61) o-Xylene	9.882	91	33138	0.657	ppbv		92
68) 1,2,4-Trimethylbenzene	10.783	105	23035	0.372	ppbv#		1
71) 1,3-Dichlorobenzene	10.848	146	7689	0.185	ppbv#		91
84] Trichlorofluoromethane...	2.232	101	10347	0.176	ppbv		100
91] Carbon Tetrachloride(sim)	5.663	117	3251	0.069	ppbv		100
102] Tetrachloroethene(sim)	8.772	166	13027	0.543	ppbv		91
106] m,p-Xylene(sim)	9.609	91	96852	1.972	ppbv		96
111] 1,3-Dichlorobenzene(sim)	10.851	146	8924	0.202	ppbv#		94

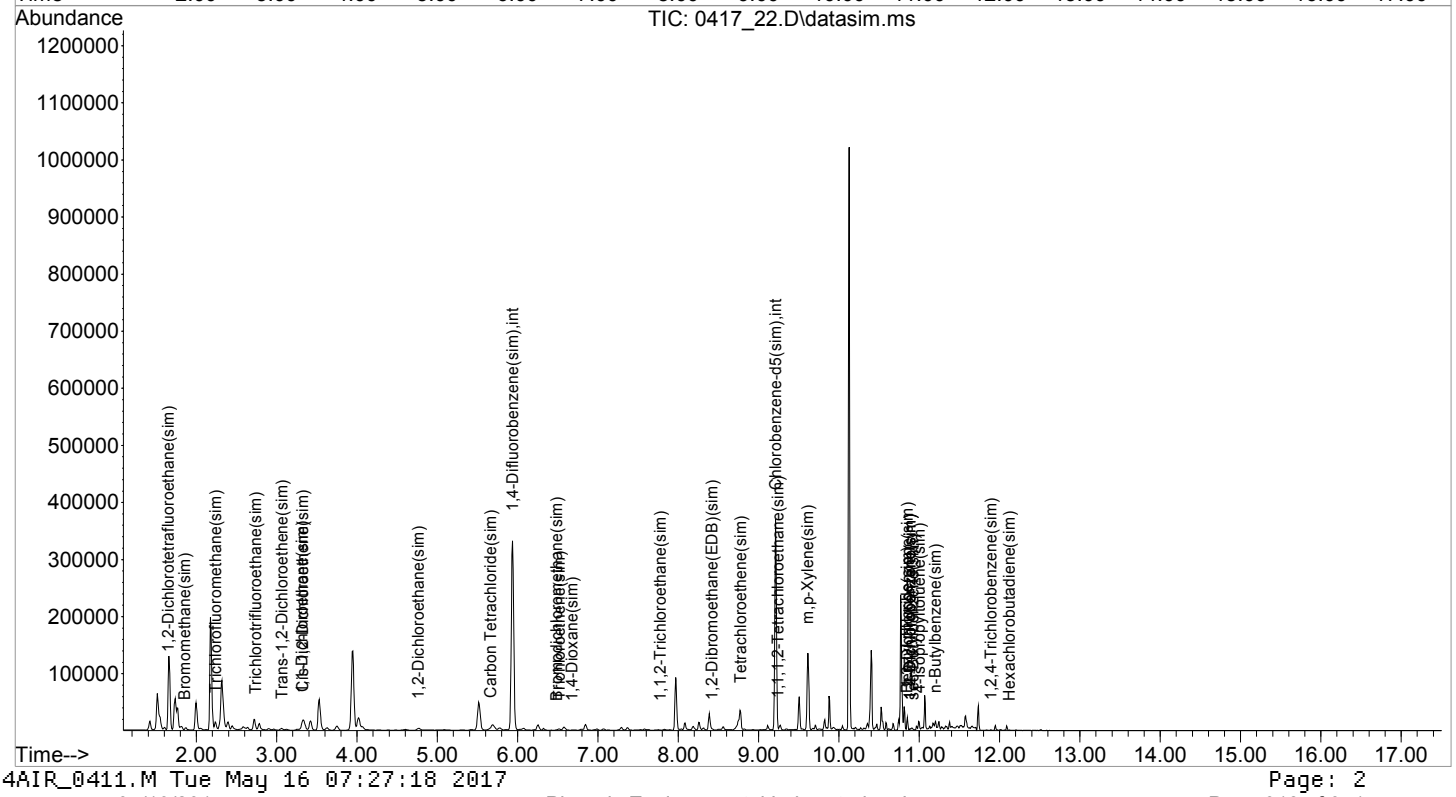
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

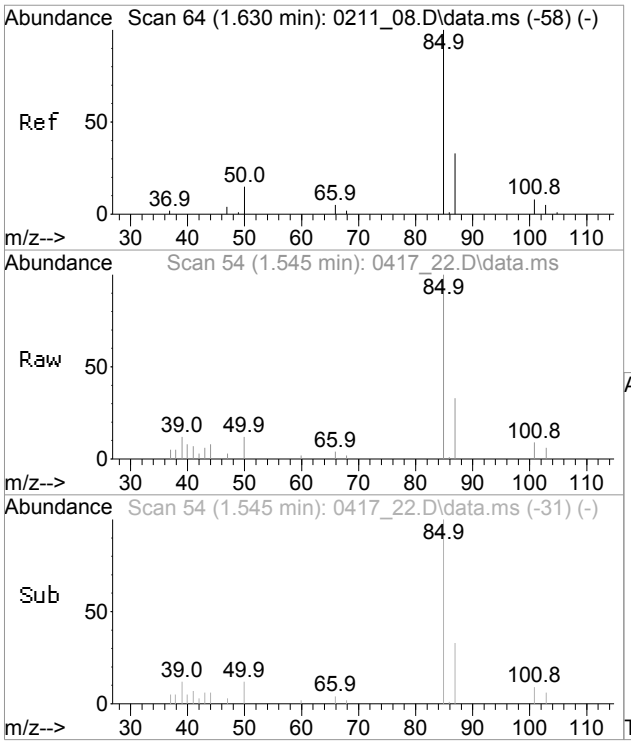
Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\04APR\17\
Data File : 0417_22.D
Acq On : 17 Apr 2017 9:19 pm
Operator : Keith
Client ID : BY04726 DUP
Lab ID : BY04726 DUP
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 18 09:04:24 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0411.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Mon Apr 17 08:55:57 2017
Response via : Initial Calibration



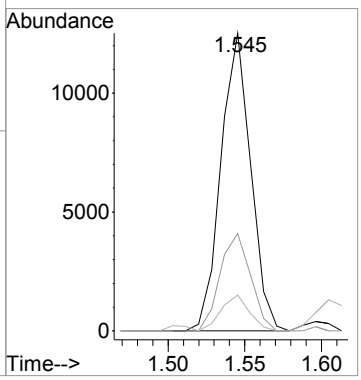


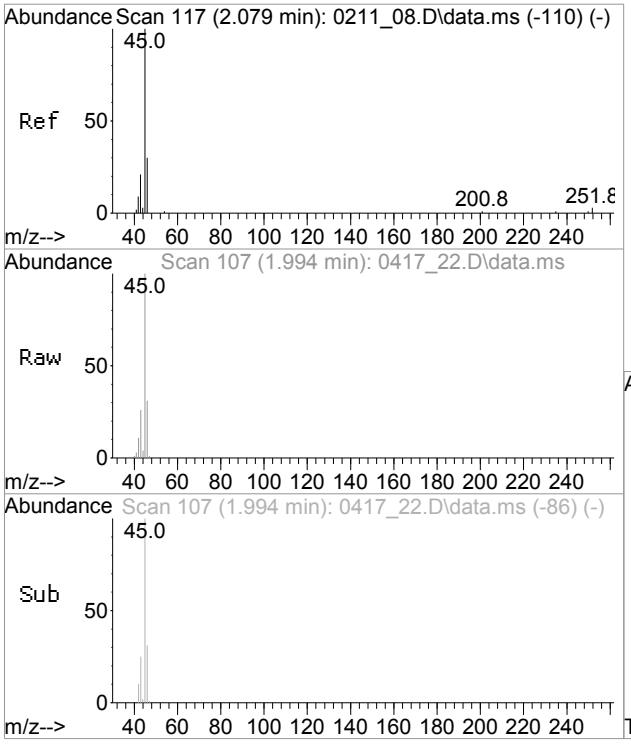


#3
Dichlorodifluoromethane
Concen: 0.32 ppbv
RT: 1.545 min Scan# 54
Delta R.T. -0.009 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 85 Resp: 16927

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1
50	12.6	10.0	15.0

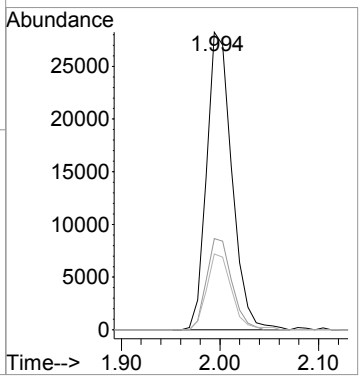


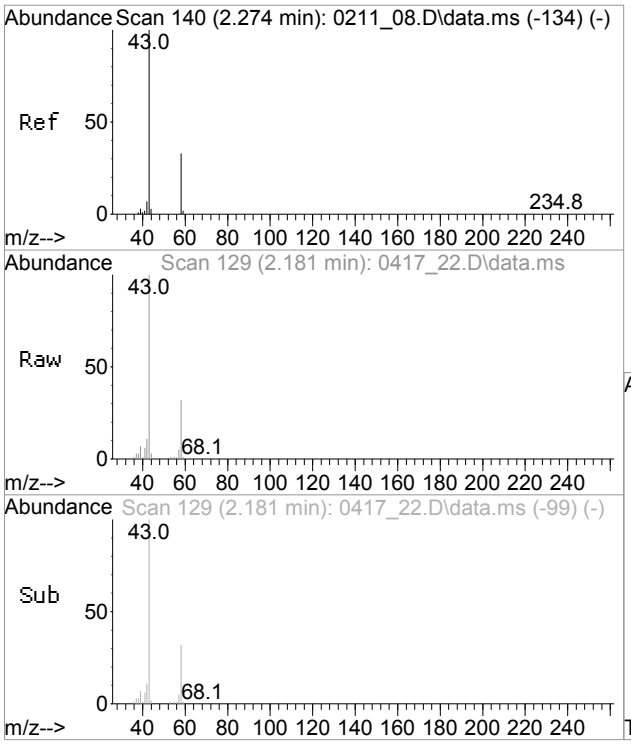


#10
Ethanol
Concen: 9.96 ppbv
RT: 1.994 min Scan# 107
Delta R.T. -0.026 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 45 Resp: 50002

Ion	Ratio	Lower	Upper
45	100		
46	30.6	25.7	38.5
43	25.4	17.7	26.5

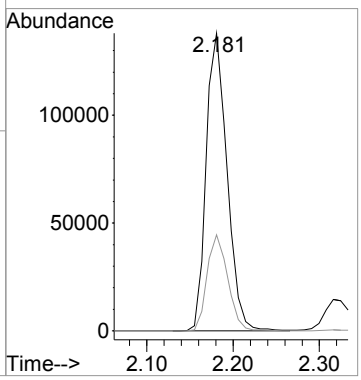


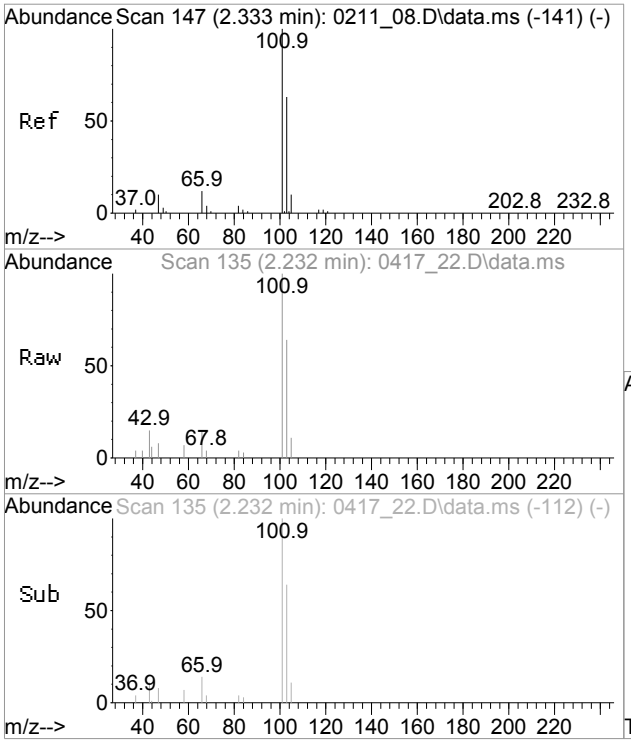


#12
Acetone
Concen: 9.95 ppbv
RT: 2.181 min Scan# 129
Delta R.T. -0.042 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 43 Resp: 230894

Ion	Ratio	Lower	Upper
43	100		
58	32.1	21.8	32.8

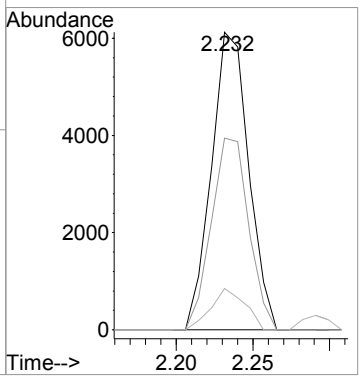


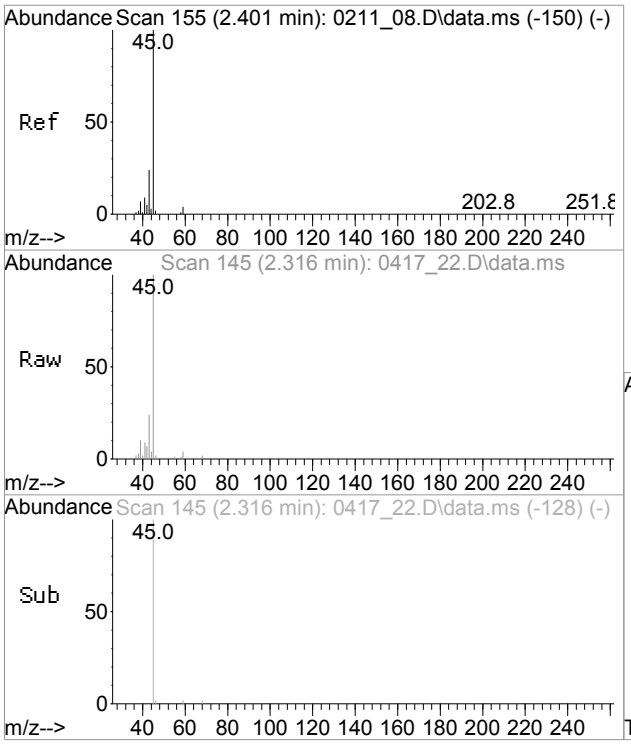


#13
Trichlorofluoromethane
Concen: 0.18 ppbv
RT: 2.232 min Scan# 135
Delta R.T. -0.009 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:101 Resp: 10347

Ion	Ratio	Lower	Upper
101	100		
103	64.8	51.5	77.3
66	12.8	8.7	13.1

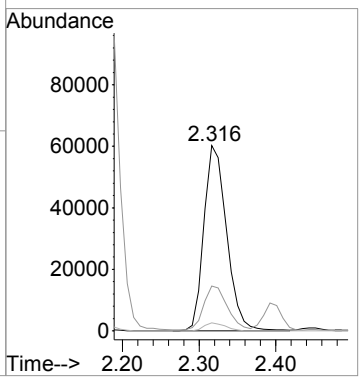


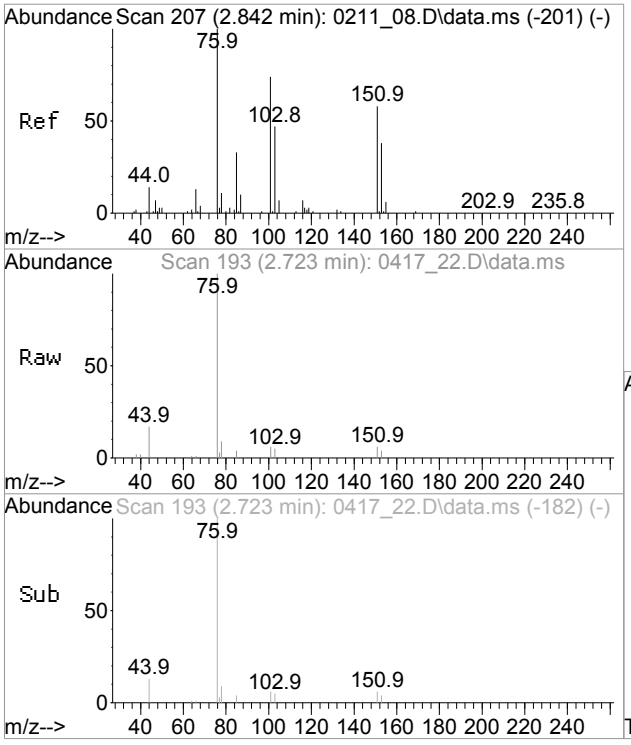


#14
Isopropylalcohol
Concen: 6.03 ppbv
RT: 2.316 min Scan# 145
Delta R.T. -0.059 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 45 Resp: 124273

Ion	Ratio	Lower	Upper
45	100		
43	24.4	17.3	25.9
59	4.0	3.0	4.6

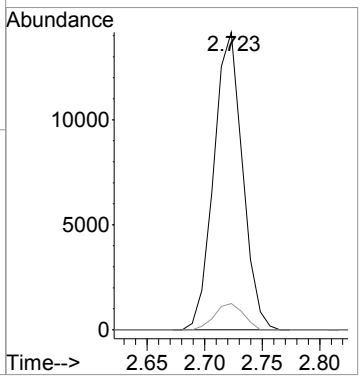


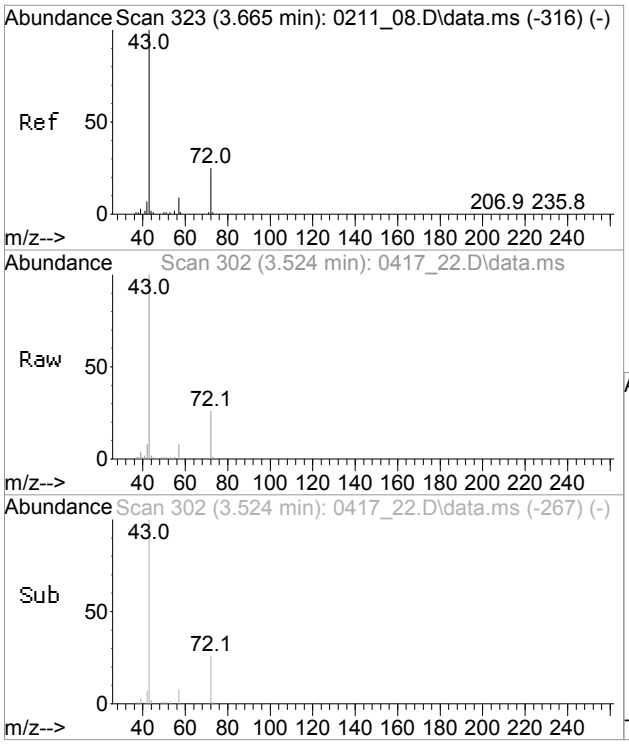


#20
Carbon Disulfide
Concen: 0.66 ppbv
RT: 2.723 min Scan# 193
Delta R.T. -0.009 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 76 Resp: 24657

Ion	Ratio	Lower	Upper
76	100		
78	8.9	9.7	14.5#

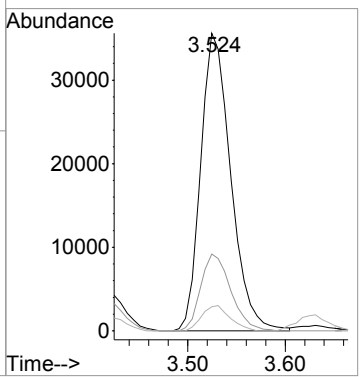


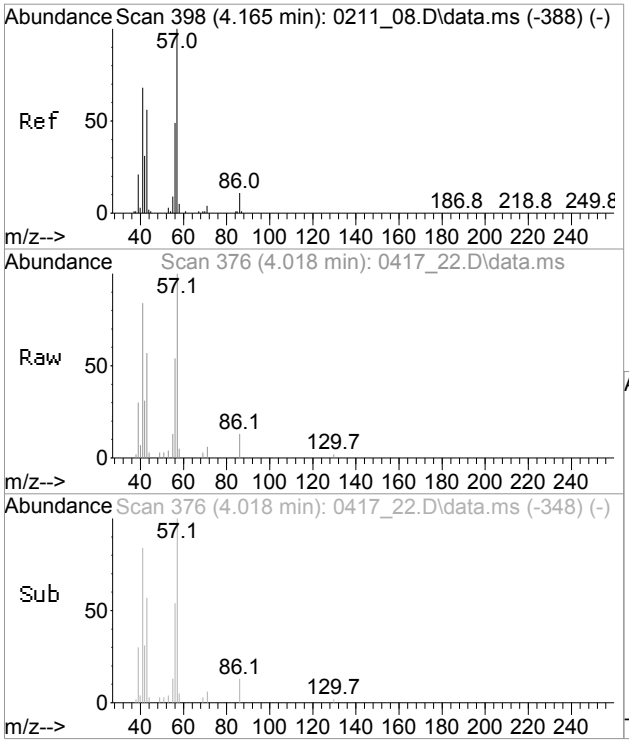


#25
Methyl Ethyl Ketone
Concen: 3.49 ppbv
RT: 3.524 min Scan# 302
Delta R.T. -0.067 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 43 Resp: 76332

Ion	Ratio	Lower	Upper
43	100		
72	25.8	17.7	26.5
57	8.0	5.9	8.9

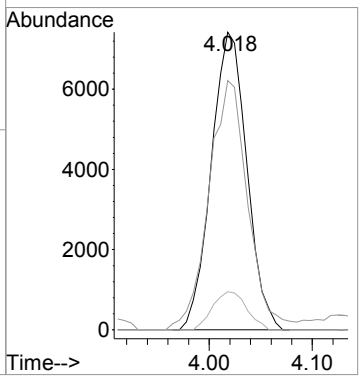


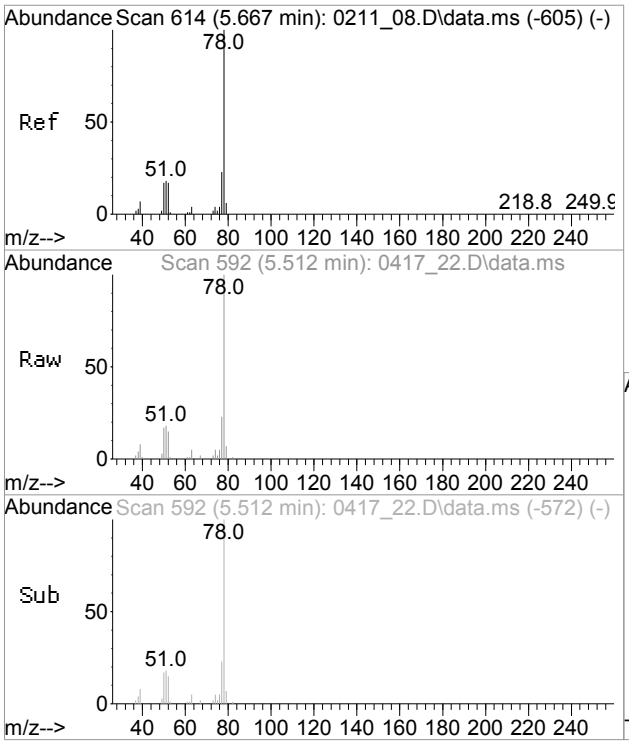


#27
Hexane
Concen: 1.16 ppbv
RT: 4.018 min Scan# 376
Delta R.T. -0.013 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 57 Resp: 17766

Ion	Ratio	Lower	Upper
57	100		
41	91.6	67.6	101.4
86	12.3	11.8	17.6

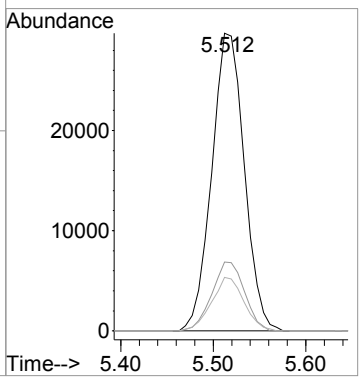


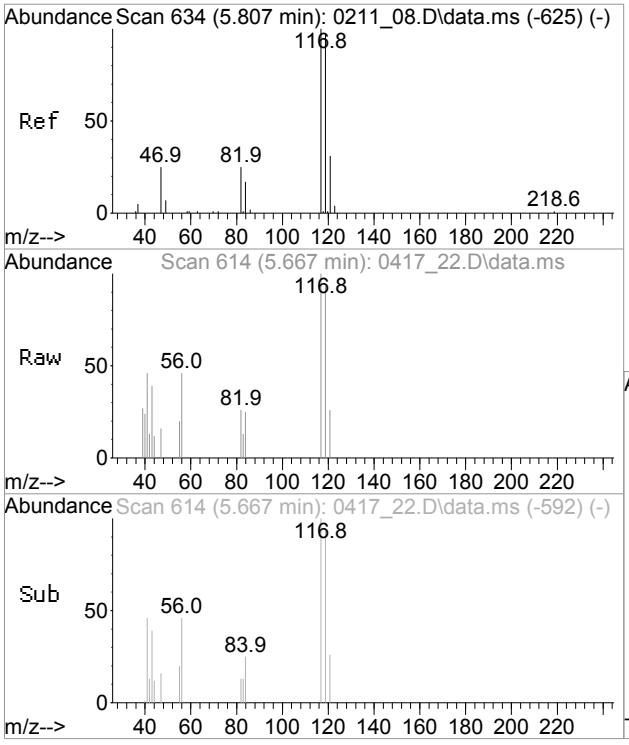


#33
Benzene
Concen: 1.81 ppbv
RT: 5.512 min Scan# 592
Delta R.T. -0.007 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 78 Resp: 72648

Ion	Ratio	Lower	Upper
78	100		
77	23.2	17.9	26.9
51	17.9	13.6	20.4

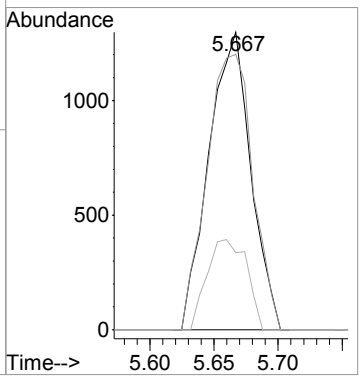


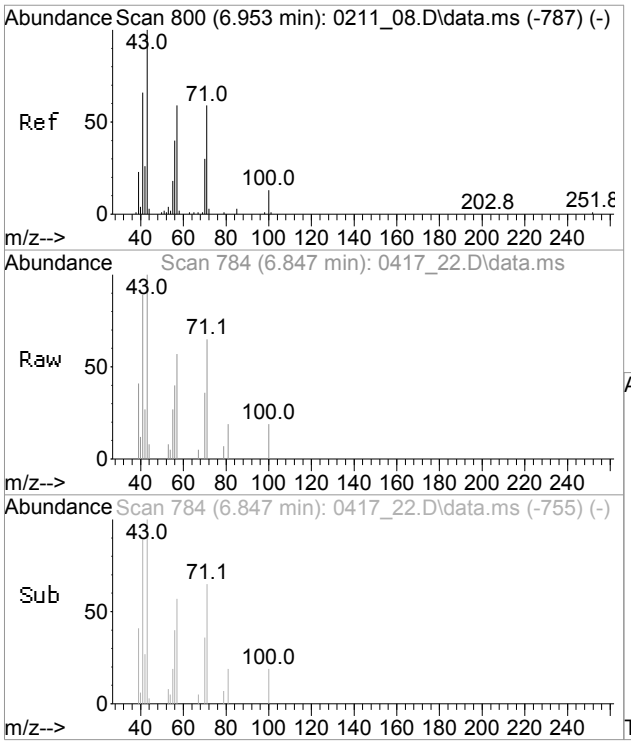


#34
Carbon Tetrachloride
Concen: Below Cal
RT: 5.667 min Scan# 614
Delta R.T. 0.007 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:117 Resp: 2949

Ion	Ratio	Lower	Upper
117	100		
119	101.6	75.6	115.6
121	28.8	10.7	50.7

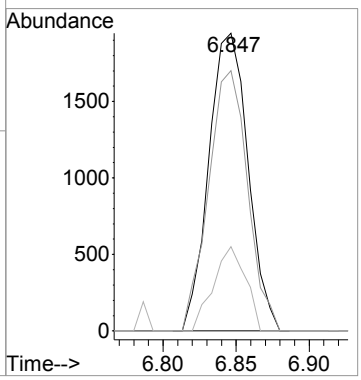


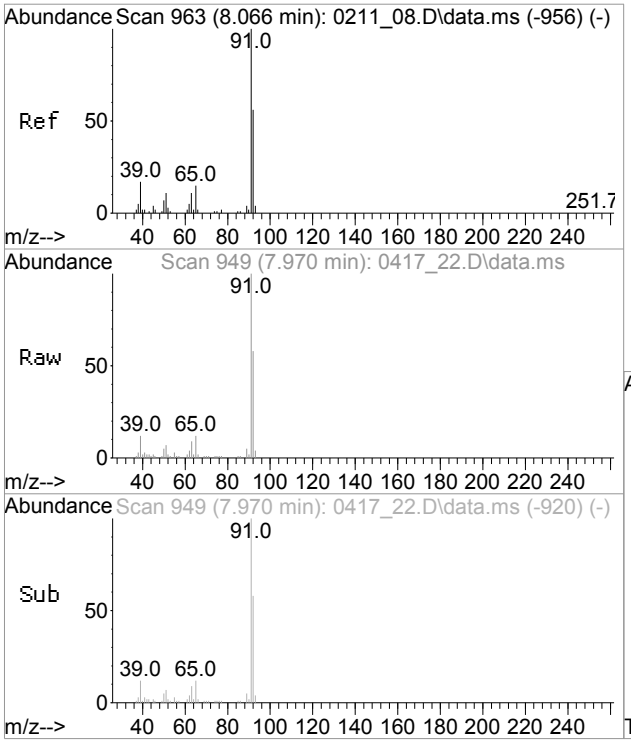


#43
Heptane
Concen: 0.32 ppbv
RT: 6.847 min Scan# 784
Delta R.T. -0.007 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 71 Resp: 3638

Ion	Ratio	Lower	Upper
71	100		
57	87.4	74.5	111.7
100	23.3	23.8	35.6#

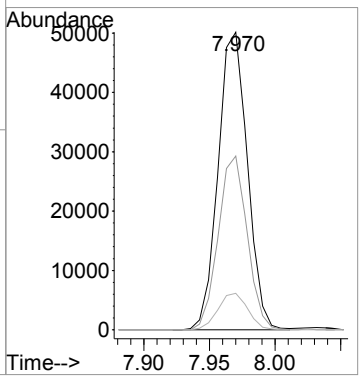


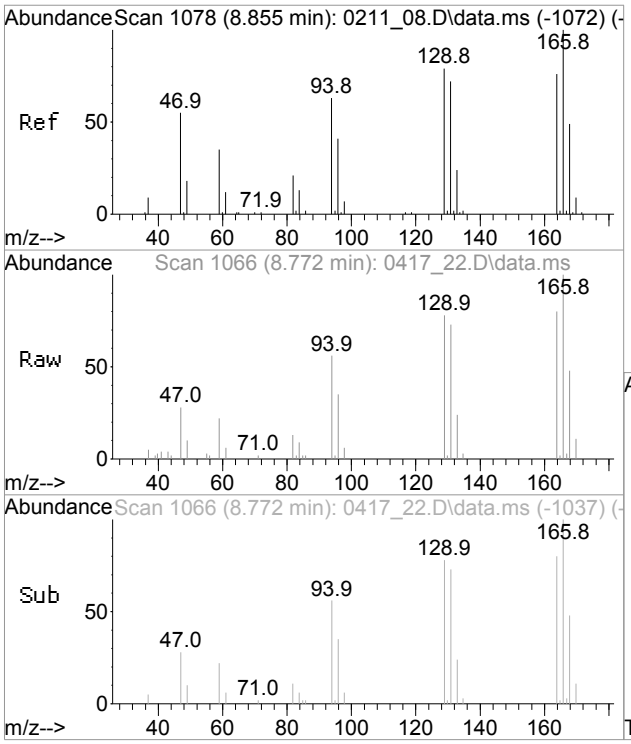


#48
Toluene
Concen: 1.53 ppbv
RT: 7.970 min Scan# 949
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 91 Resp: 77514

Ion	Ratio	Lower	Upper
91	100		
92	57.7	48.5	72.7
65	12.5	10.1	15.1

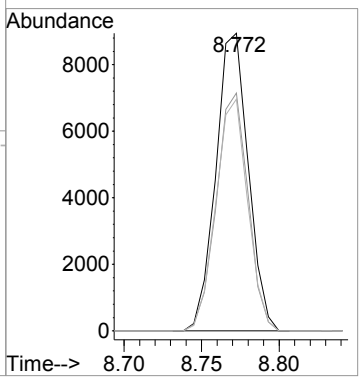


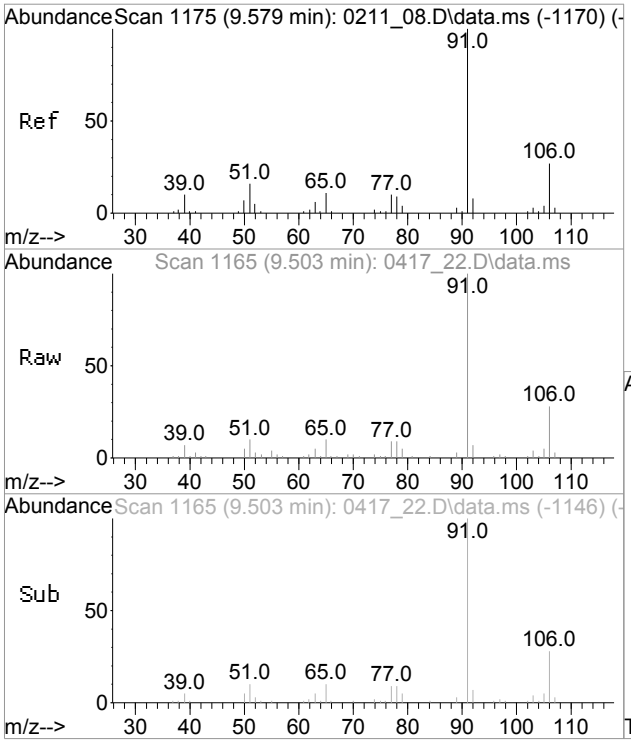


#52
Tetrachloroethene
Concen: 0.43 ppbv
RT: 8.772 min Scan# 1066
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:166 Resp: 13027

Ion	Ratio	Lower	Upper
166	100		
164	78.3	63.1	94.7
129	76.5	48.7	73.1#

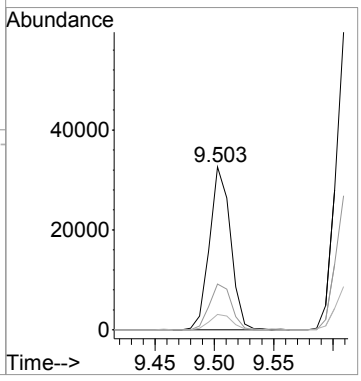


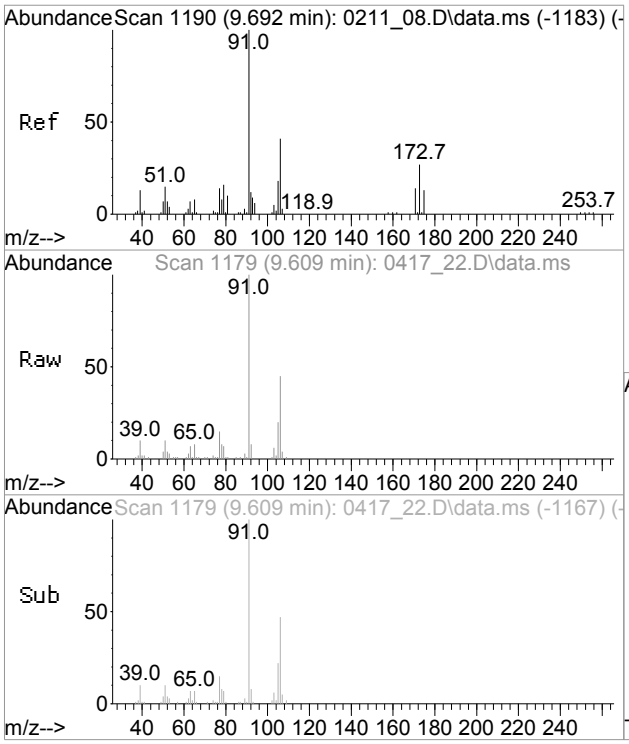


#56
Ethylbenzene
Concen: 0.66 ppbv
RT: 9.503 min Scan# 1165
Delta R.T. -0.008 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 91 Resp: 40131

Ion	Ratio	Lower	Upper
91	100		
106	29.2	11.8	51.8
77	10.4	0.0	29.3

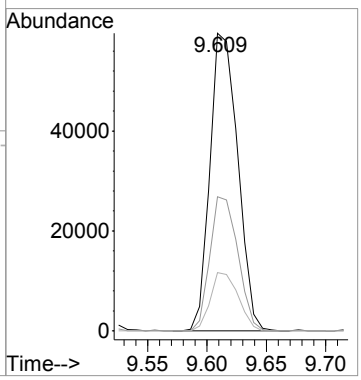


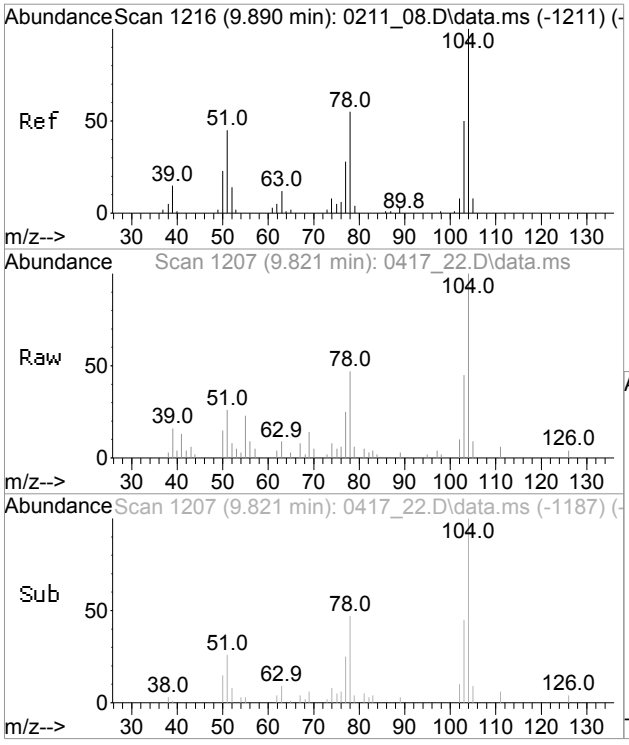


#57
m,p-Xylene
Concen: 1.83 ppbv
RT: 9.609 min Scan# 1179
Delta R.T. -0.008 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 91 Resp: 96852

Ion	Ratio	Lower	Upper
91	100		
106	45.3	38.8	58.2
105	19.7	17.0	25.6

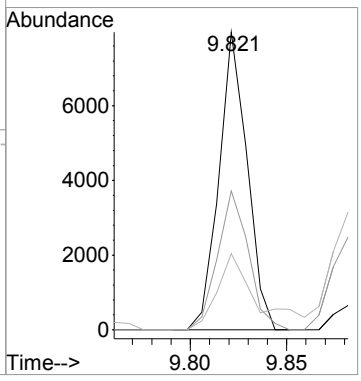


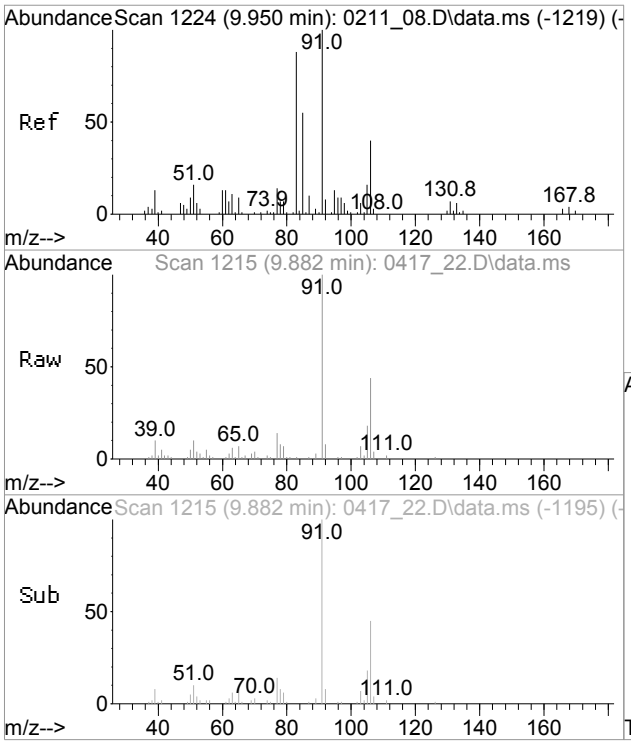


#59
Styrene
Concen: 0.24 ppbv
RT: 9.821 min Scan# 1207
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:104 Resp: 8122

Ion	Ratio	Lower	Upper
104	100		
78	51.2	36.4	54.6
51	36.1	20.2	30.2#

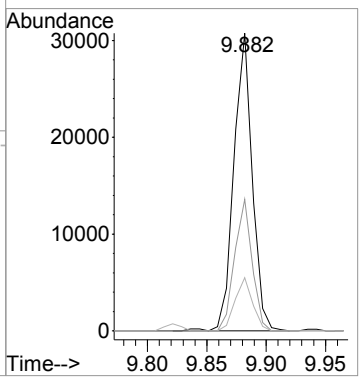


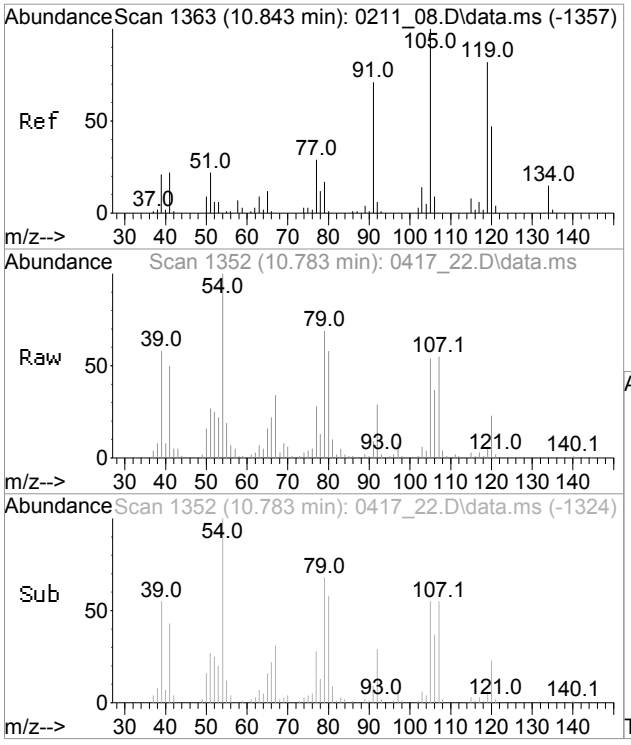


#61
o-Xylene
Concen: 0.66 ppbv
RT: 9.882 min Scan# 1215
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 91 Resp: 33138

Ion	Ratio	Lower	Upper
91	100		
106	42.1	39.1	58.7
105	17.1	15.2	22.8

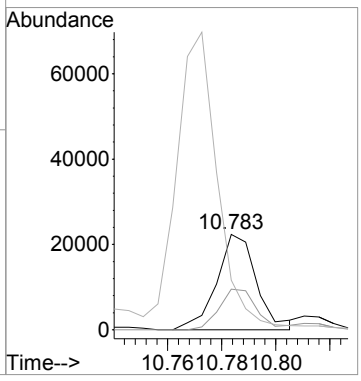


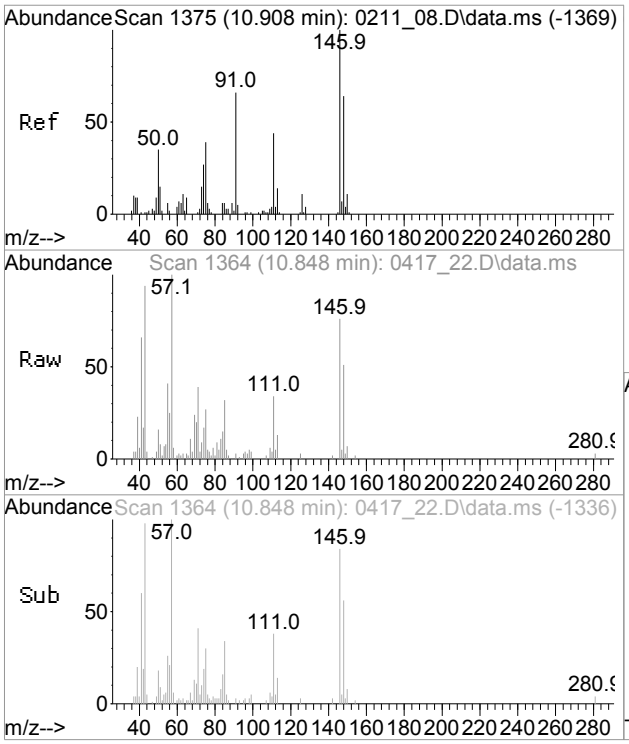


#68
1,2,4-Trimethylbenzene
Concen: 0.37 ppbv
RT: 10.783 min Scan# 1352
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:105 Resp: 23035

Ion	Ratio	Lower	Upper
105	100		
120	40.8	46.6	70.0#
77	347.0	18.8	28.2#

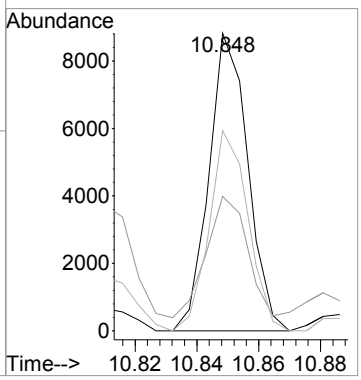


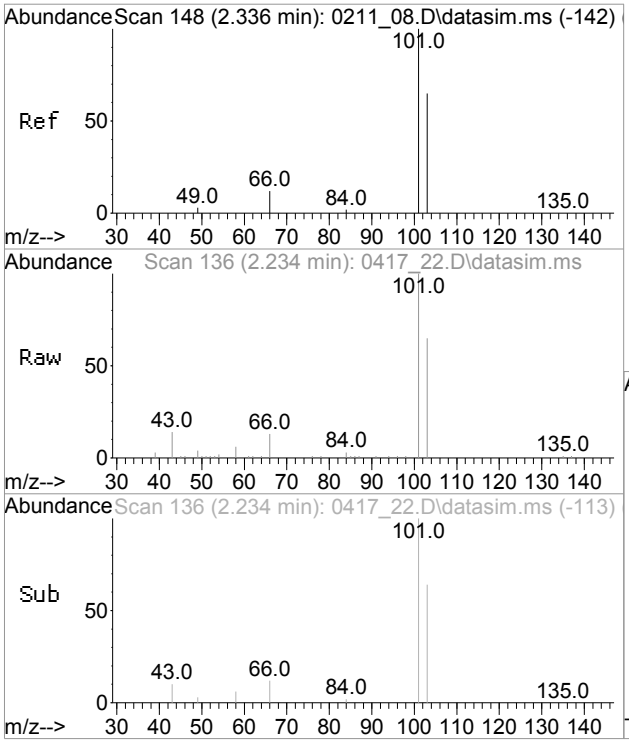


#71
1,3-Dichlorobenzene
Concen: 0.18 ppbv
RT: 10.848 min Scan# 1364
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:146 Resp: 7689

Ion	Ratio	Lower	Upper
146	100		
111	44.9	26.8	40.2#
148	67.2	51.8	77.8

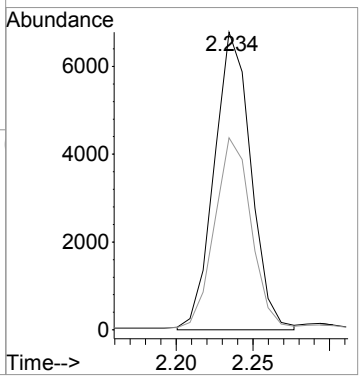


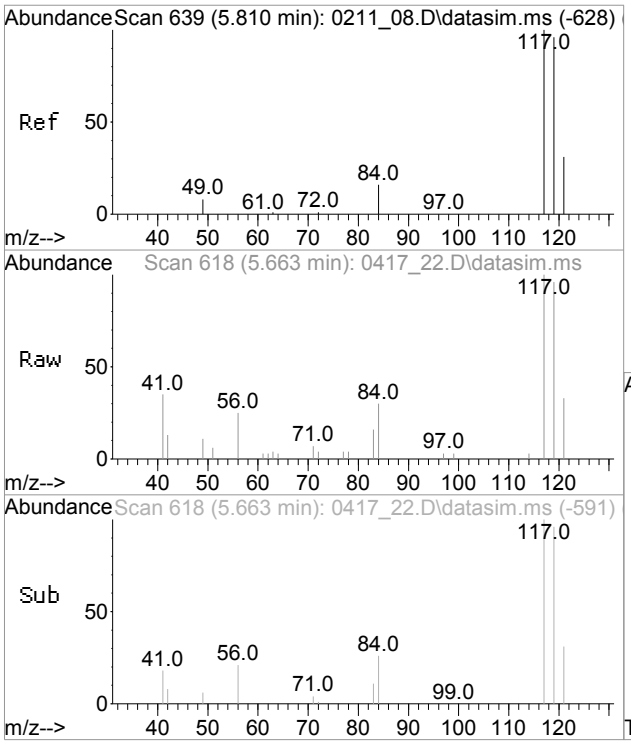


#84
Trichlorofluoromethane(sim)
Concen: 0.18 ppbv
RT: 2.232 min Scan# 136
Delta R.T. -0.009 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:101 Resp: 10347

Ion	Ratio	Lower	Upper
101	100		
103	64.8	51.5	77.3

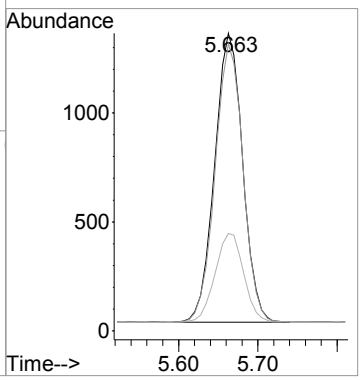


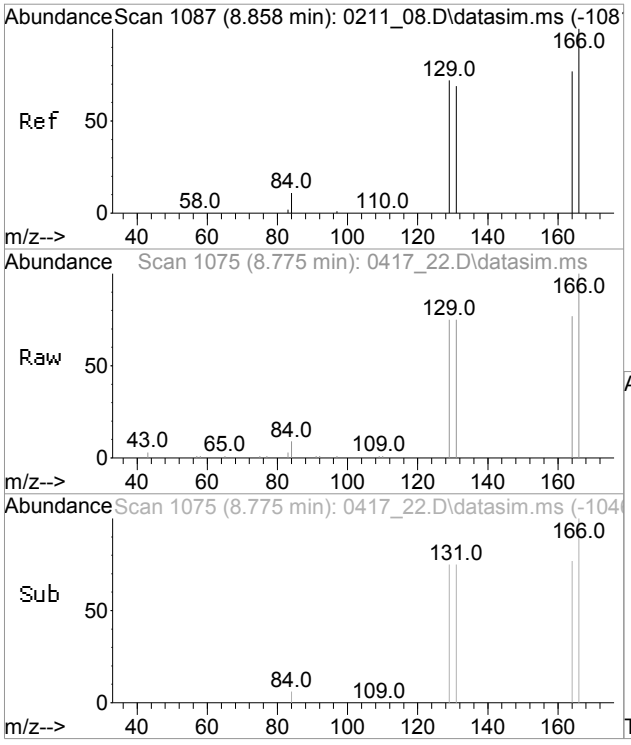


#91
Carbon Tetrachloride(sim)
Concen: 0.07 ppbv
RT: 5.663 min Scan# 618
Delta R.T. -0.007 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:117 Resp: 3251

Ion	Ratio	Lower	Upper
117	100		
119	96.0	76.8	115.2
121	31.3	24.7	37.1

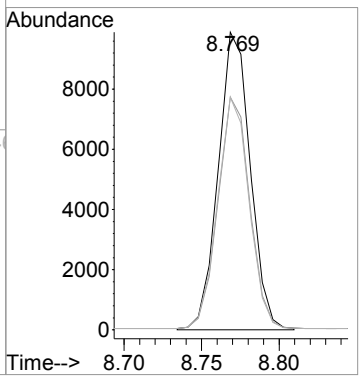


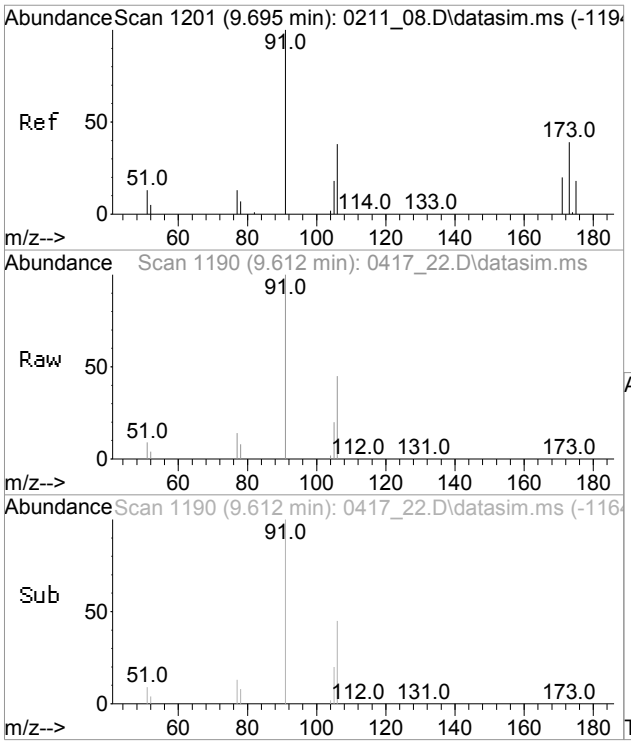


#102
Tetrachloroethene(sim)
Concen: 0.54 ppbv
RT: 8.772 min Scan# 1075
Delta R.T. -0.003 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:166 Resp: 13027

Ion	Ratio	Lower	Upper
166	100		
164	78.3	58.9	98.9
129	76.0	40.9	80.9

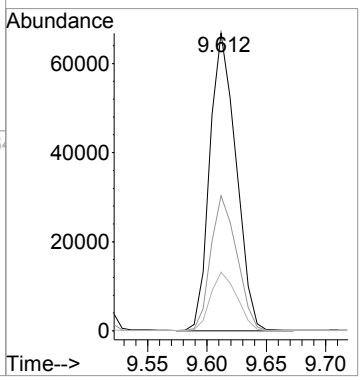


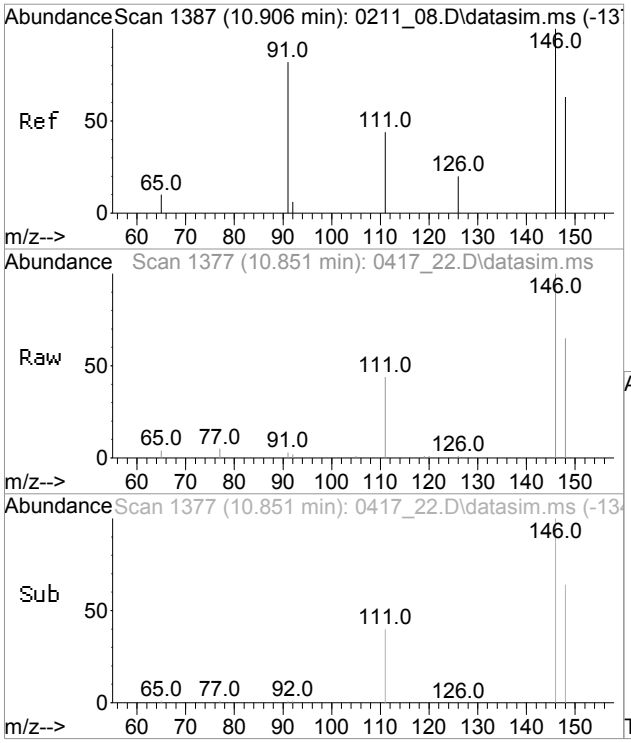


#106
m,p-Xylene(sim)
Concen: 1.97 ppbv
RT: 9.609 min Scan# 1190
Delta R.T. -0.008 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion: 91 Resp: 96852

Ion	Ratio	Lower	Upper
91	100		
106	45.3	43.6	53.3
105	19.7	17.0	25.6

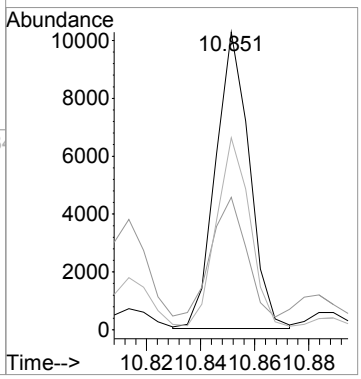




#111
1,3-Dichlorobenzene(sim)
Concen: 0.20 ppbv
RT: 10.851 min Scan# 1377
Delta R.T. -0.000 min
Lab File: 0417_22.D
Acq: 17 Apr 2017 9:19 pm

Tgt Ion:146 Resp: 8924

Ion	Ratio	Lower	Upper
146	100		
111	41.3	26.3	39.5#
148	64.5	52.2	78.4



1

CLIENT ID

AIR ANALYSIS DATA SHEET

CANISTER BLK 1041

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: CANISTE CANBL

Canister: CANBL Lab File ID: 0328_19.D

Instrument: CHEM20 Column: zb-1ms Date Received:

Purge Volume 200 (cc) Date Analyzed: 03/29/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.480		0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
75-71-8	Dichlorodifluoromethane(sim)	0.202	U	0.202	0.202	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.040	U	0.040	0.040	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-15-0	Carbon Disulfide(sim)	0.321	U	0.321	0.321	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
67-66-3	Chloroform(sim)	0.205	U	0.205	0.205	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

AIR ANALYSIS DATA SHEET

CLIENT ID: CANISTER BLK 1041

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: CANISTE CANBL

Canister: CANBL Lab File ID: 0328_19.D

Instrument: CHEM20 Column: zb-1ms Date Received:

Purge Volume 200 (cc) Date Analyzed: 03/29/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
127-18-4	Tetrachloroethene(sim)	0.037	U	0.037	0.037	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
108-90-7	Chlorobenzene(sim)	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene(sim)	0.230	U	0.230	0.230	r
179601-23-1	m,p-Xylene(sim)	0.230	U	0.230	0.230	r
100-42-5	Styrene(sim)	0.235	U	0.235	0.235	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
95-47-6	o-Xylene(sim)	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene(sim)	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene(sim)	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene(sim)	0.204	U	0.204	0.204	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
135-98-8	sec-Butylbenzene(sim)	0.182	U	0.182	0.182	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM20\03MAR\28\
Data File : 0328_19.D
Acq On : 29 Mar 2017 12:47 am
Operator : CORTEX\ms
Client ID : CANISTER BLK 1041
Lab ID : CANISTER BLK 1041
ALS Vial : 1 Sample Multiplier: 1

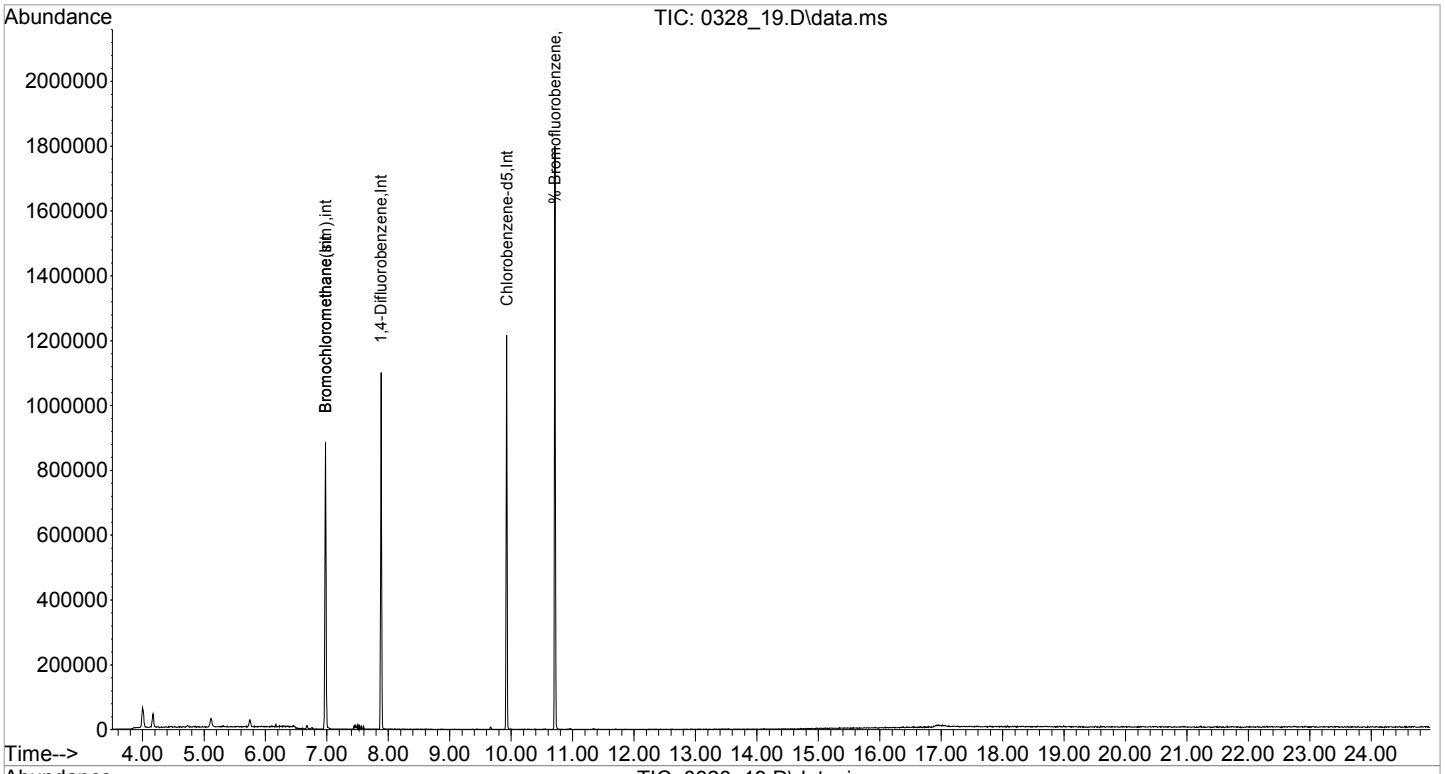
Quant Time: Mar 29 08:31:39 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0323.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Fri Mar 24 10:23:55 2017
Response via : Initial Calibration

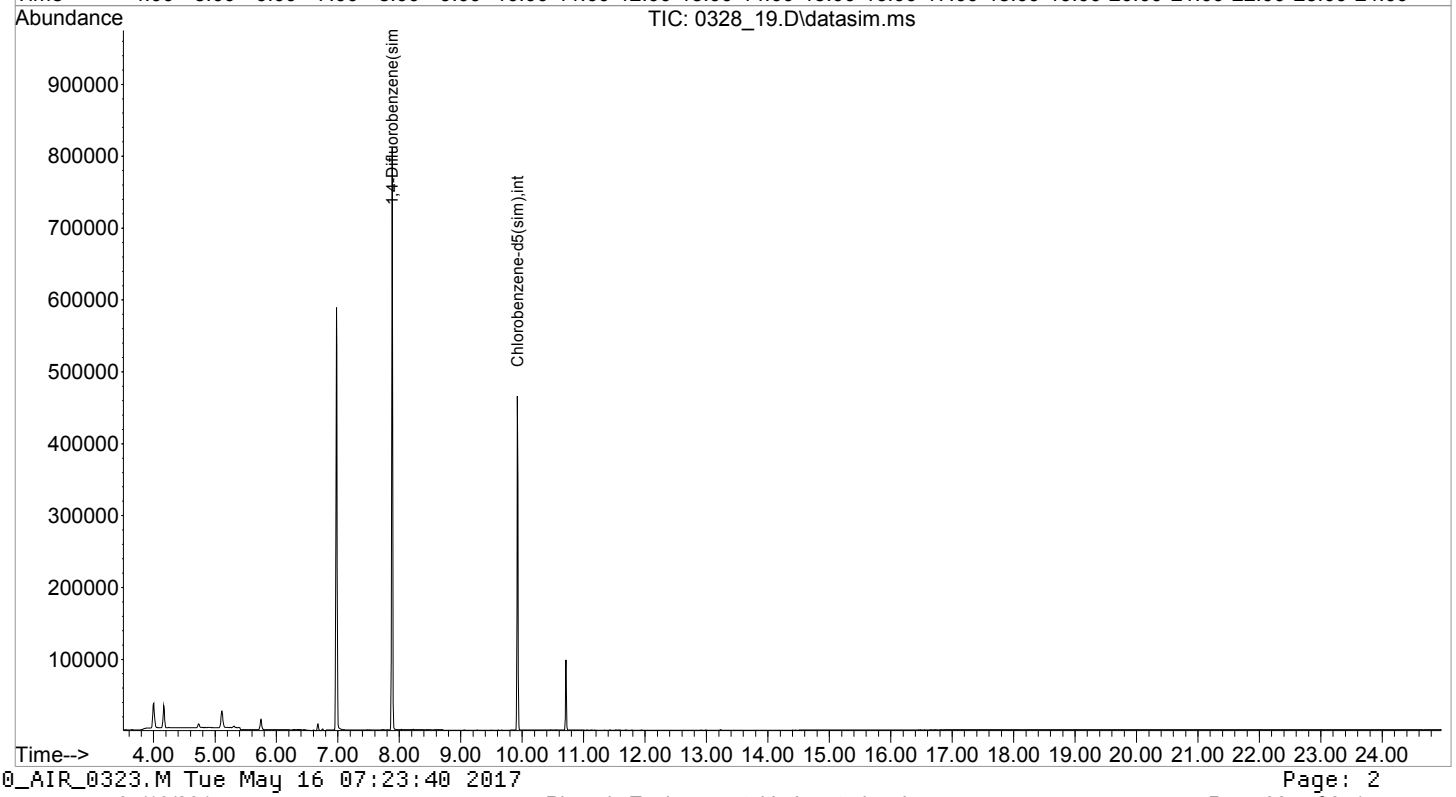
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	6.979	130	178796	10.000	ng		0.00
36) 1,4-Difluorobenzene	7.881	114	460176	10.000	ng		0.00
53) Chlorobenzene-d5	9.927	82	182751	10.000	ng	#	0.00
80) Bromochloromethane(sim)	6.979	130	178796	10.000	ng		0.00
97) 1,4-Difluorobenzene(sim)	7.884	114	541549	10.000	ng		0.00
107) Chlorobenzene-d5(sim)	9.922	82	189335	10.000	ng	#	0.00
System Monitoring Compounds							
62) % Bromofluorobenzene	10.711	95	264192	10.645	ppbv		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.50%				
Target Compounds							Qvalue
12) Acetone	5.103	43	23727	0.478	ppbv	#	36

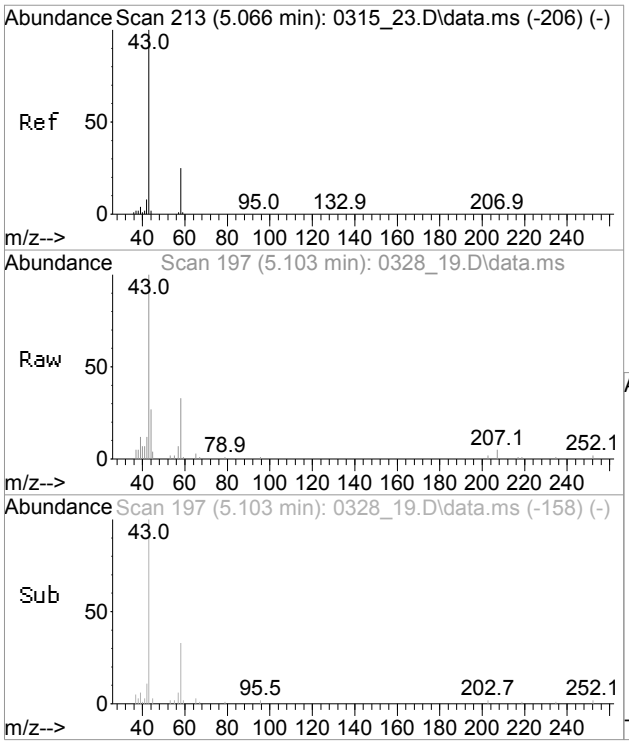
(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM20\03MAR\28\
Data File : 0328_19.D
Acq On : 29 Mar 2017 12:47 am
Operator : CORTEX\ms
Client ID : CANISTER BLK 1041
Lab ID : CANISTER BLK 1041
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 29 08:31:39 2017
Quant Method : H:\AIR2017\CHEM20\METHODS\20_AIR_0323.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Fri Mar 24 10:23:55 2017
Response via : Initial Calibration



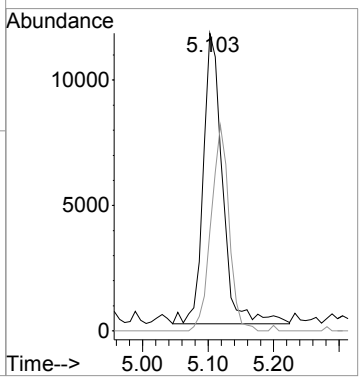




#12
Acetone
Concen: 0.48 ppbv
RT: 5.103 min Scan# 197
Delta R.T. 0.013 min
Lab File: 0328_19.D
Acq: 29 Mar 2017 12:47 am

Tgt Ion: 43 Resp: 23727

Ion	Ratio	Lower	Upper
43	100		
58	66.1	24.8	37.2#



Canister Cleaning Certification

Batch Id: 1041

QC Canister Id: 733

Canister Ids: 11285, 12857, 12864, 12868, 12869, 13643, 19816, 19969, 21345, 21368, 23343, 733

Certified: ☑

Certified Date: 3/29/2017 12:47:00 AM

Certified By: KCA

Certified Computer: AIRLABPL223

Sample Id: BLK 1041

Comment: Initial vacuum of all canisters in this batch is -30 psig.

Data File: H:\AIR2017\CHEM20\03MAR\28\0328_19.D\0328_19-20_AIR_0323.rr

Analyte	Result (ppbv)	Analyte	Result (ppbv)
% Bromofluorobenzene	10.6454	1,1,1,2-Tetrachloroethane	0
1,1,1-Trichloroethane	0	1,1,1-Trichloroethane(sim)	0
1,1,2,2-Tetrachloroethane	0	1,1,2,2-Tetrachloroethane(sim)	0
1,1,2-Trichloroethane	0	1,1,2-Trichloroethane(sim)	0
1,1-Dichloroethane	0	1,1-Dichloroethane(sim)	0
1,1-Dichloroethene	0	1,1-Dichloroethene(sim)	0
1,2,4-Trichlorobenzene	0	1,2,4-Trichlorobenzene(sim)	0
1,2,4-Trimethylbenzene	0	1,2,4-Trimethylbenzene(sim)	0
1,2-Dibromoethane(EDB)	0	1,2-Dibromoethane(EDB)(sim)	0
1,2-Dichlorobenzene	0	1,2-Dichlorobenzene(sim)	0
1,2-Dichloroethane	0	1,2-Dichloroethane(sim)	0
1,2-dichloropropane	0	1,2-dichloropropane(sim)	0
1,2-Dichlorotetrafluoroethane	0	1,2-Dichlorotetrafluoroethane(sim)	0
1,3,5-Trimethylbenzene	0	1,3,5-Trimethylbenzene(sim)	0
1,3-Butadiene	0	1,3-Dichlorobenzene	0
1,3-Dichlorobenzene(sim)	0	1,4-Dichlorobenzene	0
1,4-Dichlorobenzene(sim)	0	1,4-Difluorobenzene (Internal Standard)	10
1,4-Difluorobenzene(sim) (Internal Standard	10	1,4-Dioxane	0
1,4-Dioxane(sim)	0	2,2,4-trimethylpentane	0
2-Chlorotoluene	0	2-Hexanone(MBK)	0
4-Ethyltoluene	0	4-Ethyltoluene(sim)	0
4-Isopropyltoluene	0	4-Isopropyltoluene(sim)	0
4-Methyl-2-pentanone(MIBK)	0	Acetone	0.4784
Acrylonitrile	0	Allyl Chloride	0
Benzene	0	Benzene(sim)	0
Benzyl chloride	0	Benzyl chloride(sim)	0
Bromochloromethane (Internal Standard)	10	Bromochloromethane(sim) (Internal Standa	10
Bromodichloromethane	0	Bromodichloromethane(sim)	0
Bromoform	0	Bromoform(sim)	0
Bromomethane	0	Bromomethane(sim)	0
Carbon Disulfide	0	Carbon Disulfide(sim)	0
Carbon Tetrachloride	0	Carbon Tetrachloride(sim)	0
Chlorobenzene	0	Chlorobenzene(sim)	0
Chlorobenzene-d5 (Internal Standard)	10	Chlorobenzene-d5(sim) (Internal Standard)	10
Chloroethane	0	Chloroform	0
Chloroform(sim)	0	Chloromethane	0
Cis-1,2-Dichloroethene	0	Cis-1,2-Dichloroethene(sim)	0
cis-1,3-Dichloropropene	0	cis-1,3-Dichloropropene(sim)	0
Cyclohexane	0	Dibromochloromethane	0
Dibromochloromethane(sim)	0	Dichlorodifluoromethane	0
Dichlorodifluoromethane(sim)	0	Ethanol	0.4828
Ethyl acetate	0	Ethylbenzene	0
Ethylbenzene(sim)	0	Heptane	0
Hexachlorobutadiene	0	Hexachlorobutadiene(sim)	0
Hexane	0	Isopropylalcohol	0
Isopropylbenzene	0	Isopropylbenzene(sim)	0

Canister Cleaning Certification

Batch Id: 1041

QC Canister Id: 733

Canister Ids: 11285, 12857, 12864, 12868, 12869, 13643, 19816, 19969, 21345, 21368, 23343, 733

Certified: ☑

Certified Date: 3/29/2017 12:47:00 AM

Certified By: KCA

Certified Computer: AIRLABPL223

Sample Id: BLK 1041

Comment: Initial vacuum of all canisters in this batch is -30 psig.

Data File: H:\AIR2017\CHEM20\03MAR\28\0328_19.D\0328_19-20_AIR_0323.rr

Analyte	Result (ppbv)	Analyte	Result (ppbv)
m,p-Xylene	0	m,p-Xylene(sim)	0
Methyl Ethyl Ketone	0.2104	Methyl methacrylate	0
Methyl tert-butyl ether(MTBE)	0	Methylene Chloride	0
n-Butylbenzene	0	n-Butylbenzene(sim)	0
n-Propylbenzene	0	n-Propylbenzene(sim)	0
Naphthalene	0	Naphthalene(sim)	0
o-Xylene	0	o-Xylene(sim)	0
Propylene	0	sec-Butylbenzene	0
sec-Butylbenzene(sim)	0	Styrene	0
Styrene(sim)	0	tert-butyl alcohol	0.2906
tert-butylbenzenze	0	tert-butylbenzenze(sim)	0
Tetrachloroethene	0	Tetrachloroethene(sim)	0
Tetrahydrofuran	0	Toluene	0
Trans-1,2-Dichloroethene	0	Trans-1,2-Dichloroethene(sim)	0
trans-1,3-Dichloropropene	0	Trichloroethene	0
Trichloroethene(sim)	0	Trichlorofluoromethane	0
Trichlorofluoromethane(sim)	0	Trichlorotrifluoroethane	0
Trichlorotrifluoroethane(sim)	0	Vinyl Bromide	0
Vinyl Chloride	0	Vinyl Chloride(sim)	0

1

AIR ANALYSIS DATA SHEET

CLIENT ID: CANISTER BLK 1042

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: CANISTE CANBL

Canister: CANBL Lab File ID: 0330_10.D

Instrument: CHEM24 Column: zb-1ms Date Received:

Purge Volume 200 (cc) Date Analyzed: 03/30/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.470		0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.288	U	0.288	0.288	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
67-66-3	Chloroform	0.205	U	0.205	0.205	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	0.313	U	0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	0.230	U	0.230	0.230	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
95-47-6	o-Xylene	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.098	U	0.098	0.098	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

CLIENT ID

AIR ANALYSIS DATA SHEET

CANISTER BLK 1042

Client: AIRTEK Lab: Phoenix Env. Labs

SDG No.: GBY03105 Lab Sample ID: CANISTE CANBL

Canister: CANBL Lab File ID: 0330_10.D

Instrument: CHEM24 Column: zb-1ms Date Received:

Purge Volume 200 (cc) Date Analyzed: 03/30/17

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m3) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
156-60-5	Trans-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-35-4	1,1-Dichloroethene(sim)	0.252	U	0.252	0.252	r
75-34-3	1,1-Dichloroethane(sim)	0.247	U	0.247	0.247	r
156-59-2	Cis-1,2-Dichloroethene(sim)	0.252	U	0.252	0.252	r
107-06-2	1,2-Dichloroethane(sim)	0.247	U	0.247	0.247	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.040	U	0.040	0.040	r
76-13-1	Trichlorotrifluoroethane(sim)	0.131	U	0.131	0.131	r
78-87-5	1,2-dichloropropane(sim)	0.217	U	0.217	0.217	r
75-27-4	Bromodichloromethane(sim)	0.149	U	0.149	0.149	r
79-01-6	Trichloroethene(sim)	0.047	U	0.047	0.047	r
123-91-1	1,4-Dioxane(sim)	0.278	U	0.278	0.278	r
10061-01-5	cis-1,3-Dichloropropene(sim)	0.220	U	0.220	0.220	r
79-00-5	1,1,2-Trichloroethane(sim)	0.183	U	0.183	0.183	r
124-48-1	Dibromochloromethane(sim)	0.117	U	0.117	0.117	r
106-93-4	1,2-Dibromoethane(EDB)(sim)	0.130	U	0.130	0.130	r
127-18-4	Tetrachloroethene(sim)	0.037	U	0.037	0.037	r
75-25-2	Bromoform(sim)	0.097	U	0.097	0.097	r
630-20-6	1,1,1,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
179601-23-1	m,p-Xylene(sim)	0.230	U	0.230	0.230	r
79-34-5	1,1,2,2-Tetrachloroethane(sim)	0.146	U	0.146	0.146	r
100-44-7	Benzyl chloride(sim)	0.193	U	0.193	0.193	r
541-73-1	1,3-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
106-46-7	1,4-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
135-98-8	sec-Butylbenzene(sim)	0.182	U	0.182	0.182	r
99-87-6	4-Isopropyltoluene(sim)	0.182	U	0.182	0.182	r
95-50-1	1,2-Dichlorobenzene(sim)	0.166	U	0.166	0.166	r
104-51-8	n-Butylbenzene(sim)	0.182	U	0.182	0.182	r
120-82-1	1,2,4-Trichlorobenzene(sim)	0.135	U	0.135	0.135	r
87-68-3	Hexachlorobutadiene(sim)	0.094	U	0.094	0.094	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Quantitation Report (QT Reviewed)

Data Path : H:\AIR2017\CHEM24\03MAR\30\
Data File : 0330_10.D
Acq On : 30 Mar 2017 3:25 pm
Operator : Keith
Client ID : CANISTER BLK 1042
Lab ID : CANISTER BLK 1042
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 31 12:40:45 2017
Quant Method : H:\AIR2017\CHEM24\METHODS\24AIR_0307.M
Quant Title : VOA Standards for 5 point calibration
QLast Update : Wed Mar 08 10:07:17 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	3.945	130	204308	10.000	ng	-0.04
36) 1,4-Difluorobenzene	5.934	114	701293	10.000	ng	-0.03
53) Chlorobenzene-d5	9.207	82	346604	10.000	ng	-0.01
80) Bromochloromethane(sim)	3.945	130	204308	10.000	ng	-0.04
93) 1,4-Difluorobenzene(sim)	5.937	114	758553	10.000	ng	#-0.03
103) Chlorobenzene-d5(sim)	9.210	82	362771	10.000	ng	-0.02
System Monitoring Compounds						
62) % Bromofluorobenzene	10.124	95	455890	9.917	ppbv	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.20%			
Target Compounds						Qvalue
12) Acetone	2.223	43	9957	0.475	ppbv#	1

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

Data Path : H:\AIR2017\CHEM24\03MAR\30\
Data File : 0330_10.D
Acq On : 30 Mar 2017 3:25 pm
Operator : Keith
Client ID : CANISTER BLK 1042
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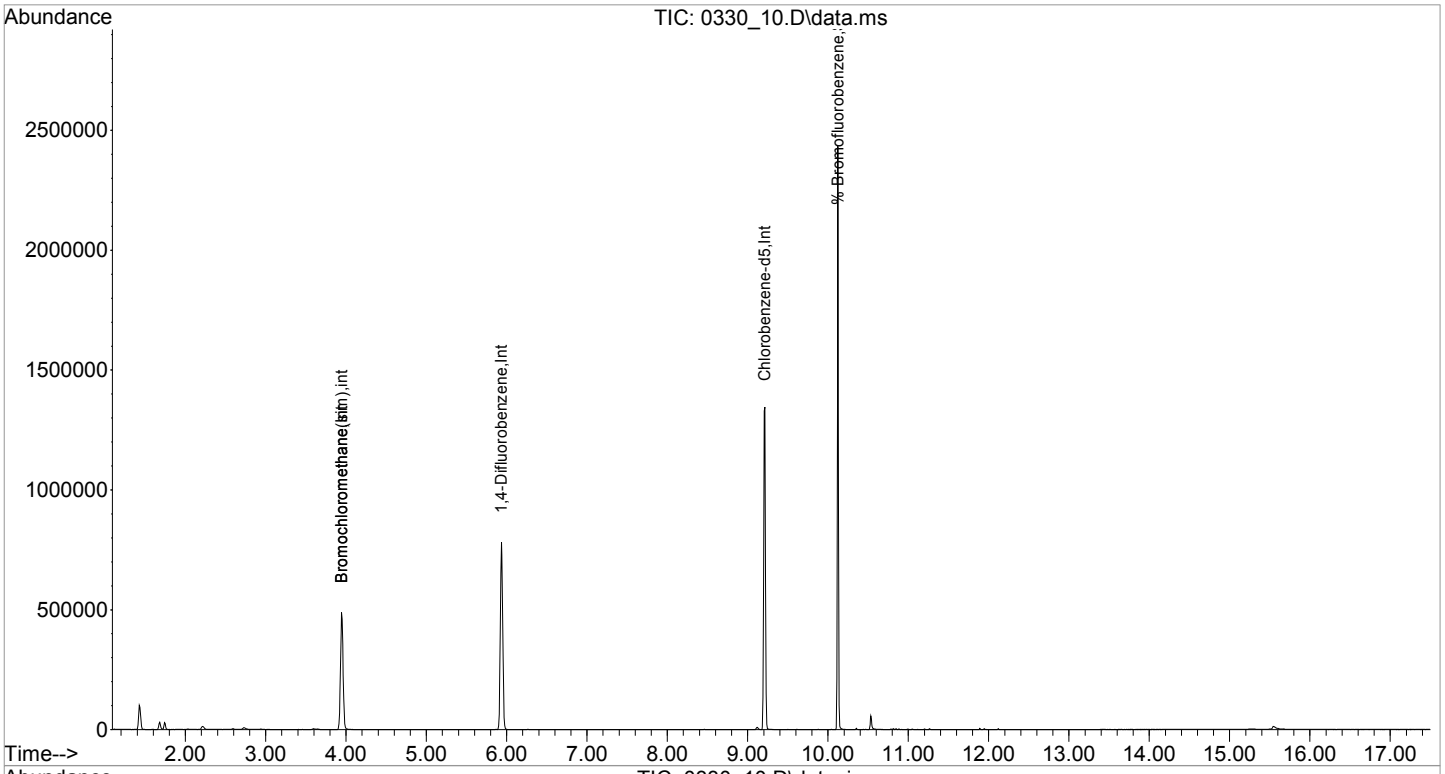
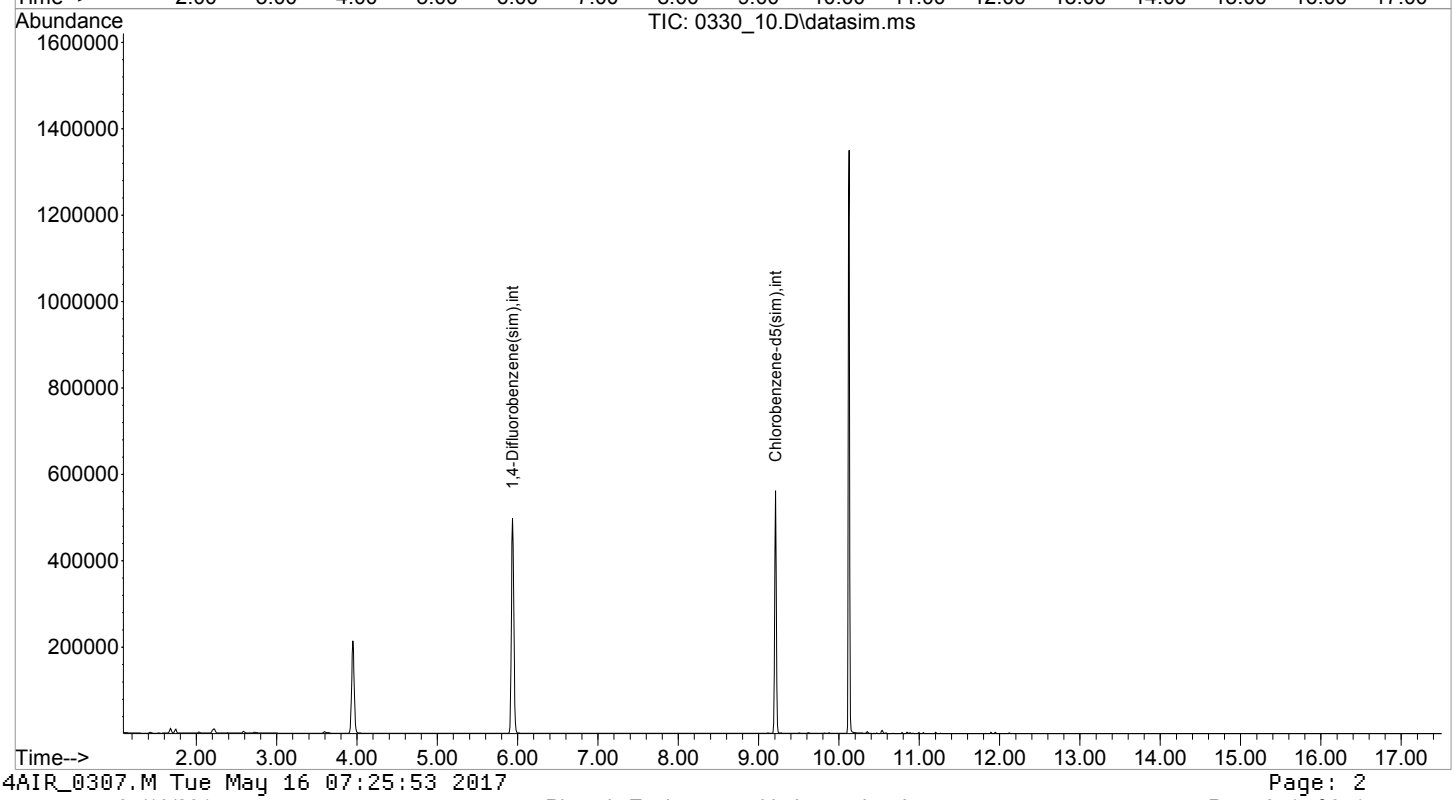
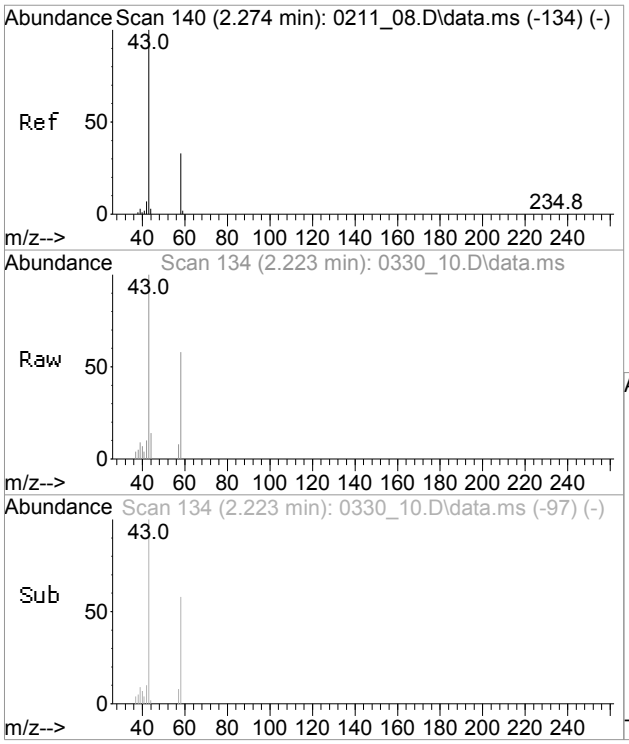


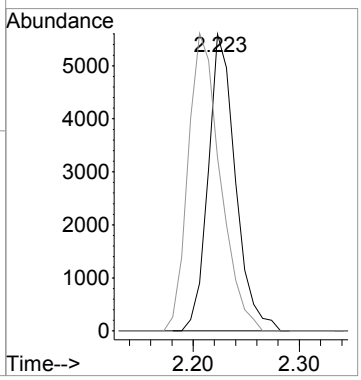




#12
Acetone
Concen: 0.47 ppbv
RT: 2.223 min Scan# 134
Delta R.T. 0.017 min
Lab File: 0330_10.D
Acq: 30 Mar 2017 3:25 pm

Tgt Ion: 43 Resp: 9957

Ion	Ratio	Lower	Upper
43	100		
58	118.6	21.8	32.8#



Canister Cleaning Certification

Batch Id: 1042

QC Canister Id: 788

Canister Ids: 11287, 19630, 19806, 19835, 19916, 19962, 21323, 21333, 23336, 369, 464, 788

Certified: ☑

Certified Date: 3/30/2017 3:25:00 PM

Certified By: KCA

Certified Computer: AIRLABPL223

Sample Id: blk 1042

Comment: Initial vacuum of all canisters in this batch is -30 psig.

Data File: H:\AIR2017\CHEM24\03MAR\30\0330_10.D\0330_10-24AIR_0307.rr

Analyte	Result (ppbv)	Analyte	Result (ppbv)
% Bromofluorobenzene	9.9171	1,1,1,2-Tetrachloroethane	0
1,1,1,2-Tetrachloroethane(sim)	0	1,1,1-Trichloroethane	0
1,1,1-Trichloroethane(sim)	0	1,1,2,2-Tetrachloroethane	0
1,1,2,2-Tetrachloroethane(sim)	0	1,1,2-Trichloroethane	0
1,1,2-Trichloroethane(sim)	0	1,1-Dichloroethane	0
1,1-Dichloroethane(sim)	0	1,1-Dichloroethene	0
1,1-Dichloroethene(sim)	0	1,2,4-Trichlorobenzene	0
1,2,4-Trichlorobenzene(sim)	0	1,2,4-Trimethylbenzene	0
1,2-Dibromoethane(EDB)	0	1,2-Dibromoethane(EDB)(sim)	0
1,2-Dichlorobenzene	0	1,2-Dichlorobenzene(sim)	0
1,2-Dichloroethane	0	1,2-Dichloroethane(sim)	0
1,2-dichloropropane	0	1,2-dichloropropane(sim)	0
1,2-Dichlorotetrafluoroethane	0	1,2-Dichlorotetrafluoroethane(sim)	0
1,3,5-Trimethylbenzene	0	1,3-Butadiene	0
1,3-Dichlorobenzene	0	1,3-Dichlorobenzene(sim)	0
1,4-Dichlorobenzene	0	1,4-Dichlorobenzene(sim)	0
1,4-Difluorobenzene (Internal Standard)	10	1,4-Difluorobenzene(sim) (Internal Standard	10
1,4-Dioxane	0	1,4-Dioxane(sim)	0
2,2,4-trimethylpentane	0	2-Chlorotoluene	0
2-Hexanone(MBK)	0	4-Ethyltoluene	0
4-Isopropyltoluene	0	4-Isopropyltoluene(sim)	0
4-Methyl-2-pentanone(MIBK)	0	Acetone	0.4746
Acrylonitrile	0	Allyl Chloride	0
Benzene	0	Benzyl chloride	0
Benzyl chloride(sim)	0	Bromochloromethane (Internal Standard)	10
Bromochloromethane(sim) (Internal Standa	10	Bromodichloromethane	0
Bromodichloromethane(sim)	0	Bromoform	0
Bromoform(sim)	0	Bromomethane	0
Bromomethane(sim)	0	Carbon Disulfide	0
Carbon Tetrachloride	0	Carbon Tetrachloride(sim)	0
Chlorobenzene	0	Chlorobenzene-d5 (Internal Standard)	10
Chlorobenzene-d5(sim) (Internal Standard)	10	Chloroethane	0
Chloroform	0	Chloromethane	0
Cis-1,2-Dichloroethene	0	Cis-1,2-Dichloroethene(sim)	0
cis-1,3-Dichloropropene	0	cis-1,3-Dichloropropene(sim)	0
Cyclohexane	0	Dibromochloromethane	0
Dibromochloromethane(sim)	0	Dichlorodifluoromethane	0
Ethanol	0.4858	Ethyl acetate	0
Ethylbenzene	0	Heptane	0
Hexachlorobutadiene	0	Hexachlorobutadiene(sim)	0
Hexane	0	Isopropylalcohol	0
Isopropylbenzene	0	m,p-Xylene	0
m,p-Xylene(sim)	0	Methyl Ethyl Ketone	0.2846
Methyl methacrylate	0	Methyl tert-butyl ether(MTBE)	0
Methylene Chloride	0	n-Butylbenzene	0
n-Butylbenzene(sim)	0	n-Propylbenzene	0

Canister Cleaning Certification

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QC Canister Id: 788
Canister Ids: 11287, 19630, 19806, 19835, 19916, 19962, 21323, 21333, 23336, 369, 464, 788

Certified: ☑
Certified Date: 3/30/2017 3:25:00 PM
Certified By: KCA
Certified Computer: AIRLABPL223
Sample Id: blk 1042

Comment: Initial vacuum of all canisters in this batch is -30 psig.

Data File: H:\AIR2017\CHEM24\03MAR\30\0330_10.D\0330_10-24AIR_0307.rr

Analyte	Result (ppbv)	Analyte	Result (ppbv)
n-Propylbenzene(sim)	0	Naphthalene	0
Naphthalene(sim)	0	o-Xylene	0
Propylene	0.317	sec-Butylbenzene	0
sec-Butylbenzene(sim)	0	Styrene	0
tert-butyl alcohol	0.3342	tert-butylbenzenze	0
tert-butylbenzenze(sim)	0	Tetrachloroethene	0
Tetrachloroethene(sim)	0	Tetrahydrofuran	0
Toluene	0	Trans-1,2-Dichloroethene	0
Trans-1,2-Dichloroethene(sim)	0	trans-1,3-Dichloropropene	0
Trichloroethene	0	Trichloroethene(sim)	0
Trichlorofluoromethane	0	Trichlorofluoromethane(sim)	0
Trichlorotrifluoroethane	0	Trichlorotrifluoroethane(sim)	0
Vinyl Bromide	0	Vinyl Chloride	0
Vinyl Chloride(sim)	0		

Injection Log

Data Directory: H:\AIR2017\CHEM20\03MAR\28\

Line	Vl	FileName	SampleName	MiscInfo	Injection Time
1)	0	0328_23.D	*** No MS or GC data present ***		N/A
2)	1	0328_01.D	1ppb cc;air04q	istd;air05d	03/28/17 12:47
3)	1	0328_02.D	10ppb cc;air04v	istd;air05d	03/28/17 13:24
4)	1	0328_03.D	10ppb lcs ; air04y	istd;air05d	03/28/17 14:03
5)	1	0328_04.D	0/0	istd;air05d	03/28/17 14:38
6)	1	0328_05.D	0/0	istd;air05d	03/28/17 15:13
7)	1	0328_06.D	blk for dil	istd;air05d	03/28/17 16:40
8)	1	0328_07.D	94501	istd;air05d	03/28/17 17:21
9)	1	0328_08.D	94502	istd;air05d	03/28/17 18:01
10)	1	0328_09.D	94499	istd;air05d	03/28/17 18:42
11)	1	0328_10.D	94500	istd;air05d	03/28/17 19:22
12)	1	0328_11.D	95208	istd;air05d	03/28/17 20:02
13)	1	0328_12.D	0/0	istd;air05d	03/28/17 21:03
14)	1	0328_13.D	94502 dup	istd;air05d	03/28/17 21:43
15)	1	0328_14.D	94499 10x	istd;air05d	03/28/17 22:21
16)	1	0328_15.D	94500 30x;2x	istd;air05d	03/28/17 22:58
17)	1	0328_16.D	0/0	istd;air05d	03/28/17 23:34
18)	1	0328_17.D	0/0	istd;air05d	03/29/17 0:09
19)	1	0328_19.D	CANISTER BLK 1041	CANISTER BLK 1041	03/29/17 0:47
20)	1	0328_20.D	0/0	istd;air05d	03/29/17 1:23
21)	1	0328_21.D	1.0PPB;AIR04Q	istd;air05d	03/29/17 1:59
22)	1	0328_22.D	10PPB;AIR04V	istd;air05d	03/29/17 2:36

Injection Log

Data Directory: H:\AIR2017\CHEM20\04APR\05\

Line	Vl	FileName	SampleName	MiscInfo	Injection Time
1)	0	0406_17.D	*** No MS or GC data present ***		N/A
2)	0	0405_28.D	*** No MS or GC data present ***		N/A
3)	1	0405_01.D	0/0	istd;air05d	04/05/17 10:51
4)	1	0405_02.D	BFB TUNE	0/0	04/05/17 11:26
5)	1	0405_03.D	ICAL 0.035	0.035ppb	04/05/17 12:02
6)	1	0405_04.D	ICAL 0.05	0.05ppb;air03m	04/05/17 12:39
7)	1	0405_05.D	ICAL 0.1	0.10ppb;air03m	04/05/17 13:15
8)	1	0405_06.D	ICAL 0.25	0.2ppb;air03m	04/05/17 13:52
9)	1	0405_07.D	ICAL 0.5	0.5ppb;air03m	04/05/17 14:31
10)	1	0405_08.D	ICAL 1	1.0ppb;air03y	04/05/17 15:07
11)	1	0405_09.D	ICAL 2.5	2.5ppb;air03y	04/05/17 15:45
12)	1	0405_10.D	ICAL 5	5.0ppb;air03w	04/05/17 16:22
13)	1	0405_11.D	ICAL 10	10ppb;air03w	04/05/17 16:58
14)	1	0405_12.D	ICAL 25	25ppb;air03w	04/05/17 17:37
15)	1	0405_13.D	ICAL 40	40ppb;air03w	04/05/17 18:16
16)	1	0405_14.D	10PPB LCS ;air06a	istd;air05d	04/05/17 18:55
17)	1	0405_15.D	0/0	istd;air05d	04/05/17 19:29
18)	1	0405_16.D	0/0	istd;air05d	04/05/17 20:27
19)	1	0405_17.D	BLK 1046	istd;air05d	04/05/17 21:06
20)	1	0405_18.D	BLK 1047	istd;air05d	04/05/17 21:45
21)	1	0405_19.D	99687	istd;air05d	04/05/17 22:24
22)	1	0405_20.D	99689	istd;air05d	04/05/17 23:04
23)	1	0405_21.D	99690	istd;air05d	04/05/17 23:44
24)	1	0405_22.D	99692	istd;air05d	04/06/17 0:23
25)	1	0405_23.D	99475	istd;air05d	04/06/17 1:03
26)	1	0405_24.D	99476	istd;air05d	04/06/17 1:43
27)	1	0405_25.D	99477	istd;air05d	04/06/17 2:23
28)	1	0405_26.D	99688	istd;air05d	04/06/17 3:02
29)	1	0405_27.D	99691	istd;air05d	04/06/17 3:42
30)	1	0405_29.D	99476 DUP	istd;air05d	04/06/17 8:51
31)	1	0406_01.D	0.2 PPB RL;AIR 03M	istd;air05d	04/06/17 9:46
32)	1	0406_02.D	1.0ppb;air03y	istd;air05d	04/06/17 10:22
33)	1	0406_03.D	10ppb;air03w	istd;air05d	04/06/17 10:59
34)	1	0406_04.D	10PPB LCS ;air06a	istd;air05d	04/06/17 11:37
35)	1	0406_05.D	0/0	istd;air05d	04/06/17 12:12
36)	1	0406_06.D	0/0	istd;air05d	04/06/17 12:46
37)	1	0406_07.D	00163	istd;air05d	04/06/17 18:14
38)	1	0406_08.D	00161	istd;air05d	04/06/17 18:54
39)	1	0406_09.D	00161	istd;air05d	04/06/17 19:34
40)	1	0406_10.D	00162 10X	istd;air05d	04/06/17 20:11
41)	1	0406_11.D	00161 3X;10X	istd;air05d	04/06/17 20:48
42)	1	0406_12.D	0/0	istd;air05d	04/06/17 21:31
43)	1	0406_13.D	00163 DUP	istd;air05d	04/06/17 22:11
44)	1	0406_14.D	0/0	istd;air05d	04/06/17 22:53
45)	1	0406_15.D	1.0ppb;air03y	istd;air05d	04/06/17 23:30
46)	1	0406_16.D	10ppb;air03w	istd;air05d	04/07/17 0:07

Injection Log

Data Directory: H:\AIR2017\CHEM20\04APR\12\

Line	Vl	FileName	SampleName	MiscInfo	Injection Time
1)	0	0412_05A.D	*** No MS or GC data present ***		N/A
2)	0	0412_06.D	*** No MS or GC data present ***		N/A
3)	0	0412_01A.D	*** No MS or GC data present ***		N/A
4)	0	0412_67.D	*** No MS or GC data present ***		N/A
5)	1	0412_01.D	0/0	istd;air05v	04/12/17 16:03
6)	1	0412_02.D	1.0ppb; air04q	istd;air05v	04/12/17 17:17
7)	1	0412_03.D	10ppb;04v	istd;air05v	04/12/17 17:54
8)	1	0412_04.D	10ppb lcs;04y	istd;air05v	04/12/17 18:33
9)	1	0412_05.D	0.2PPB;AIR05I	istd;air05v	04/12/17 19:09
10)	1	0412_06A.D	0/0	istd;air05v	04/12/17 20:06
11)	1	0412_07.D	0/0	istd;air05v	04/12/17 20:41
12)	1	0412_08.D	blk 1048	istd;air05v	04/12/17 21:20
13)	1	0412_09.D	blk 1049	istd;air05v	04/12/17 21:58
14)	1	0412_10.D	01392 10x	istd;air05v	04/12/17 22:36
15)	1	0412_11.D	01393 2x;10x	istd;air05v	04/12/17 23:13
16)	1	0412_12.D	01311 10x	istd;air05v	04/12/17 23:51
17)	1	0412_13.D	01391 3x;10x	istd;air05v	04/13/17 0:28
18)	1	0412_14.D	01313 3x;10x	istd;air05v	04/13/17 1:05
19)	1	0412_15.D	0/0	istd;air05v	04/13/17 1:40
20)	1	0412_16.D	01318	istd;air05v	04/13/17 2:20
21)	1	0412_17.D	01318 dup	istd;air05v	04/13/17 3:01
22)	1	0412_18.D	01390 3x;10x	istd;air05v	04/13/17 3:38
23)	1	0412_19.D	01310 15x;10x	istd;air05v	04/13/17 4:16
24)	1	0412_20.D	01312 15x;10x	istd;air05v	04/13/17 4:53
25)	1	0412_21.D	01314 15x;10x	istd;air05v	04/13/17 5:30
26)	1	0412_22.D	01316 15x;10x	istd;air05v	04/13/17 6:07
27)	1	0412_23.D	01319 15x;10x	istd;air05v	04/13/17 6:43
28)	1	0412_24.D	01317 15x;10x	istd;air05v	04/13/17 7:20
29)	1	0412_25.D	01973	istd;air05v	04/13/17 8:00
30)	1	0412_26.D	01974	istd;air05v	04/13/17 8:40
31)	1	0412_27.D	01975	istd;air05v	04/13/17 9:19
32)	1	0412_28.D	01976	istd;air05v	04/13/17 9:59
33)	1	0412_29.D	01977	istd;air05v	04/13/17 10:38
34)	1	0412_30.D	01972 2x;5x	istd;air05v	04/13/17 11:15
35)	1	0412_31.D	01971 2x;5x	istd;air05v	04/13/17 11:52
36)	1	0412_32.D	BFB TUNE	0/0	04/13/17 12:27
37)	1	0412_33.D	CCAL 1	1.0ppb; air04q	04/13/17 13:04
38)	1	0412_34.D	CCAL 10	10ppb;04v	04/13/17 13:40
39)	1	0412_35.D	BY03107 LCS	BY03107 LCS	04/13/17 14:19
40)	1	0412_36.D	0.2PPB;AIR05I	istd;air05v	04/13/17 14:56
41)	1	0412_37.D	0/0	istd;air05v	04/13/17 15:30
42)	1	0412_38.D	BY03107 BLANK	BY03107 BLANK	04/13/17 16:05
43)	1	0412_39.D	blk 1050	istd;air05v	04/13/17 17:06
44)	1	0412_40.D	03561	istd;air05v	04/13/17 18:34
45)	1	0412_41.D	IA-1	BY03106	04/13/17 19:14
46)	1	0412_42.D	OA-1	BY03107	04/13/17 19:55
47)	1	0412_43.D	OA-1 DUP	BY03107 DUP	04/13/17 20:35
48)	1	0412_44.D	01971 400cc	istd;air05v	04/13/17 21:17
49)	1	0412_45.D	SS-1	BY03105	04/13/17 21:57
50)	1	0412_46.D	03560	istd;air05v	04/13/17 22:38
51)	1	0412_47.D	023562	istd;air05v	04/13/17 23:17
52)	1	0412_48.D	03563	istd;air05v	04/13/17 23:58
53)	1	0412_49.D	03564	istd;air05v	04/14/17 0:38
54)	1	0412_50.D	03565	istd;air05v	04/14/17 1:18
55)	1	0412_51.D	03566	istd;air05v	04/14/17 1:58
56)	1	0412_52.D	0/0	istd;air05v	04/14/17 2:33
57)	1	0412_53.D	03087	istd;air05v	04/14/17 3:12
58)	1	0412_54.D	03088	istd;air05v	04/14/17 3:52
59)	1	0412_55.D	01974 5x	istd;air05v	04/14/17 4:29
60)	1	0412_56.D	019745 3x;10x	istd;air05v	04/14/17 5:07
61)	1	0412_57.D	01976 3x;10x	istd;air05v	04/14/17 5:43
62)	1	0412_58.D	01972 8x;10	istd;air05v	04/14/17 6:20
63)	1	0412_59.D	01319 150x;10x	istd;air05v	04/14/17 6:57
64)	1	0412_60.D	0/0	istd;air05v	04/14/17 7:32
65)	1	0412_61.D	CCAL 1	1.0	04/14/17 8:09
66)	1	0412_62.D	CCAL 10	10	04/14/17 8:46

```
67)  1 0412_63.D  lcs                    istd;air05v          04/14/17  9:24
68)  1 0412_64.D  0.2                    istd;air05v          04/14/17 10:01
69)  1 0412_65.D  0/0                    istd;air05v          04/14/17 10:36
70)  1 0412_66.D  0/0                    istd;air05v          04/14/17 11:10
```

Injection Log

Data Directory: H:\AIR2017\CHEM24\04APR\11A\

Line	Vl	FileName	SampleName	MiscInfo	Injection Time
1)	1	0411_01.D	0/0		04/11/17 18:44
2)	2	0411_02.D	BFB TUNE	0/0	04/11/17 19:13
3)	4	0411_03.D	ICAL 0.035	0.035 ppb	04/11/17 19:43
4)	5	0411_04.D	ICAL 0.05	0.05 ppb	04/11/17 20:14
5)	6	0411_05.D	ICAL 0.1	0.1 ppb	04/11/17 20:45
6)	10	0411_06.D	ICAL 0.25	0.2ppb	04/11/17 21:16
7)	11	0411_07.D	ICAL 0.5	0.5ppb	04/11/17 21:51
8)	12	0411_08.D	ICAL 1	1 ppb	04/11/17 22:23
9)	13	0411_09.D	ICAL 2.5	2.5ppb	04/11/17 22:58
10)	14	0411_10.D	ICAL 5	5ppb	04/11/17 23:28
11)	15	0411_11.D	ICAL 10	10ppb	04/12/17 0:47
12)	16	0411_12.D	ICAL 25	25ppb	04/12/17 1:22
13)	17	0411_13.D	ICAL 40	40ppb	04/12/17 2:00
14)	18	0411_14.D	lcs		04/12/17 2:36
15)	19	0411_15.D	0/0		04/12/17 3:06
16)	20	0411_16.D	0/0		04/12/17 3:36

Injection Log

Data Directory: H:\AIR2017\CHEM24\03MAR\30\

Line	Vl	FileName	SampleName	MiscInfo	Injection Time
1)	0	0330_34.D	*** No MS or GC data present ***		N/A
2)	0	0330_18.D	*** No MS or GC data present ***		N/A
3)	1	0330_01.D	0/0		03/30/17 8:38
4)	2	0330_02.D	1.0 ppb 01B		03/30/17 9:10
5)	4	0330_03.D	10ppb 01D		03/30/17 9:42
6)	5	0330_04.D	10PPB LCS 00Z		03/30/17 10:18
7)	10	0330_05.D	0/0		03/30/17 10:47
8)	11	0330_06.D	0/0		03/30/17 11:17
9)	12	0330_07.D	0.5ppb AB LOD 200cc		03/30/17 11:53
10)	12	0330_08.D	0.5ppb AB LOD 200cc		03/30/17 13:12
11)	12	0330_09.D	0.5ppb AB LOD 200cc		03/30/17 14:04
12)	13	0330_10.D	CANISTER BLK 1042	CANISTER BLK 1042	03/30/17 15:25
13)	14	0330_11.D	blk 1043		03/30/17 16:00
14)	15	0330_12.D	96229		03/30/17 16:36
15)	16	0330_13.D	96230		03/30/17 17:12
16)	17	0330_14.D	96231		03/30/17 17:47
17)	18	0330_15.D	96232		03/30/17 18:18
18)	19	0330_16.D	95639 ab 10x		03/30/17 18:49
19)	20	0330_17.D	95640 ab 10x		03/30/17 19:19
20)	22	0330_19.D	96694		03/30/17 19:54
21)	23	0330_20.D	96695		03/30/17 20:30
22)	24	0330_21.D	96644		03/30/17 21:00
23)	25	0330_22.D	96696		03/30/17 21:36
24)	26	0330_23.D	96697		03/30/17 22:11
25)	27	0330_24.D	0/0		03/30/17 22:41
26)	28	0330_25.D	96695 dup		03/30/17 23:15
27)	29	0330_26.D	95640 ab 1x		03/31/17 0:37
28)	30	0330_27.D	96230 2x		03/31/17 1:10
29)	31	0330_28.D	96229 10x		03/31/17 1:41
30)	32	0330_29.D	96696 10x		03/31/17 2:12
31)	33	0330_30.D	96697 10x		03/31/17 2:42
32)	34	0330_31.D	0/0		03/31/17 3:12
33)	35	0330_32.D	1.0ppb;air01b		03/31/17 3:44
34)	36	0330_33.D	10ppb;air01d		03/31/17 4:17

Injection Log

Data Directory: H:\AIR2017\CHEM24\04APR\17\

Line	Vl	FileName	SampleName	MiscInfo	Injection Time
1)	0	0417_35.D	*** No MS or GC data present ***		N/A
2)	1	0417_01.D	0/0		04/17/17 9:28
3)	2	0417_02.D	CCAL 1 - BFB TUNE	1.0 ppb 01B - 1.0 p	04/17/17 10:01
4)	4	0417_03.D	CCAL 10	10ppb 01D	04/17/17 10:33
5)	5	0417_04.D	BY04726 LCS	BY04726 LCS	04/17/17 11:08
6)	6	0417_05.D	0.2		04/17/17 11:41
7)	10	0417_06.D	BY04726 BLANK	BY04726 BLANK	04/17/17 12:11
8)	11	0417_07.D	0/0		04/17/17 12:41
9)	12	0417_08.D	SS-1 DIL	BY03105 30X	04/17/17 13:11
10)	13	0417_09.D	03560 15x;10x		04/17/17 13:42
11)	14	0417_10.D	03561 3x;10x		04/17/17 14:13
12)	15	0417_11.D	03562 15x;10x		04/17/17 14:43
13)	16	0417_12.D	03563 3x;10x		04/17/17 15:14
14)	17	0417_13.D	03564 3x;10x		04/17/17 15:45
15)	18	0417_14.D	03566 3x;10x		04/17/17 16:16
16)	18	0417_15.D	blk 1051		04/17/17 16:51
17)	19	0417_16.D	04710 ab 5x		04/17/17 17:27
18)	20	0417_17.D	04725		04/17/17 18:02
19)	21	0417_18.D	04406		04/17/17 18:38
20)	22	0417_19.D	04407		04/17/17 19:15
21)	23	0417_20.D	04724		04/17/17 19:50
22)	24	0417_21.D	BY04726 QC	BY04726	04/17/17 20:26
23)	25	0417_22.D	BY04726 DUP	BY04726 DUP	04/17/17 21:19
24)	26	0417_23.D	04710 ab 5x;5x		04/17/17 21:50
25)	27	0417_24.D	0/0		04/17/17 22:20
26)	28	0417_25.D	0/0		04/17/17 22:50
27)	29	0417_26.D	05389		04/17/17 23:25
28)	30	0417_27.D	05390		04/18/17 0:00
29)	31	0417_28.D	05388		04/18/17 1:23
30)	32	0417_29.D	05491 ab 5x		04/18/17 1:58
31)	33	0417_30.D	0/0		04/18/17 2:28
32)	34	0417_31.D	CCAL 1	1.0ppb;air4r	04/18/17 3:01
33)	35	0417_32.D	CCAL 10	10ppb;air4u	04/18/17 3:33
34)	36	0417_33.D	10ppb lcs;air4z		04/18/17 4:08
35)	37	0417_34.D	0.2ppb rl;air5j		04/18/17 4:41
36)	42	0417_39.D	?		04/18/17 15:39

APPENDIX C – NYSDOH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Michael Rivera Date/Time Prepared 6/5/17 0930

Preparer's Affiliation Airtek Environmental corp. Phone No. 718 937 3720

Purpose of Investigation Soil vapor investigation for 32-01 57th st. Woodside NY 11377

1. OCCUPANT:

Interviewed: (Y)/ N

Last Name: Topjor First Name: Tenzin

Address: 32-12 58th Street, Woodside, NY 11377

County: Queens

Home Phone: N/A Office Phone: (646) 479-4636

Number of Occupants/persons at this location 2 Age of Occupants 32

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y /(N)

Last Name: Curley First Name: Keron

Address: 32 East 35th Street, NY, NY 10016

County: Newyork

Home Phone: NA Office Phone: NA

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School ~~Commercial/Multi-use~~
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: Single family house

If multiple units, how many? NA

If the property is commercial, type?

Business Type(s) office

Does it include residences (i.e., multi-use)? (Y) N If yes, how many? 2

Other characteristics:

Number of floors 2 Building age 1925

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Basement Air flows up to 1ST floor through stairway and water line penetraters

Airflow near source

Boiler has vented doors

Outdoor air infiltration

Outdoor Air enters At windows

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick unknown
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with 12X12 vFT	
e. Concrete floor:	unsealed	sealed	sealed with unknown	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	unknown
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 5 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

None observed

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene	
Electric	Propane	Solar	Possibly fuel oil
Wood	Coal		

Domestic hot water tank fueled by: electric

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other _____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom (Almost Never)

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Storage
1st Floor	office space
2nd Floor	Residential / Bedrooms
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type?_____

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? Y / (N) When & Type?_____

i. Have cosmetic products been used recently? Y / (N) When & Type?_____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? no operational

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? _____

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / N
If yes, please describe: Basement has animal ~~waste~~ urine odor

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	(Public Water)	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	(Public Sewer)	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: NA

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

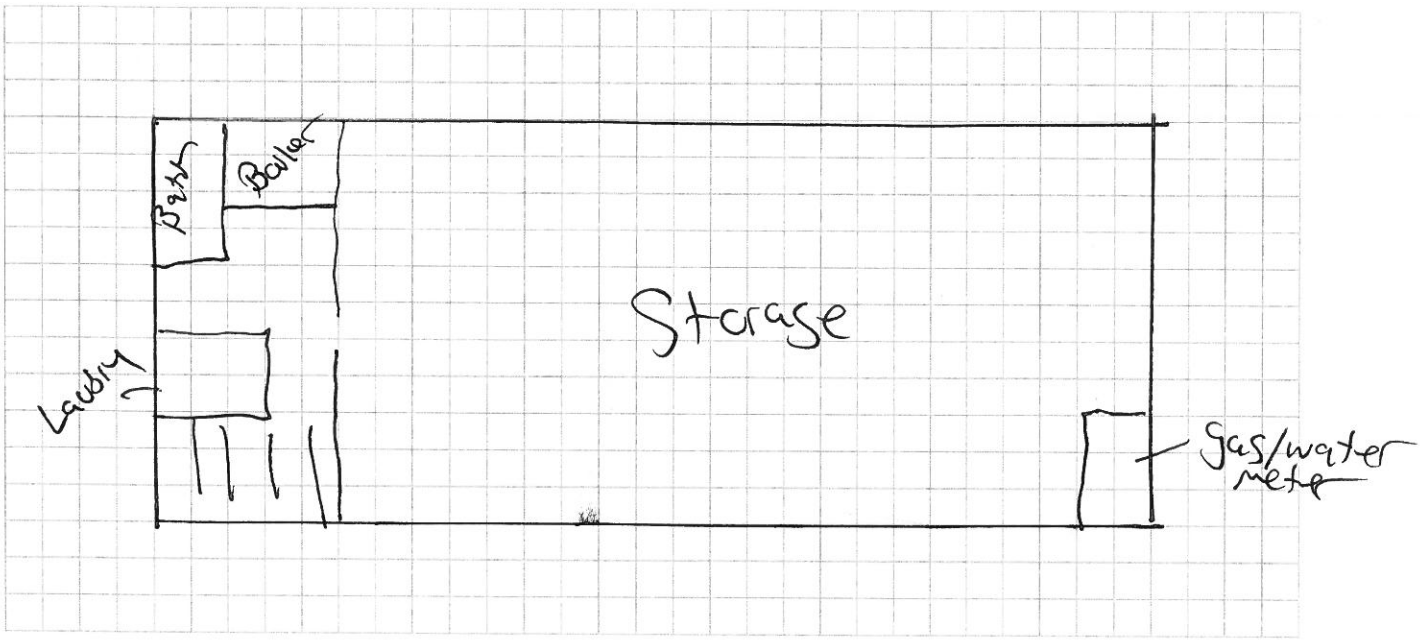
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

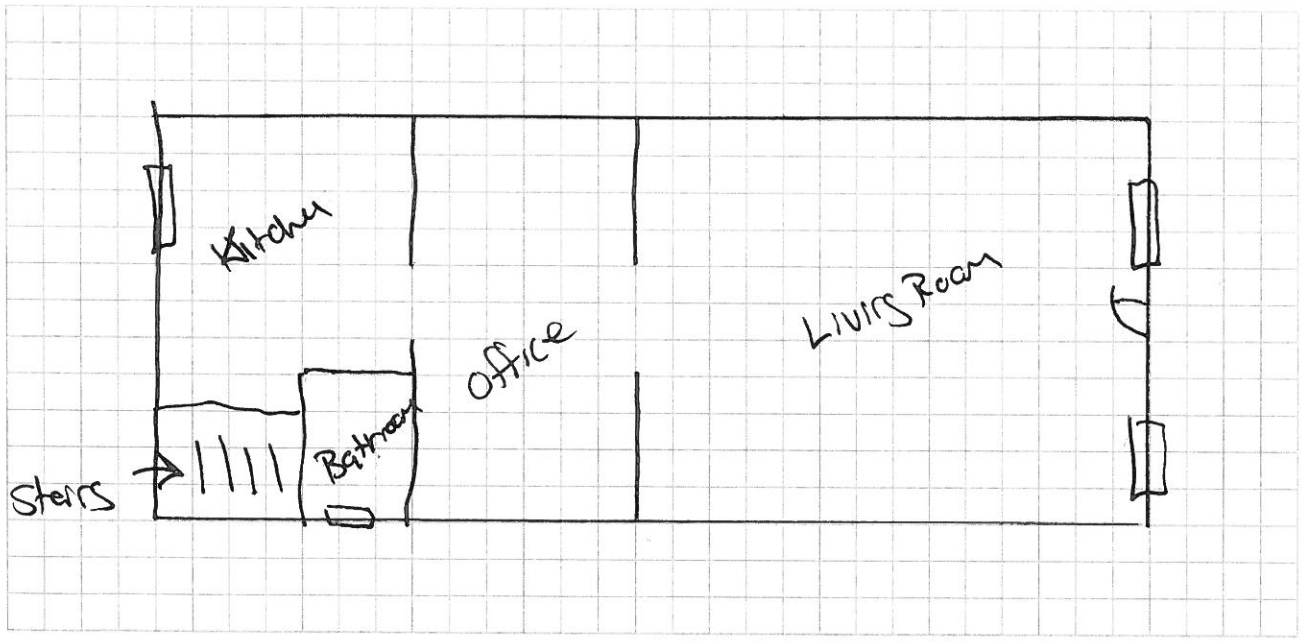
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

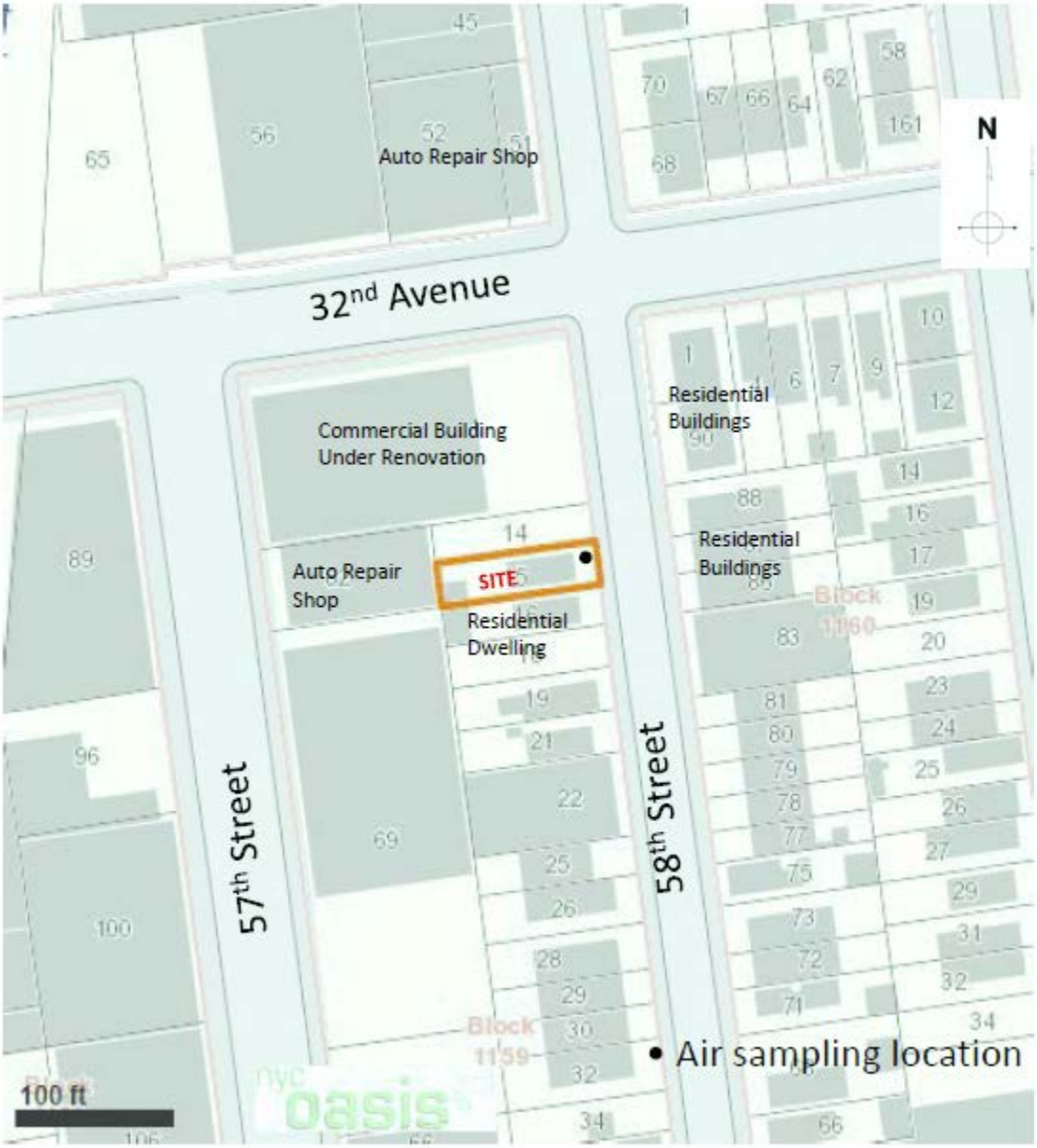
Basement:



First Floor:



12. OUTDOOR PLOT



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: N/A

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Basement	Instant Fabric color	3cans (30z)	used	Ethanol, Dimethyl Ether, Polyacrylic Acid		Y
Basement	Rustoleum Paint (spray)	8oz	used	Acetone and xylene		Y
↓	Simple Green Stainless steel polish	32oz	Used	Silicone Polymer Emulsion		Y
↓				Biodegradable surfactant		Y
↓	WD-40	8oz	used	Petroleum Distillates		Y
↓	Tile lab Penetrating Sealer	487ML	used	CAS #7732-18-15; copolymer		Y
↓	Repel insect Block 29% Deet	6.5oz		27.65% Deet 1.45% other ingredients		Y
↓	MR Clean	1gal	used	see photo		Y
↓	3 in 1 oil	3oz	used	Petroleum Distillate		Y
↓	Easy off oven cleaner	16oz	used	Monoethanolamine		Y
Kitchen	Easy off oven cleaner	14.5oz	used	Sodium Hydroxide		Y
↓	Drano Clog Remover	32oz	used	Sodium Hypochlorite, Sodium Hydroxide, Sodium Silicate		Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX D – SPECIFICATION CUT SHEETS FOR RADONAWAY VENTILATION FANS

RadonAway®
The world's leading radon fan manufacturer

RP Series

Radon Mitigation Fan

All RadonAway® fans are specifically designed for radon mitigation. RP Series Fans provide superb performance, run ultra-quiet and are attractive. They are ideal for most sub-slab radon mitigation systems.

Features

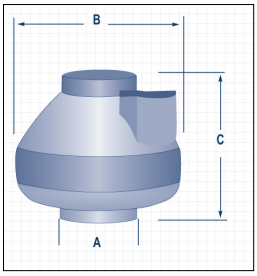
- Energy efficient
- Ultra-quiet operation
- Meets all electrical code requirements
- Water-hardened motorized impeller
- Seams sealed to inhibit radon leakage (RP140 & RP145 double snap sealed)
- ETL Listed - for indoor or outdoor use
- Thermally protected motor
- Rated for commercial and residential use

MODEL	P/N	FAN DUCT DIAMETER	WATTS	MAX. PRESSURE"WC	TYPICAL CFM vs. STATIC PRESSURE WC				
					0"	.5"	1.0"	1.5"	2.0"
RP140	23029-1	4"	15-21	0.8	135	70	-	-	-
RP145	23030-1	4"	41-72	2.1	166	126	82	41	3
RP260	23032-1	6"	50-75	1.6	272	176	89	13	-
RP265	23033-1	6"	91-129	2.3	334	247	176	116	52
RP380	28208	8"	95-152	2.3	497	353	220	130	38

Made in USA with US and imported parts

ETL Listed

All RadonAway inline radon fans are covered by our 5-year, hassle-free warranty



Model	A	B	C
RP140	4.5"	9.7"	8.5"
RP145	4.5"	9.7"	8.5"
RP260	6"	11.75"	8.6"
RP265	6"	11.75"	8.6"
RP380	8"	13.41"	10.53"

For Further Information Contact

8/15
P/N 02008

RadonAway®

The World's Leading
Radon Fan Manufacturer



RP Series

Installation & Operating Instructions

RadonAway
3 Saber Way | Ward Hill, MA 01835
www.radonaway.com

P/N IN020-REV R 08/15

RadonAway Ward Hill, MA.

Series Fan Installation & Operating Instructions

Please Read and Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

1. **WARNING!** WARNING! For General Ventilating Use Only. Do Not Use to Exhaust Hazardous, Corrosive or Explosive Materials, Gases or Vapors. See Vapor Intrusion Application Note #AN001 for important information on VI applications. RadonAway.com/vapor-intrusion
2. **WARNING!** NOTE: Fan is suitable for use with solid state speed controls however use of speed controls is not generally recommended.
3. **WARNING!** Check voltage at the fan to insure it corresponds with nameplate.
4. **WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
5. **NOTICE!** There are no user serviceable parts located inside the fan unit. **Do NOT attempt to open.** Return unit to the factory for service.
6. **WARNING!** Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.
7. **WARNING!** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

   a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

   b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

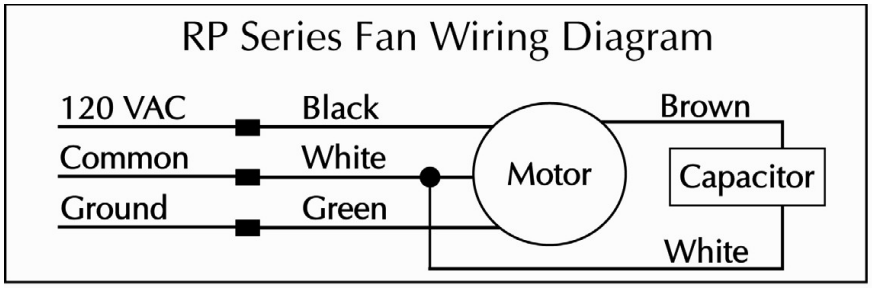
   c) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire rated construction.

   d) Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturers guideline and safety standards such as those published by the National Fire Protection Association, and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.

   e) When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.

   f) Ducted fans must always be vented to outdoors.

   g) If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit.



RP Series

RP140	**p/n 23029-1**
RP145	**p/n 23030-1**
RP260	**p/n 23032-1**
RP265	**p/n 23033-1**
RP380	**p/n 28208**

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1. INTRODUCTION

The RP Series Radon Fans are intended for use by trained, professional, certified/licensed Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of an RP Series Fan. This instruction should be considered as a supplement to EPA/radon industry standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2. FAN SEALING

The RP Series Fans are factory sealed, no additional caulk or other materials are required to inhibit air leakage.

1.3. ENVIRONMENTALS

The RP Series Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F.

1.4. ACOUSTICS

The RP Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

(To ensure quiet operation of ENERGY STAR qualified in-line and remote fans, each fan shall be installed using sound attenuation techniques appropriate for the installation. For bathroom and general ventilation applications, at least 8 feet of insulated flexible duct shall be installed between the exhaust or supply grille(s) and the fan). RP Series fans are not suitable for kitchen range hood remote ventilation applications.

1.5. GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes thus blocking air flow to the RP Series Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes allowing for return to normal operation.

1.6. SLAB COVERAGE

The RP Series Fan can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the RP Series Fan best suited for the sub-slab material can improve the slab coverage. The RP140/145/155 are best suited for general purpose use. The RP260 can be used where additional airflow is required and the RP265/380 is best suited for large slab, high airflow applications. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.7. CONDENSATION & DRAINAGE

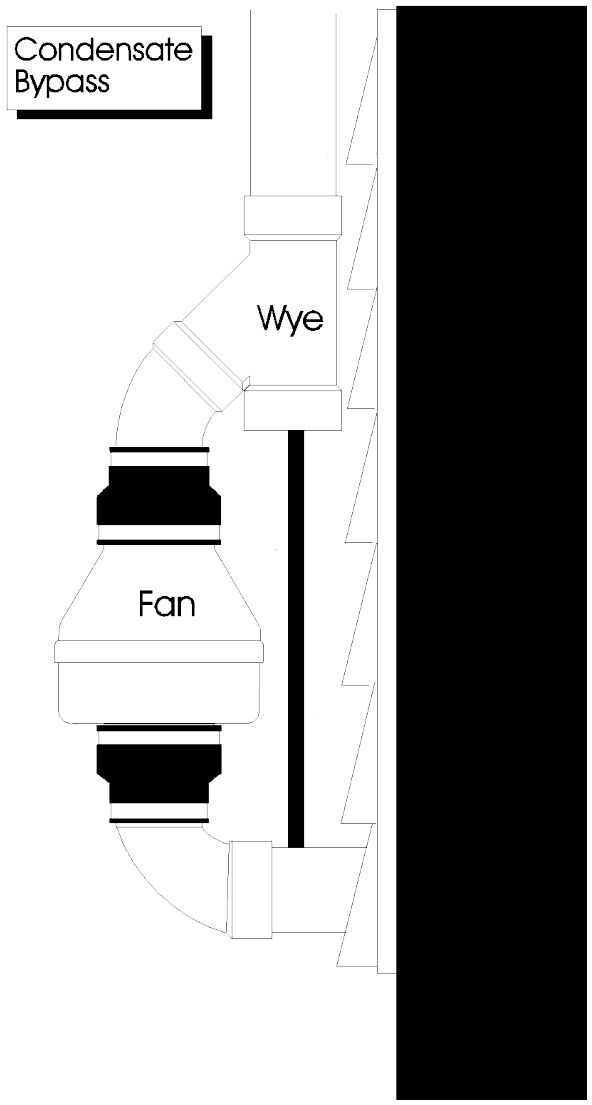
Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The RP Series Fan **MUST** be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The RP Series Fans are **NOT** suitable for underground burial.

For RP Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

Pipe Dia.	Minimum Rise per Ft of Run*				
	@25 CFM	@50 CFM	@100 CFM	@200 CFM	@300 CFM
6"	-	3/16	1/4	3/8	3/4
4"	1/8	1/4	3/8	2 3/8	-
3"	1/4	3/8	1 1/2	-	-

*Typical RP1xx/2xx Series Fan operational flow rate is 25 - 90 CFM 0n 3" and 4" pipe. (For more precision, determine flow rate by measuring Static Pressure, in WC, and correlate pressure to flow in the performance chart in the addendum.)

Under some circumstances in an outdoor installation a condensate bypass should be installed in the outlet ducting as shown. This may be particularly true in cold climate installations which require long lengths of outlet ducting or where the outlet ducting is likely to produce large amounts of condensation because of high soil moisture or outlet duct material. Schedule 20 piping and other thin-walled plastic ducting and Aluminum downspout will normally produce much more condensation than Schedule 40 piping. Schedule 40 piping is preferred for radon mitigation, all joints should fully sealed using the appropriate pipe cement on socket type fittings or flexible coupling firmly attached via worm drive screw clamps. Sealing ducting or pipe with duct tape is not acceptable on radon mitigation installations. No pipe penetrations are permitted, other than the condensation bypass. Silicon caulk is permitted for sealing purposes.



The bypass is constructed with a 45 degree Wye fitting at the bottom of the outlet stack. The bottom of the Wye is capped and fitted with a tube that connects to the inlet piping or other drain. The condensation produced in the outlet stack is collected in the Wye fitting and drained through the bypass tube. The bypass tubing may be insulated to prevent freezing.

1.8. SYSTEM MONITOR & LABEL

A System Monitor, such as a manometer (P/N 50017) or audible alarm (P/N 28001-2) is required to notify the occupants of a fan system malfunction. A System Label (provided with Manometer P/N 50017) with instructions for contacting the installing contractor for service and also identifying the necessity for regular radon tests to be conducted by the building occupants, must be conspicuously placed where the occupants frequent and can see the label.

1.9. VENTILATION

If used as a ventilation Fan any type of ducting is acceptable, however, flexible nonmetallic ducting is recommended for easy installation and quieter operation. Insulated flexible ducting is highly recommended in cold climates to prevent the warm bathroom air from forming condensation in the ducting where it is exposed to colder attic air. The outlet of the fan should always be ducted to the outside. Avoid venting the outlet of the fan directly into an attic area. The excess moisture from the bathroom can cause damage to building structure and any items stored in the attic. Multiple venting points may be connected together using a "T" or "Y" fitting. Ideally Duct should be arranged such that equal duct lengths are used between intake and "T" or "Y" fitting, this will result in equal flow rates in each intake branch. If adjustable intake grilles are used on multi-intake systems then the opening on each grill should be equal in order to minimize noise and resistance. Straight smooth runs of rigid metal ducting will present the least resistance and maximize system performance. The Equivalent Length of Rigid Metal Ducting resulting in .2" WC pressure loss for each Fan Model is provided in the specification section of these Instructions. Flexible ducting, if used, must always be as close to being fully extended as possible. Formed rigid metal duct elbows will present the least resistance and maximize system performance, recommended bend radius of elbow is at least 1.5 x duct diameter.

RP Series fans are not suitable for kitchen range hood remote ventilation applications. For quietest performance, the fan should be mounted further away from the inlet duct, near the outside vent. A minimum distance of 8 feet is recommended between the fan or T/Y of a multi-intake system and intake grille(s).

Backdraft dampers allow airflow in only one direction preventing cold/hot drafts from entering the vented area and minimize possible condensation and icing within the system while the fan is not operating. Backdraft dampers are highly recommended at each intake grille for bathroom ventilation in all cold climate installations. Installation instructions are included with Spruce backdraft dampers.

The ducting from this fan to the outside of the building has a strong effect on the airflow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.

1.10. ELECTRICAL WIRING

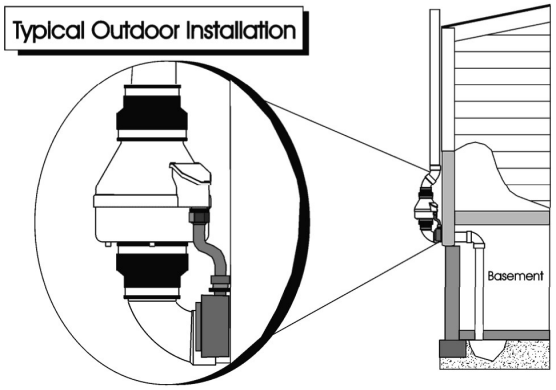
The RP Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly sealed to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.11. SPEED CONTROLS

The RP Series Fans are rated for use with electronic speed controls, however, they are generally not recommended. If used, the recommended speed control is Pass & Seymour Solid State Speed Control Cat. No. 94601-I.

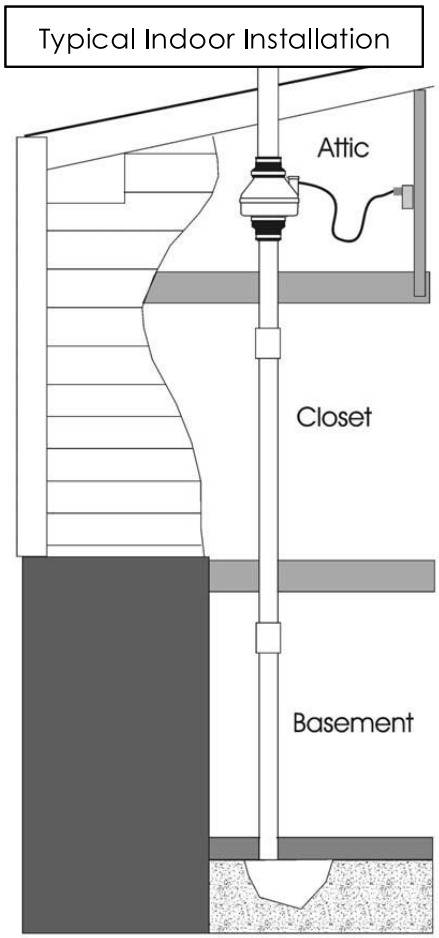
2.0 INSTALLATION

The RP Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The RP Series Fan may be mounted directly on the system piping or fastened to a supporting structure by means of optional mounting bracket



2.1 MOUNTING

Mount the RP Series Fan vertically with outlet up. Insure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.



2.2 MOUNTING BRACKET (optional)

The RP Series Fan may be optionally secured with the RadonAway P/N 25007 (25033 for RP385) mounting bracket. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

2.3 SYSTEM PIPING

Complete piping run, using flexible couplings as means of disconnect for servicing the unit and vibration isolation. Used as a Radon Fan the fan is typically outside of the building thermal boundary, and is venting to the outside, installation of insulation around the fan is not required. If used as a ventilation fan insulation may be installed around the fan and duct work, insulation should be sized appropriately for the duct size used and secured with duct tape.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections (See Section 1.10). Note that the fan is not intended for connection to rigid metal conduit.

Fan Wire	Connection
Green	Ground
Black	AC Hot
White	AC Common

2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

_____**Verify** all connections are tight and **leak-free**.

_____**Insure** the RP Series Fan and all ducting is secure and vibration-free.

_____**Verify** system vacuum pressure with manometer. **Insure** vacuum pressure is within normal operating range and **less than** the maximum recommended operating pressure.

(Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 Feet.)
(Further reduce Maximum Operating Pressure by 10% for High Temperature environments)
See Product Specifications. If this is exceeded, increase the number of suction points.

_____**Verify Radon levels by testing to EPA protocol.**

RP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the RP Series Fan:

Typical CFM Vs Static Pressure "WC									
	0"	.25"	.5"	.75"	1.0"	1.25"	1.5"	1.75"	2.0"
RP140	135	103	70	14	-	-	-	-	-
RP145	166	146	126	104	82	61	41	21	3
RP260	272	220	176	138	103	57	13	-	-
RP265	334	291	247	210	176	142	116	87	52
RP380*	497	401	353	281	220	176	130	80	38

* Tested with 6" inlet and discharge pipe.

Power Consumption 120 VAC, 60Hz 1.5 Amp Maximum		Maximum Recommended Operating Pressure* (Sea Level Operation)**	
RP140	17 - 21 watts	RP140	0.8" W.C.
RP145	41 - 72 watts	RP145	1.7" W.C.
RP260	52 - 72 watts	RP260	1.5" W.C.
RP265	91 - 129 watts	RP265	2.2" W.C.
RP380	95 - 152 watts	RP380	2.0" W.C.

**Reduce by 10% for High Temperature Operation*
***Reduce by 4% per 1000 feet of altitude*

	Size	Weight	Inlet/Outlet	L.2
RP140	8.5H" x 9.7" Dia.	5.5 lbs.	4.5" OD (4.0" PVC Sched 40 size compatible)	25
RP145	8.5H" x 9.7" Dia.	5.5 lbs.	4.5" OD (4.0" PVC Sched 40 size compatible)	15
RP260	8.6H" x 11.75" Dia.	5.5 lbs.	6.0" OD	48
RP265	8.6H" x 11.75" Dia.	6.5 lbs.	6.0" OD	30
RP380	10.53H" x 13.41" Dia.	11.5 lbs.	8.0" OD	57

L.2 = Estimated Equivalent Length of Rigid Metal Ducting resulting in .2in WC pressure loss for Duct Size listed. Longer Equivalent Lengths can be accommodated at Flows Lower than that at .2in WC pressure loss (see CFM Vs Static Pressure "WC Table).

Recommended ducting: 3" or 4" RP1xx/2xx, 6" RP380, Schedule 20/40 PVC Pipe

Mounting: If used for Ventilation use 4", 6" or 8" Rigid or Flexible Ducting

Mount on the duct pipe or with optional mounting bracket.

Storage temperature range: 32 - 100 degrees F.

Normal operating temperature range: -20 - 120 degrees F.

Maximum inlet air temperature: 80 degrees F.

Continuous Duty

Class F Insulation [RP140 Class B]

Class B Insulation

Thermally Protected

3000 RPM

Rated for Indoor or Outdoor Use

LISTED
Electric Fan

Intertek
77728

Conforms to
UL STD. 507

Certified to
CAN/CSA STD.
C22.2 No.113

ENERGY STAR
RP140 Only

TESTED/CERTIFIED
2100
Home Ventilating Institute

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the GP/XP/XR/RP/SF Series Fan for shipping damage within 15 days of receipt. Notify **RadonAway® of any damages immediately**. RadonAway® is not responsible for damages incurred during shipping. However, for your benefit, RadonAway® does insure shipments.

There are no user serviceable parts inside the fan. **Do not attempt to open.** Return unit to factory for service.

Install the GP/XP/XR/RP/SF Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

Provide a copy of this instruction or comparable radon system and testing information to the building occupants after completing system installation.

WARRANTY

RadonAway® warrants that the GPX01/XP/XR/RP/SF Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of 90 days from the date of purchase (the "Warranty Term").

RadonAway® will replace any Fan which fails due to defects in materials or workmanship during the Warranty Term. The Fan must be returned (at Owner's cost) to the RadonAway® factory. Any Fan returned to the factory will be discarded unless the Owner provides specific instructions along with the Fan when it is returned regardless of whether or not the Fan is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not cover damage in shipment unless the damage is due to the negligence of RadonAway®.

5 YEAR EXTENDED WARRANTY WITH PROFESSIONAL INSTALLATION.

RadonAway® will extend the Warranty Term of the fan to five (5) years from date of purchase or sixty-three (63) months from the date of manufacture, whichever is sooner, if the Fan is installed in a professionally designed and professionally installed active soil depressurization system or installed as a replacement fan in a professionally designed and professionally installed active soil depressurization system by a qualified installer. Proof of purchase and/or proof of professional installation may be required for service under this warranty. Outside the Continental United States and Canada the extended Warranty Term is limited to one (1) year from the date of manufacture.

RadonAway® is not responsible for installation, removal or delivery costs associated with this Warranty.

LIMITATION OF WARRANTY

EXCEPT AS STATED ABOVE, THE GPx01/XP/XR/RP SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs, including insurance, to and from factory.

RadonAway® 3 Saber Way
Ward Hill, MA 01835 USA TEL (978) 521-3703
FAX (978) 521-3964
Email to: Returns@RadonAway.com

Record the following information for your records:

Serial No._____
Purchase Date_____