Mr. Glenn May
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
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Buffalo, New York 14203

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ENVIRONMENT

Subject:

Soil Vapor Intrusion Evaluation Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
100 Forest Avenue
Buffalo, New York
NYSDEC Site No. 915141A

Date:
June 10, 2016

Contact:
Vin Maresco

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315.671.9256

Email:
vin.maresco@arcadis.com

Our ref:
B0087377.0000.00001

Dear Mr. May:

On behalf of Bristol-Myers Squibb Company (BMS), Arcadis of New York, Inc., (Arcadis) is submitting this Soil Vapor Intrusion Evaluation Report (SVIER) for the Iroquois Gas/Westwood Pharmaceutical Terrestrial Site located at 100 Forest Avenue in Buffalo, New York (the site). Figure 1 presents the site location.

This SVIER describes the investigation of the soil vapor intrusion (SVI) pathway at the site and reports the analytical results. This SVIER was prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) *DER-10, Technical Guidance for Site Investigation and Remediation* (NYSDEC 2010), the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (*SVI Guidance*, NYSDOH 2006), and the *Soil Vapor Intrusion Evaluation Work Plan* (SVIEWP, Arcadis of New York, Inc. 2015). BMS and Arcadis received email authorization from NYSDEC to proceed with implementation of the SVIEWP on January 25, 2016.

SITE DESCRIPTION

The site covers approximately 9 acres and consists of two 100,000-square-foot warehouses (Building 6 and Building 9) and a groundwater treatment building (Building 6A). On-site Buildings 6 and 9 are currently leased to a trucking firm for warehousing operations. Site features are presented in Figure 2.

Surrounding land use includes a mix of commercial, light and heavy industrial, and residential uses. The site is bordered to the north by a City of Buffalo impound lot; to the east by Dart Street and a mix of industrial and residential properties; to the south by Bradley Street, a mix of vacant industrial and residential properties, and vacant land; and to the west by Scajaquada Creek.

Site History

On March 28, 1994, NYSDEC issued a Record of Decision (ROD) that selected a remedy to clean up the Iroquois Gas/Westwood Pharmaceuticals Site (Site No. 915141). The site was subsequently subdivided into the Terrestrial Site (Site No. 915141A), which includes the upland portion of the site and the on-site buildings, and the Riparian Site (Site No. 915141B), which includes sediment in an adjacent portion of Scajaquada Creek (NYSDEC 2014).

The remedy for the Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site comprised soil capping, extraction and treatment of contaminated groundwater, and a vertical barrier for hydraulic gradient control, and was completed by the remedial party, Westwood Pharmaceuticals (now BMS), in 1997. Operation, monitoring, and maintenance activities associated with the remedy have been ongoing since then (NYSDEC 2014).

During Scajaquada Creek bank maintenance activities in 2011, non-aqueous phase liquid (NAPL) was observed in a seep at the sheet pile wall along the creek. In April and June 2013, volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX), and isopropylbenzene, were detected at concentrations greater than NYSDEC groundwater and surface water standards in samples of water collected from seeps in the sheet pile wall. BMS conducted a supplemental investigation in 2013, and recommended a remedial alternatives analysis. BMS submitted a feasibility study to the NYSDEC in April 2014 (NYSDEC 2014). NYSDEC comments were received on May 8, 2014 and incorporated in a resubmittal dated June 24, 2014.

A modified remedy will replace the groundwater extraction wells with a groundwater collection interceptor trench designed to capture impacted groundwater and NAPL. A supplemental site investigation to support the interceptor trench design was completed in June/July 2015 and February 2016. Based on the findings of the supplemental site investigation, which are detailed in the *Supplemental Site Investigation Summary Report* (Arcadis of New York, Inc. 2016), the interceptor trench design is currently in progress. Remaining elements of the existing remedy, such as the existing cover system and institutional controls, will be updated and maintained as needed. As part of the updates to the institutional controls the potential SVI pathway at the site will be evaluated and addressed, if needed (NYSDEC 2014).

Regional Geology/Hydrogeology

Site geology reportedly includes 4 to 32 feet of fill material that consists of silt, clay, gravel, ash, slag, clinker, construction debris, bricks, and wood chips that overlie native low permeability silty clay. Depth to groundwater at the site historically ranges from approximately 7 to 20 feet below ground surface (bgs) in the study area (Arcadis of New York, Inc. 2015). Groundwater flow direction is to the west toward Scajaquada Creek (NYSDEC 2014).

OBJECTIVES AND APPROACH

The objective of this SVIER is to evaluate the SVI pathway at the site as part of the modified remedy. To accomplish this objective, soil vapor sampling was proposed in the SVIEWP (Arcadis of New York, Inc. 2015) at 3 initial locations exterior to Building 9 and at depths directly above groundwater in an area overlying the greatest historic groundwater concentrations to assess soil vapor concentrations on site.

The NYSDOH *SVI Guidance* (2006) does not provide standards, criteria, guidance values, or screening levels for evaluating soil vapor results. Therefore, the potential for exposure via the SVI pathway on site was assessed by evaluating the analytical results of these soil vapor samples as follows:

- Comparing the results to conservative (i.e., health-protective) soil vapor screening levels developed based on NYSDOH indoor air background levels or United States Environmental Protection Agency (USEPA) Industrial Air Regional Screening Levels (RSLs) and an attenuation factor for soil vapor to indoor air,
- Evaluating the results relative to soil vapor concentration ranges in decision matrices included in the NYSDOH *SVI Guidance* (2006), and
- Examining the results to look for indicator compounds commonly identified at former manufactured gas plant (MGP) sites.

SOIL VAPOR SAMPLING AND ANALYSIS METHODS

Selection of soil vapor sampling locations, installation of soil vapor sampling points, sampling methods, and analytical methods for the proposed soil vapor samples followed the SVIEWP (Arcadis of New York, Inc. 2015). These activities are summarized briefly below.

Soil Vapor Sampling Locations

As described in the SVIEWP (Arcadis of New York, Inc. 2015), soil vapor sampling locations were selected in the area of greatest VOC concentrations detected in groundwater (i.e., monitoring wells PF-6, P-6, P-5, and PF-4) during the two most recent rounds of groundwater sampling (i.e., September 2013 and August 2015) conducted prior to the SVIEWP. Soil vapor sampling locations were spaced approximately 100 feet apart for spatial coverage along the building exterior in the direction of groundwater flow (Arcadis of New York, Inc. 2015). Consistent with the NYSDOH *SVI Guidance* (2006), sampling locations were positioned at least 10 feet from Building 9. Soil vapor sampling locations are shown on Figure 2.

Soil Vapor Sampling Point Installation

Soil vapor sampling points were installed using a direct-push drilling technology (i.e., Geoprobe Systems®). Soil boring logs are included in Attachment A. In accordance with NYSDOH comments

regarding the SVIEWP (Arcadis of New York, Inc. 2015), the target depth for each sample was based on two conditions: 1) greater than 5 feet bgs, and 2) greater than 1 foot above the water table. As detailed below, due to the depth to water at two locations, it was not possible to install the soil vapor sampling point at a depth greater than 5 feet bgs.

- SV-B9-1 was installed with a sand pack depth of 3 to 4 feet bgs. Based upon a groundwater elevation reading of 5.5 feet bgs measured in monitoring well PF-6 prior to installation, a depth of 5 feet bgs was initially targeted for the sand pack depth. However, field observations indicated the presence of saturated soil at the initial boring depth of approximately 5 feet bgs. Therefore, a new boring was installed and the sand pack was placed at 3 to 4 feet bgs.

- SV-B9-2 was installed with a sand pack depth of 3.5 to 4.5 feet bgs. Based upon groundwater elevation readings of 7.02 feet bgs at MW-F2 and 16.4 feet bgs at PF-4, a depth of 8 feet bgs was targeted for the sand pack depth. However, the soil recovered during drilling consisted of gravel and gravel fragments and was extremely wet. The water level was measured in this boring hole and indicated groundwater at approximately 5.3 feet bgs. Therefore, a new boring was installed and the sand pack was placed at 3.5 to 4.5 feet bgs.

- SV-B9-3 was installed with a sand pack depth of approximately 17 to 18 feet bgs, based upon groundwater elevation readings of 18.48 feet bgs in EW-7 and 24.44 feet bgs at EW-6.

Figure 3 presents the soil vapor sampling point construction detail.

Soil Vapor Sampling Methods

The three exterior soil vapor sampling points were installed on February 23, 2016, consistent with the SVIEWP (Arcadis of New York, Inc. 2015). Soil vapor samples were collected on March 3, 2016. Soil vapor sampling logs are included in Attachment B. Samples were collected over a 30-minute duration using batch-certified 1-liter Summa® canisters. Flow controllers were provided by the laboratory and calibrated to allow uniform sample collection over the 30-minute time period.

One blind field duplicate soil vapor sample (FD-030316) was collected from soil vapor sampling location SV-B9-3 during the sampling activities. This sample was collected by attaching a blind duplicate canister and the parent sample canister to either end of a stainless steel Swagelok T-fitting and then connecting the T-fitting to the sampling assembly at SV-B9-3. This configuration permitted concurrent collection of both duplicate and parent samples at the target flow rate.

Soil Vapor Analytical Methods

The soil vapor samples were submitted under chain-of-custody protocols to Eurofins Air Toxics, Inc. laboratory in Folsom, California (NY Lab ID No. 11291), which is certified by the Environmental Laboratory Approval Program (ELAP) for air (including soil vapor) analyses, and analyzed via USEPA Method TO-15. Samples were analyzed for compounds detected in the September 2013 round of

groundwater samples and the April and June 2013 rounds of seep samples, as well as compounds listed in the NYSDOH *SVI Guidance* (2006) as associated with former MGP sites as outlined in the SVIEWP.

DATA EVALUATION

Preliminary analytical results were provided to Arcadis on March 31, 2016, and the final laboratory analytical report was received from the laboratory on April 6, 2016. A copy of the laboratory analytical report is included in Attachment C. Table 1 (attached) summarizes the analytical results for the soil vapor samples.

Data Quality Review

Following receipt of the laboratory analytical report, the analytical results were reviewed to evaluate data quality, specifically whether the quality is sufficient to meet overall project objectives listed above and data quality objectives identified in the SVIEWP (Arcadis of New York, Inc. 2015). Data were reviewed in accordance with USEPA and NYSDEC guidance and analytical methods. A copy of the memorandum describing the review of the soil vapor data is included in Attachment D and summarized below.

Applicable performance criteria were met, with two minor exceptions. Laboratory control sample (LCS) / laboratory control sample duplicate (LCSD) recoveries exceeded control limits for two compounds; however, because these compounds were not detected in the associated samples, there is no impact on the usability of the data. The laboratory also noted that 1,2,3-trimethylbenzene was not spiked in the LCS/LCSD, but the compound met calibration criteria. Therefore, reported 1,2,3-trimethylbenzene results for each soil vapor sample should be considered estimated. Qualifying these results as estimates will not impact the conclusions of this assessment because 1,2,3-trimethylbenzene was not detected in any of the samples and the detection limit is more than an order of magnitude less than the soil vapor screening levels. Overall, the analytical data for the three soil vapor samples are considered reliable and acceptable for use in evaluating soil vapor concentrations on site and the potential for the SVI pathway to impact indoor air quality in on-site buildings.

Soil Vapor Intrusion Pathway Evaluation

The soil vapor intrusion pathway evaluation detailed below relies on several lines of evidence, including a comparison of soil vapor analytical results to soil vapor screening levels, an evaluation of soil vapor analytical results in the context of soil vapor concentrations in Matrices 1 and 2 in the NYSDOH *SVI Guidance* (2006), and an evaluation of the soil vapor analytical results for indicator compounds associated with former MGP sites.

Comparison of Soil Vapor Analytical Results to Soil Vapor Screening Levels

As detailed in the SVIEWP (Arcadis of New York, Inc. 2015) and discussed below, soil vapor screening levels were developed for this evaluation based on air guideline values and indoor air background levels provided in the NYSDOH *SVI Guidance* (2006) and USEPA (2015b) Industrial Air RSLs.

Soil Vapor Screening Level Development

Soil vapor screening levels were developed by first identifying acceptable concentrations in indoor air, based on the lesser of the Air Guideline Values (NYSDOH 2006 and NYSDOH 2015) and indoor air background levels identified as the 90th percentile concentration in the USEPA Building Assessment Survey and Evaluation (BASE) Study as reported in the NYSDOH *SVI Guidance* (2006, Appendix C, Table C2). If the 90th percentile concentration of a compound included in the BASE Study was reported as a detection limit, the detection limit was used. The use of the detection limit is a conservative approach that provides an upper-bound estimate of potential background concentrations in indoor air. Calculated screening levels based on this assumption are therefore protective of upper-bound estimates of background levels in indoor air. As noted above, the NYSDOH *SVI Guidance* (2006) states that if indoor air levels are comparable to background levels, then no further action is needed. If a particular compound was not included in the USEPA BASE study (as reported and recommended in the NYSDOH *SVI Guidance* [2006]), the USEPA Industrial Air RSL was selected, if available. The USEPA Industrial Air RSLs are risk-based screening levels protective of workers present in an industrial or commercial setting for a standard work week of 40 hours (USEPA 2015b).

These acceptable indoor air values were then used to calculate soil vapor screening levels using a conservative soil vapor attenuation factor of 0.03, as recommended by the USEPA (2015a) *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air*. Soil vapor screening levels are presented in Table 1. The USEPA (2015a) recommends the use of an attenuation factor of 0.03 for evaluating soil vapor based on a conservative analysis of empirical data for both sub-slab soil vapor and exterior soil vapor. The use of an attenuation factor of 0.03 is considered conservative for commercial/industrial sites such as this one, because the data used to calculate the attenuation factors in the USEPA database are from residential structures, which may have thinner slabs and/or lower ventilation and/or air exchange rates than commercial/industrial buildings. Thicker slabs present in commercial/industrial buildings are anticipated to have less cracks that extend through the entire thickness (i.e., from top to bottom) of the slab, and therefore, are anticipated to result in less vapor intrusion and lower attenuation factors. Furthermore, as noted by the USEPA (2015a), the attenuation factor of 0.03 does not account for biodegradation, and therefore, this value is likely conservative for compounds that biodegrade readily in the subsurface, such as petroleum hydrocarbons.

Comparison of Soil Vapor Analytical Results to Soil Vapor Screening Levels

As shown in Table 1, analytical results of soil vapor samples SV-B9-1, SV-B9-2, and SV-B9-3 (and field duplicate FD-030316) are less than soil vapor screening levels. Specifically, the majority of reported detections and reporting limits are at least an order of magnitude less than soil vapor screening levels. These analytical results therefore indicate that potential exposure via the SVI pathway on site is less than background or health based screening levels.

Evaluation of Soil Vapor Analytical Results in the Context of NYSDOH Matrices

NYSDOH (2006) has developed two matrices to evaluate the minimum actions recommended to address current and potential future exposures to site-related constituents via the SVI pathway. The NYSDOH *SVI*

Guidance (2006) and Soil Vapor Intrusion Update dated June 2007 (NYSDOH 2007) have assigned trichloroethene (TCE) and vinyl chloride to Matrix 1 and cis-1,2-dichloroethene to Matrix 2. NYSDOH (2006, 2007) has not assigned matrices to any of the other analytes in the site soil vapor samples.

In accordance with Matrix 1 of the NYSDOH *SVI Guidance* (2006), detections of TCE or vinyl chloride in sub-slab vapor at a concentration less than 5 µg/m^3 generally do not require further action for the SVI pathway. As shown in Table 1, neither TCE nor vinyl chloride were detected in exterior soil vapor samples. Reporting limits for vinyl chloride were less than 5 µg/m^3, and reporting limits for TCE (ranging from 6.5 to 7.4 µg/m^3) only marginally exceed this value.

In accordance with Matrix 2 of the NYSDOH SVI guidance, detections of cis-1,2-dichloroethene in sub-slab soil vapor at a concentration less than 100 µg/m^3 generally do not require further action for the SVI pathway. As shown in Table 1, cis-1,2-dichloroethene was not detected in exterior soil vapor samples at reporting limits ranging from 4.8 to 5.5 µg/m^3, which are more than an order of magnitude less than the level at which no further action is generally recommended (100 µg/m^3).

Given the conservative nature of the sampling event (samples were collected at depths directly above groundwater in an area overlying the greatest groundwater concentrations of site-related constituents), these analytical results indicate that no further action is required to address the SVI pathway for these compounds at the site.

Evaluation of Soil Vapor Analytical Results for MGP Indicator Compounds

As shown in Table 1, indicator compounds for former MGP sites (trimethylbenzene isomers, tetramethylbenzene isomers, thiophene, indane, indene, and naphthalene) were not detected in sub-slab soil vapor samples. Given that these samples were collected at depths directly above groundwater in an area overlying the greatest groundwater concentrations of site-related constituents, these analytical results indicate the potential exposure from MGP-related compounds via the SVI pathway at the site is less than background or health based screening levels.

SUMMARY AND CONCLUSIONS

Three soil vapor samples and one field duplicate soil vapor sample were collected from three sampling locations exterior to Building 9 and at depths directly above groundwater in an area overlying the greatest historic groundwater concentrations to assess soil vapor concentrations on site. Samples were analyzed for compounds detected in the September 2013 groundwater sampling event and the April and June 2013 seep sampling events, as well as compounds listed in the NYSDOH *SVI Guidance* (2006) as associated with former MGP sites.

Analytical results of soil vapor samples SV-B9-1, SV-B9-2, and SV-B9-3 (and field duplicate soil vapor sample FD-030316) are less than conservative soil vapor screening levels, in many cases by at least an order of magnitude, indicating that potential exposure via the SVI pathway on site is less than background or health based screening levels. TCE, vinyl chloride, and cis-1,2-dichloroethene were not detected in soil vapor samples, and reporting limits for these compounds were less than or only marginally (less than a factor of 2) greater than sub-slab vapor concentrations in the assigned decision matrices from the

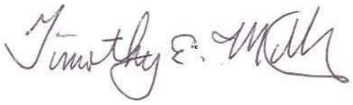
NYSDOH *SVI Guidance* (2006) that generally do not require further action for the SVI pathway. Furthermore, indicator compounds for former MGP sites (trimethylbenzene isomers, tetramethylbenzene isomers, thiophene, indane, indene, and naphthalene) were not detected in sub-slab soil vapor samples.

Given that soil vapor samples were collected at depths directly above groundwater in an area overlying the greatest groundwater concentrations of site-related constituents, these analytical results indicate that potential exposure from site-related compounds via the SVI pathway at the site is less than background or health based screening levels. Therefore, no further SVI investigation is recommended at the site.

If you have any questions or require additional information, please contact Douglas Morrison at 315.432.4851 or douglas.morrison@bms.com.

Sincerely,

Arcadis of New York, Inc.



Timothy E. Miller, P.E.
Principal Engineer

I, Timothy E. Miller, certify that I am currently a NYS registered Professional Engineer and Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Soil Vapor Intrusion Evaluation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Copies:
Bridget Boyd, NYSDOH
Tanya Alexander, NFG
Douglas Morrison, BMS
John Alonzo, de maximis, inc.
Vin Maresco, Arcadis
Margaret Bartee, Arcadis
Christopher Angier, Arcadis

Enclosures:

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1 Soil Vapor Screening Levels and Analytical Results

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1 Site Location Map

2 Soil Vapor Sampling Locations

3 Soil Vapor Sampling Point Construction

Attachments

A Soil Boring Logs

B Soil Vapor Sampling Logs

C Laboratory Analytical Report

D Data Review Memorandum

References

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TABLE

Table 1
Soil Vapor Screening Levels and Analytical Results

Soil Vapor Intrustion Evaluation Report
Bristol-Myers Squibb Company
Site No. 915141A: Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site

Location: Date collected: Sample Type: Sample Name:	CAS No.	Units	Soil Vapor Screening Level [a]	Exterior 3/3/2016 Soil Vapor SV-B9-1	Exterior 3/3/2016 Soil Vapor SV-B9-2	Exterior 3/3/2016 Soil Vapor SV-B9-3	Exterior 3/3/2016 Soil Vapor FD-030316 [b]
Volatile Organic Compounds							
Acetone	67-64-1	µg/m^3	3,297	29 U	36	33 U	33
Benzene	71-43-2	µg/m^3	313	25	7.6	4.4 U	4.3 U
Chloroform	67-66-3	µg/m^3	37	6.0 U	5.9 U	6.7 U	6.6 U
Cyclohexane	110-82-7	µg/m^3	866,667	31	5.6	4.8 U	4.6 U
cis-1,2-Dichloroethene	156-59-2	µg/m^3	63	4.9 U	4.8 U	5.5 U	5.3 U
trans-1,2-Dichloroethene	156-60-5	µg/m^3	--	4.9 U	4.8 U	5.5 U	5.3 U
Ethylbenzene	100-41-4	µg/m^3	190	7.7	5.2 U	6.0 U	5.8 U
Isopropylbenzene	98-82-8	µg/m^3	60,000	6.1 U	5.9 U	6.8 U	6.6 U
Methylcyclohexane	108-87-2	µg/m^3	--	64	19 U	22 U	22 U
Methylene Chloride	75-09-2	µg/m^3	333	43 U	42 U	48 U	47 U
Naphthalene	91-20-3	µg/m^3	170	13 U	13 U	14 U	14 U
Toluene	108-88-3	µg/m^3	1,433	26	29	5.2 U	5.1 U
Trichloroethene	79-01-6	µg/m^3	67	6.6 U	6.5 U	7.4 U	7.2 U
1,2,3-Trimethylbenzene	526-73-8	µg/m^3	733	24 U	24 U	27 U	26 U
1,2,4-Trimethylbenzene	95-63-6	µg/m^3	317	6.1 U	5.9 U	6.8 U	6.6 U
1,3,5-Trimethylbenzene	108-67-8	µg/m^3	123	6.1 U	5.9 U	6.8 U	6.6 U
Vinyl Chloride	75-01-4	µg/m^3	63	3.2 U	3.1 U	3.5 U	3.4 U
m,p-Xylenes	108-38-3/106-42-3	µg/m^3	740	18	17	6.0 U	5.8 U
o-Xylene	95-47-6	µg/m^3	263	11	7.5	6.0 U	5.8 U
Tentatively Identified Compounds[c]							
Indane	496-11-7	ppbv	--	ND	ND	ND	ND
Indene	95-13-6	ppbv	--	ND	ND	ND	ND
1,2,3,4-Tetramethylbenzene	488-23-3	ppbv	--	ND	ND	ND	ND
1,2,3,5-Tetramethylbenzene	527-53-7	ppbv	--	ND	ND	ND	ND
1,2,4,5-Tetramethylbenzene	95-93-2	ppbv	--	ND	ND	ND	ND
Thiophene	110-02-1	ppbv	--	ND	ND	ND	ND

Notes:

(a) Soil vapor screening levels were calculated using the lesser of the New York State Department of Health (NYSDOH) Air Guideline Value and the NYSDOH Indoor Air Background Concentration (i.e., 90th percentile from the United States Environmental Protection Agency [USEPA] Building Assessment and Survey Evaluation [BASE] Study as reported by the NYSDOH (2006]), or if no NYSDOH value was available, the USEPA Industrial Air Regional Screening Level (set to a target cancer risk of $1x10^{-6}$ or target hazard quotient of 1), divided by the default USEPA soil gas attenuation factor of 0.03.

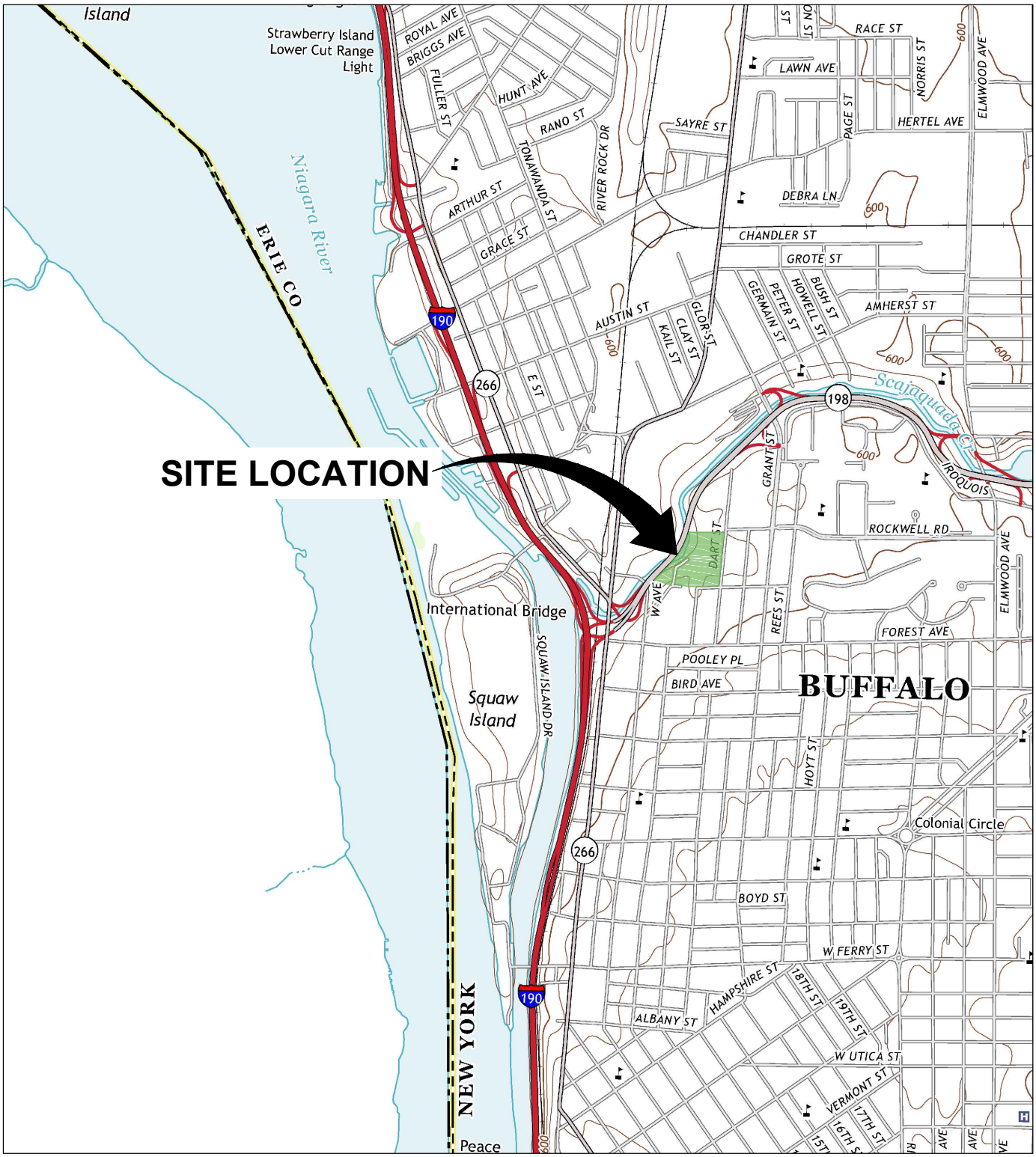
(b) Duplicate soil vapor sample FD-030316 was collected at sampling location SV-B9-3.

(c) Indane, indene, 1,2,3,4-tetramethylbenzene; 1,2,3,5-tetramethylbenzene; 1,2,4,5-tetramethylbenzene; and thiophene are not commonly analyzed via USEPA Method TO-15 and can only be evaluated as tentatively identified compounds.

(d) Abbreviations and symbols:

-- = value unavailable
CAS = Chemical Abstract Service
ND = compound not detected/identified
µg/m^3 = microgroams per cubic meter
ppbv = parts per billion by volume
U = analyte not detected at the reporting limit shown

FIGURES



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., BUFFALO NW, NY-ON, 2013.

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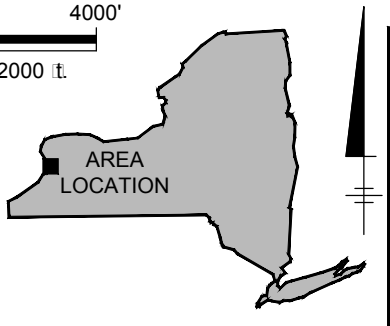

NEW YORK

BRISTOL-MYERS SQUIBB COMPANY
100 FOREST AVENUE
BUFFALO, NEW YORK

SOIL VAPOR INTRUSION EVALUATION REPORT

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER LD:(Opt) PIC: G. M. WROBLEWSKI PM/TM: C. ANGIER TR: M. BARTEE LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACTIB0087377\000000001\DWG\87377N01.dwg LAYOUT: 1 SAVED: 4/11/2016 11:48 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/11/2016 11:48 AM BY: KRAHMER, ERIC
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BUILDING

SCAJAQUADA EXPRESSWAY (ELEVATED)

SCAJAQUADA CREEK

GRAVEL

GRASS

ASPHALT

LOADING DOCK

CONCRETE

ASPHALT

PARKING

DART STREET

GATE

BUILDING 9
METAL BUILDING

BUILDING 6A GROUNDWATER
TREATMENT PLANT

BUILDING 6
METAL BUILDING

MW-F5 MW-F4 MW-S3 CPT-11 EW-8 MW-F3 MW-S2 PS-2
B-8 CPT-10 SEEP-32 SEEP-30
EW-7 CPT-8 PF-4 SV-B9-2 MW-F2 SV-B9-1 PF-6
P-6 P-9 CPT-7 SV-B9-3 EW-6
CPT-6 P-5 P-8 EW-5 PF-3
SEEP-16 CPT-5 B-7 CPT-9
SEEP-14 SEEP-13 CPT-4 P-4 EW-4
P-7 CPT-3
P-3 CPT-2
B-6 CPT-1 EW-3 PF-2 MW-S4
P-2
P-1
B-19
B-3

LEGEND:

- PROPERTY BOUNDARY
- FENCE
- SHEET PILE RETAINING WALL
- MONITORING WELL
- SEEP LOCATION
- PIEZOMETER
- GROUNDWATER EXTRACTION WELL
- CORE PENETROMETER TEST (CPT) LOCATION
- SOIL VAPOR SAMPLE LOCATION
- AREA INACCESSIBLE DUE TO STEEP SLOPE

NOTE:

1. BASE MAP FROM A GROUNDWATER & ENVIRONMENTAL SERVICES, INC. FIGURE TITLED "PROPOSED GROUND- WATER COLLECTION TRENCH LOCATION MAP" DATED 4/13/2013.
2. LOCATIONS OF SOIL BORINGS CPT-1 THROUGH CPT-7, CPT-9, AND PIEZOMETERS P-7 THROUGH P-9 WERE SURVEYED BY C.T. MALE ON AUGUST 19, 2015. SOIL BORINGS CPT-8, CPT-10 AND CPT-11, AND SOIL VAPOR SAMPLE LOCATIONS SV-B9-1 THROUGH SV-B9-3 WERE SURVEYED BY C.T. MALE ON MARCH 3, 2016.

0 60' 120'
GRAPHIC SCALE

BRISTOL-MYERS SQUIBB COMPANY
100 FOREST AVENUE
BUFFALO, NEW YORK

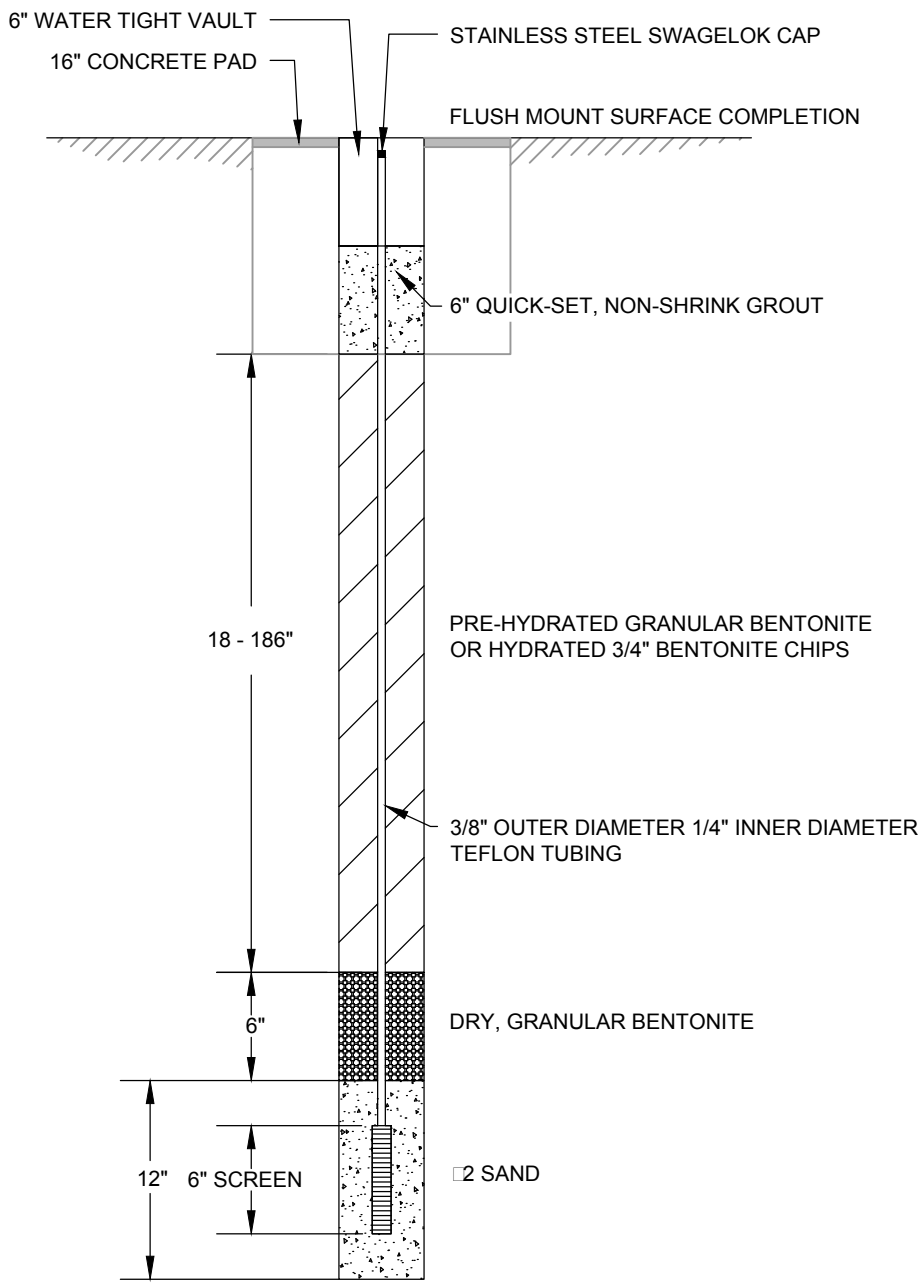
SOIL VAPOR INTRUSION EVALUATION REPORT

SOIL VAPOR SAMPLING LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY: SYRACUSE NY DIV/GROUP: ENVCAD DB: E. KRAHMER LD:(Opt) PIC: V. MARESCO PM: C. ANGIERS TM: R. HENSEL LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACTIB\087377\000000001\DWG\87377G02.dwg LAYOUT: 2 SAVED: 5/12/2016 2:30 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ----
XREFS: IMAGES: PROJECTNAME: ----
87377X01
87377XLB
87377X02



NOT TO SCALE

BRISTOL-MYERS SQUIBB COMPANY
100 FOREST AVENUE
BUFFALO, NEW YORK

SOIL VAPOR INTRUSION EVALUATION REPORT

SOIL VAPOR SAMPLING POINT CONSTRUCTION

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3

ATTACHMENT A

Soil Boring Logs

Boring Log

Boring/Well SV-B9-1 Project/No. B0087377 Page 1 of 1

Site Location BMS - Buffalo, NY Drilling Started 2/23/2016 Drilling Completed 2/23/2016

Total Depth Drilled 5 Feet Hole Diameter 2 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device N/A Sampling Interval 4 feet

Land-Surface Elev. N/A feet ☐ Surveyed ☐ Estimated Datum N/A

Drilling Fluid Used N/A Drilling Method Geoprobe

Drilling Contractor Parratt-Wolff Inc. Driller Mark Evans Helper Jared Evans

Prepared By Shawn P. Skelly Hammer Weight N/A Hammer Drop N/A ins.

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	Sample/Core Description
0	5	N/A	N/A	Fill material (Hand cleared to 5', no sampling performed).
5	8	1.7	N/A	Gray/brown rock fragments, wet (0 - 1.0').
				Brown Sandy SILT, little f-Gravel, damp (1.0' - 1.7').
8	12	1.6	N/A	Red brick fragments and dust (0 - 0.5').
				Dark brown Silty SAND, little f-Gravel, trace brick and concrete fragments (0.5' - 1.6').
12	16	1.3	N/A	Dark brown Silty SAND, little f-Gravel, trace concrete fragments.
16	20	1.3	N/A	Dark brown rock fragments and fine GRAVEL, wet, NAPL present from 0.9' - 1.3'.

Boring Log

Boring/Well SV-B9-2 Project/No. B0087377 Page 1 of 1

Site Location BMS - Buffalo, NY Drilling Started 2/23/2016 Drilling Completed 2/23/2016

Total Depth Drilled 5 Feet Hole Diameter 2 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device N/A Sampling Interval 4 feet

Land-Surface Elev. N/A feet ☐ Surveyed ☐ Estimated Datum N/A

Drilling Fluid Used N/A Drilling Method Geoprobe

Drilling Contractor Parratt-Wolff Inc. Driller Mark Evans Helper Jared Evans

Prepared By Shawn P. Skelly Hammer Weight N/A Hammer Drop N/A ins.

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	Sample/Core Description
0	5	N/A	N/A	Fill material (Hand cleared to 5', no sampling performed).
5	8	2.4	N/A	Brown SILT, little f-Sand, trace f-Gravel, damp

Boring Log

Boring/Well SV-B9-3 Project/No. B0087377 Page 1 of 1

Site Location BMS - Buffalo, NY Drilling Started 2/23/2016 Drilling Completed 2/23/2016

Total Depth Drilled 5 Feet Hole Diameter 2 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device N/A Sampling Interval 4 feet

Land-Surface Elev. N/A feet ☐ Surveyed ☐ Estimated Datum N/A

Drilling Fluid Used N/A Drilling Method Geoprobe

Drilling Contractor Parratt-Wolff Inc. Driller Mark Evans Helper Jared Evans

Prepared By Shawn P. Skelly Hammer Weight N/A Hammer Drop N/A ins.

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	Sample/Core Description
0	5	N/A	N/A	Fill material (Hand cleared to 5', no sampling performed).
5	8	3.0	N/A	Brown Silty Clay, dry, trace f-Gravel, trace f-m Sand (0.0-2.0')
				Dark brown SILT, f-Sand, trace f-Gravel (2.0'-3.0')
8	12	1.8	N/A	Dark brown f-SAND, little Silt, little f-Gravel, slight odor
12	16	1.7	N/A	Brown SILT, some f-Gravel, little Sand, gravel fragments
16	20	2	N/A	Same as above (0.0-0.5')
				Brown Gravel, some to little Silt and f-Sand (0.5'-1.0')
				Brown Silt with Black staining, little Clay, trace f-Sand, slight odor, damp (1.0'-2.0')

ATTACHMENT B

Soil Vapor Sampling Logs

Soil Gas Sample Collection Log

ARCADIS

Sample ID: SV-B9-1

Client:	BMS	**Date/Day:**	03/03/2016
Project:	SV1	**Weather:**	OVERCAST, COLD
Location:	BUFFALO, NY	**Temperature:**	25 F
Project #:		**Wind Speed/Direction:**	~~(0 mph)~~ 5-10 (mph) ENE
Samplers:	SPS	**Subcontractor:**	NA
Logged By:		**Equipment:**	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	**Moisture Content of Sampling Zone (circle one):**	(Dry) Moist
Sampling Depth:	3' - 4'		
Probe (circle one):	(Permanent) Temporary	**Approximate Volume of Sampling Train::**	200 mL (' of ¼" ID tubing)
Time of Collection:	Start: 1245 Finish: 1315	**Approximate Purge Volume:**	600 mL= [(200) * (3 v)]

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)

SUMMA Canister Information

Size (circle one): (1 L) ~~6 L~~

Canister ID: 11835

Flow Controller ID: 06535

Tracer Gas Information (if applicable)

Tracer Gas: Helium / NA

Canister Pressure (inches Hg):

Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
-	Digital: -29.5 / Analog: -29.0	Analog: -8.0

Tracer Gas Concentration (if applicable):

Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
0 ppm	0 ppm	16.2 %	15.9 %	2.3 %

General Observations/Notes:

Photo ID:	0.0 ppb reading on the PID following sample
Analog reading after ~~hrs~~	1255: -21.0 Collection from soil vapor tubing.
Analog reading after ~~hrs~~	1305: -14.5
Differential Pressure:	

Approximating One-Well Volume (for purging temporary points):
Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Soil Gas Sample Collection Log

ARCADIS

Sample ID: SV-B9-2

Client:	BMS	**Date/Day:**	03/03/2016
Project:	SV1	**Weather:**	OVERCAST, COLD
Location:	BUFFALO, NY	**Temperature:**	25F
Project #:		**Wind Speed/Direction:**	~~(0 mph)~~ 5-10 (mph) ENE
Samplers:	SPS	**Subcontractor:**	NA
Logged By:		**Equipment:**	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	3.5' - 4.5'		
Probe (circle one):	(Permanent) / Temporary	**Approximate Volume of Sampling Train::**	210 mL (' of ¼" ID tubing)
Time of Collection:	Start: 1335 Finish: 1405	**Approximate Purge Volume:**	630 mL= [(210) * (3 v)]

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)

SUMMA Canister Information

Size (circle one): (1 L) ~~6 L~~

Canister ID: 35604

Flow Controller ID: 067457

Tracer Gas Information (if applicable)

Tracer Gas: Helium / NA

Canister Pressure (inches Hg):

Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
-	Digital: - 26.0 / Analog: - 27.5	Analog: - 8.0

Tracer Gas Concentration (if applicable):

Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	**Post Sample**	**Prior to Purging**	**Post Purging**	**Post Sampling**
0 ppm	0 ppm	18.8 %	18.2 ~~39~~ % SPS	3.9 %

General Observations/Notes:

~~Photo ID:~~	0 ppb reading on the PID following sample
Analog reading after ~~hrs~~: 1345 - -21.5	Collection from soil vapor tubing.
Analog reading after ~~hrs~~ 1355 - -15.5	
Differential Pressure:	

Approximating One-Well Volume (for purging temporary points):
Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Soil Gas Sample Collection Log

ARCADIS

Sample ID: SV-B9-3

Client:	BMS	**Date/Day:**	03/03/2016
Project:	SV1	**Weather:**	OVERCAST, COLD
Location:	BUFFALO, NY	**Temperature:**	25 F
Project #:		**Wind Speed/Direction:**	~~[illegible]~~ 5-10 (mph) ENE
Samplers:	SPS	**Subcontractor:**	NA
Logged By:		**Equipment:**	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	17 ' – 18 '		
Probe (circle one):	(Permanent) / Temporary	**Approximate Volume of Sampling Train::**	300 mL (' of ¼" ID tubing)
Time of Collection:	Start: 1430 Finish: 1500	**Approximate Purge Volume:**	900 mL= [(300) * (3 v)]

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)

SUMMA Canister Information

Size (circle one): (1 L) ~~[illegible]~~

Canister ID: 12356

Flow Controller ID: 00343

Tracer Gas Information (if applicable)

Tracer Gas: Helium / NA

Canister Pressure (inches Hg):

Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
-	Digital: -29.5 / Analog: - >30	Analog: - 10.0

Tracer Gas Concentration (if applicable):

Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	**Post Sample**	**Prior to Purging**	**Post Purging**	**Post Sampling**
0 ppm	0 ppm	20.5 ~~[illegible]~~ %	20.0 ~~[illegible]~~ %	3.8 %

General Observations/Notes:

Photo ID:	0 ppb reading on the PID following sample
Analog reading after ~~[illegible]~~: 1440: -24.5	Collection from soil vapor tubing.
Analog reading after ~~[illegible]~~: 1450: -17.5	
Differential Pressure:	

Approximating One-Well Volume (for purging temporary points):
Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Soil Gas Sample Collection Log

ARCADIS

Sample ID: FD.030316

Client:	BMS	**Date/Day:**	03/03/16
Project:	SVI	**Weather:**	OVERCAST, COLD
Location:	BUFFALO, NY	**Temperature:**	25 F
Project #:		**Wind Speed/Direction:**	~~(ft/min)~~ 5-10 (mph) ENE
Samplers:	SBS	**Subcontractor:**	NA
Logged By:		**Equipment:**	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	**Moisture Content of Sampling Zone (circle one):**	(Dry) / Moist
Sampling Depth:	17 ' - 18 '		
Probe (circle one):	(Permanent) / Temporary	**Approximate Volume of Sampling Train::**	300 mL (' of ¼" ID tubing)
Time of Collection:	Start: 1430 Finish: 1500	**Approximate Purge Volume:**	900 mL= [(300) * (3v)]

Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)

SUMMA Canister Information

Size (circle one): (1 L) ~~6 L~~

Canister ID: 36496

Flow Controller ID: 00963

Tracer Gas Information (if applicable)

Tracer Gas: Helium / NA

Canister Pressure (inches Hg):

Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
-	Digital: - 29.5 / Analog: - 7.30	Analog: - 9.5

Tracer Gas Concentration (if applicable):

Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	**Post Sample**	**Prior to Purging**	**Post Purging**	**Post Sampling**
0 ppm	0 ppm	20.5 %	20.0 %	3.8 %

General Observations/Notes: PARENT SAMPLE: SV-B9-3

Photo ID:	0 ppb reading on the PID following sample
Analog reading after ~~HCl~~	1440: ~~+7.5~~ -24.5 Collection from soil vapor tubing.
Analog reading after ~~HCl~~	1450: -17.0
Differential Pressure:	

Approximating One-Well Volume (for purging temporary points):
Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ATTACHMENT C

Laboratory Analytical Report

Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

TO-15

INVENTORY SHEET

Work Order #: 1603115

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b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
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c. Internal Standard Summary Form (If Applicable)	62	62
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5. Other Records (describe or list)		
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h. Canister Certification	--	--
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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	3/31/16
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1603115

Work Order Summary

CLIENT:	Ms. Margaret Bartee Arcadis U.S., Inc. 8 South River Road CRANBURY, NJ 08512	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	(609) 860-0590	**P.O. #**	B0087377.0000.0001A
FAX:		**PROJECT #**	B0087377.0000.0001A BMS-BUFFALO
DATE RECEIVED:	03/05/2016	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/21/2016		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV-B9-1	TO-15	5.5 "Hg	15 psi
02A	SV-B9-2	TO-15	5.0 "Hg	15 psi
03A	SV-B9-3	TO-15	8.0 "Hg	15 psi
04A	FD-030316	TO-15	7.5 "Hg	15 psi
05A	Lab Blank	TO-15	NA	NA
06A	CCV	TO-15	NA	NA
07A	LCS	TO-15	NA	NA
07AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 03/21/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1603115

Four 1 Liter Summa Canister samples were received on March 05, 2016. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds. Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates

as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SV-B9-1	1603115-01A	3/ 3/2016	3/ 5/2016	NA	13	3/16/2016	NA	Good
SV-B9-2	1603115-02A	3/ 3/2016	3/ 5/2016	NA	13	3/16/2016	NA	Good
SV-B9-3	1603115-03A	3/ 3/2016	3/ 5/2016	NA	13	3/16/2016	NA	Good
FD-030316	1603115-04A	3/ 3/2016	3/ 5/2016	NA	13	3/16/2016	NA	Good
Lab Blank	1603115-05A	NA	NA	NA	NA	3/16/2016	NA	Good
CCV	1603115-06A	NA	NA	NA	NA	3/16/2016	NA	Good
LCS	1603115-07A	NA	NA	NA	NA	3/16/2016	NA	Good
LCSD	1603115-07AA	NA	NA	NA	NA	3/16/2016	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-B9-1

Lab ID#: 1603115-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Cyclohexane	1.2	9.1	4.2	31
Benzene	1.2	7.9	3.9	25
Toluene	1.2	6.8	4.6	26
Ethyl Benzene	1.2	1.8	5.4	7.7
m,p-Xylene	1.2	4.2	5.4	18
o-Xylene	1.2	2.5	5.4	11
Methylcyclohexane	4.9	16	20	64

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Client Sample ID: SV-B9-1

Lab ID#: 1603115-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031608**	**Date of Collection:**	**3/3/16 1:15:00 PM**
Dil. Factor:	**2.47**	**Date of Analysis:**	**3/16/16 02:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Acetone	12	Not Detected	29	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Cyclohexane	1.2	9.1	4.2	31
Benzene	1.2	7.9	3.9	25
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Toluene	1.2	6.8	4.6	26
Ethyl Benzene	1.2	1.8	5.4	7.7
m,p-Xylene	1.2	4.2	5.4	18
o-Xylene	1.2	2.5	5.4	11
Cumene	1.2	Not Detected	6.1	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected
1,2,3-Trimethylbenzene	4.9	Not Detected	24	Not Detected
Naphthalene	2.5	Not Detected	13	Not Detected
Methylcyclohexane	4.9	16	20	64

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
1,2,4,5-Tetramethylbenzene	95-93-2	NA	Not Detected
1,2,3,4-Tetramethylbenzene	488-23-3	NA	Not Detected
Indene	95-13-6	NA	Not Detected
Indan	496-11-7	NA	Not Detected
Thiophene	110-02-1	NA	Not Detected
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031608.d
Lab Smp Id: 1603115-01A
Inj Date : 16-MAR-2016 14:45
Operator : js Inst ID: msdp.i
Smp Info : 200ml 11835
Misc Info : 5.5 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 3
Dil Factor: 2.47000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.47000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.449 (1.000)	130	117319	25.0000		80.00- 120.00	100.00
5.456	5.449 (1.000)	128	88387			49.06- 109.06	75.34
5.456	5.449 (1.000)	49	209025			124.20- 184.20	178.17
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	492239	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	67000			0.00- 44.57	13.61
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	462264	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	238798			20.36- 80.36	51.66
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.097)	65	181412	26.2028	26.203	80.00- 120.00	100.00
5.986	5.986 (1.097)	67	90612			26.68- 86.68	49.95

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.555	7.554 (1.191)	98	498500	25.3476	25.348	80.00- 120.00	100.00
7.555	7.554 (1.191)	70	51059			0.00- 40.62	10.24
7.555	7.554 (1.191)	100	329761			36.74- 96.74	66.15
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	357659	23.9903	23.990	80.00- 120.00	100.00
9.761	9.761 (1.112)	95	343287			65.95- 125.95	95.98
9.761	9.761 (1.112)	176	350144			65.80- 125.80	97.90
102 Cyclohexane					CAS #: 110-82-7		
5.620	5.628 (1.030)	84	26929	3.69205	9.119	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	66422			115.43- 175.43	246.66
5.628	5.628 (1.032)	41	37530			53.65- 113.65	139.37
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	47978	3.19814	7.899	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	12271			0.00- 53.91	25.58
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	68971	6.49766	16.049	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	29806			16.94- 76.94	43.21
6.645	6.645 (1.047)	55	85633			65.75- 125.75	124.16
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	57750	2.75334	6.801	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	32440			27.38- 87.38	56.17
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.858 (1.009)	106	6538	0.71475	1.765	80.00- 120.00	100.00
8.858	8.858 (1.009)	91	19148			276.53- 336.53	292.87
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	18944	1.70273	4.206	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	39444			166.59- 226.59	208.21
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	10925	1.02291	2.526	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	23561			176.08- 236.08	215.66

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031608.d
Lab Smp Id: 1603115-01A
Inj Date : 16-MAR-2016 14:45
Operator : js Inst ID: msdp.i
Smp Info : 200ml 11835
Misc Info : 5.5 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 3
Dil Factor: 2.47000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031608.d
Lab Smp Id: 1603115-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 5.5 Hg->15 psi

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	117319	-1.52
123 1,4-Difluorobenze	491164	294698	687630	492239	0.22
163 Chlorobenzene-d5	462293	277376	647210	462264	-0.01

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 21-Mar-2016 15:45

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1603115-01A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: Arc21131.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 5.5 Hg->15 psi

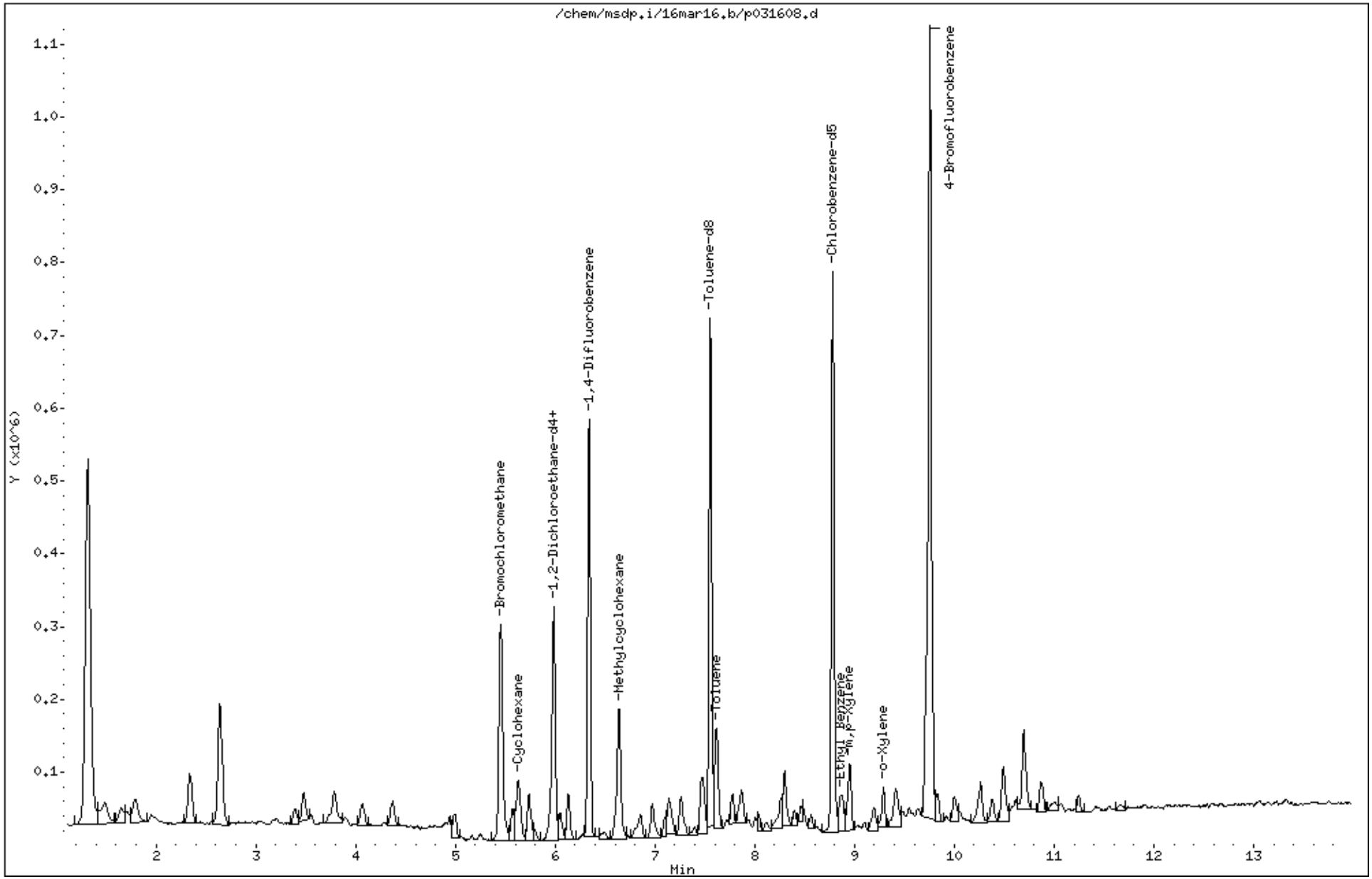
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.203	104.81	70-130
$ 146 Toluene-d8	25.000	25.348	101.39	70-130
$ 177 4-Bromofluorobenze	25.000	23.990	95.96	70-130

Data File: /chem/msdp.i/16mar16.b/p031608.d
Date : 16-MAR-2016 14:45
Client ID:
Sample Info: 200ml 11835

Instrument: msdp.i

Operator: js
Column diameter: 0.25

Column phase: RTX-624



Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

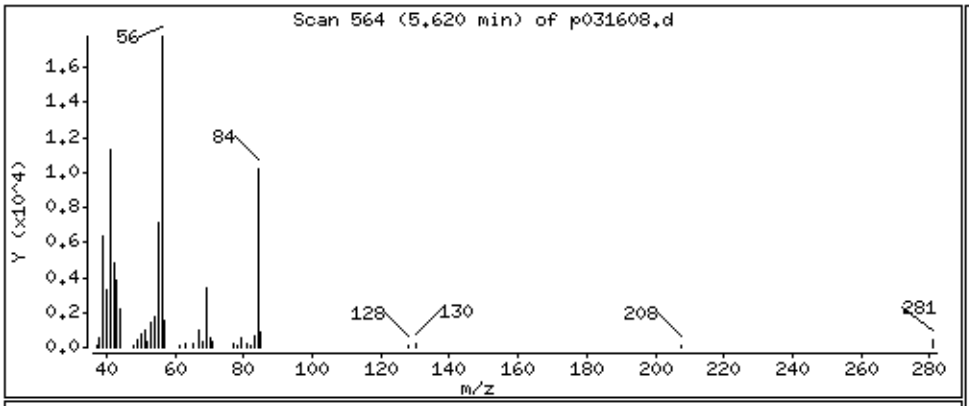
Operator: js

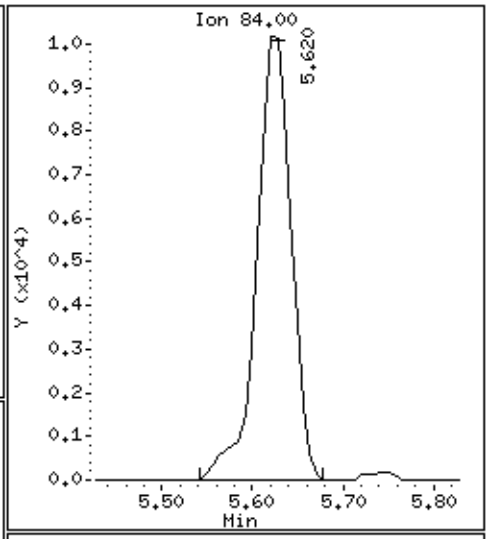
Column phase: RTX-624

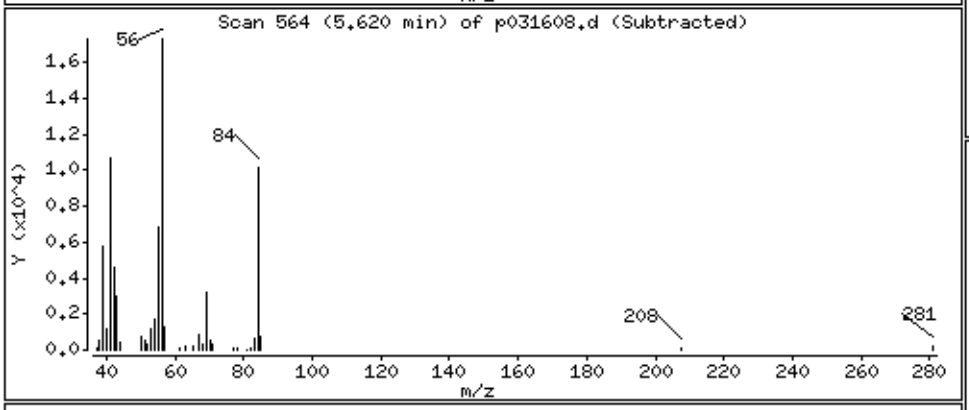
Column diameter: 0.25

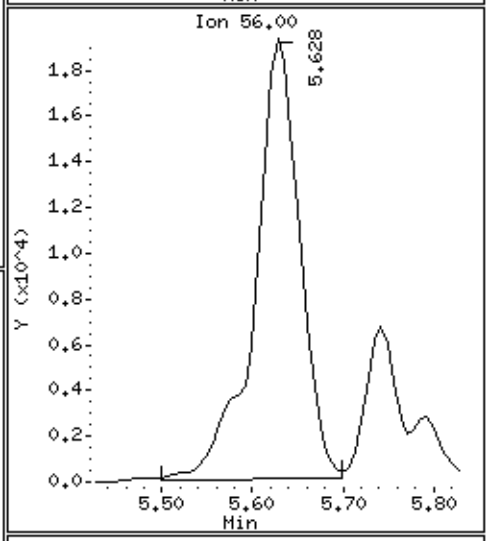
102 Cyclohexane

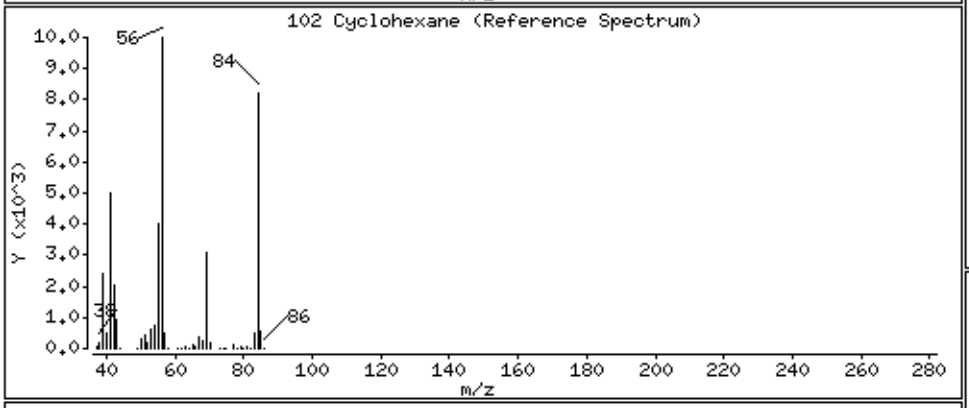
Concentration: 9.119 PPBV

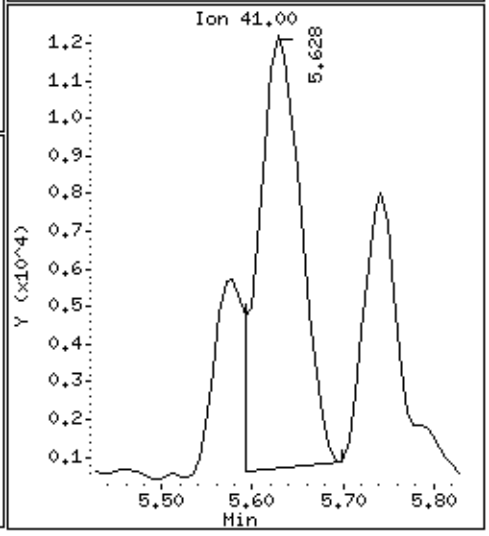


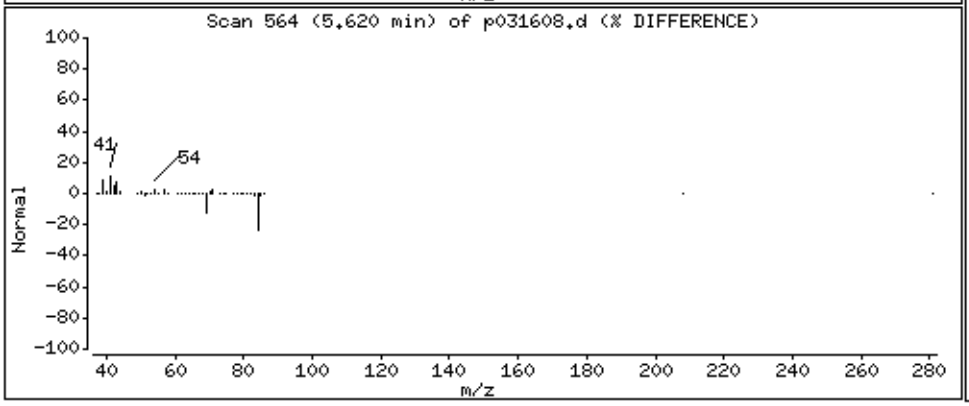












Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

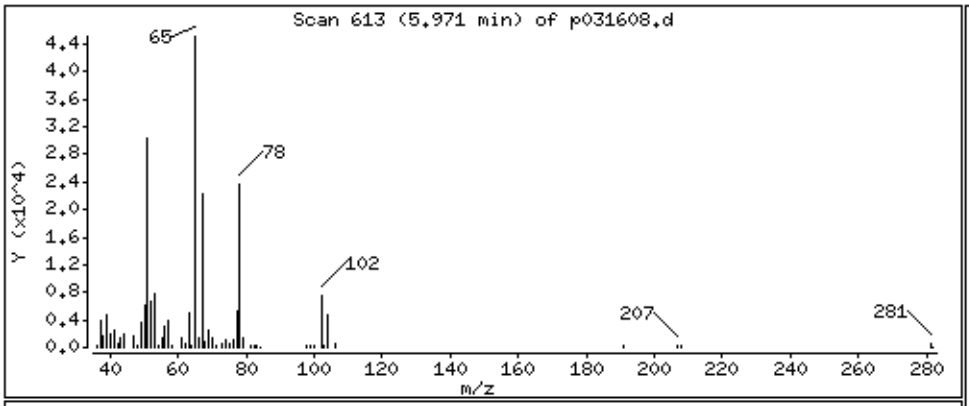
Operator: js

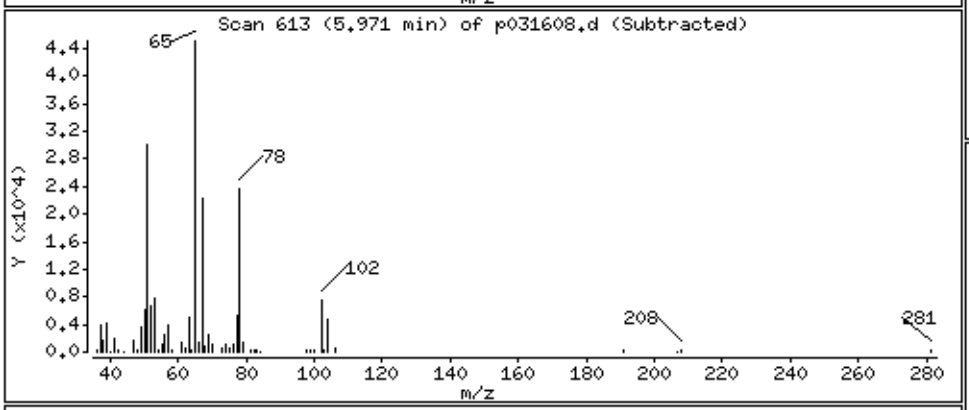
Column phase: RTX-624

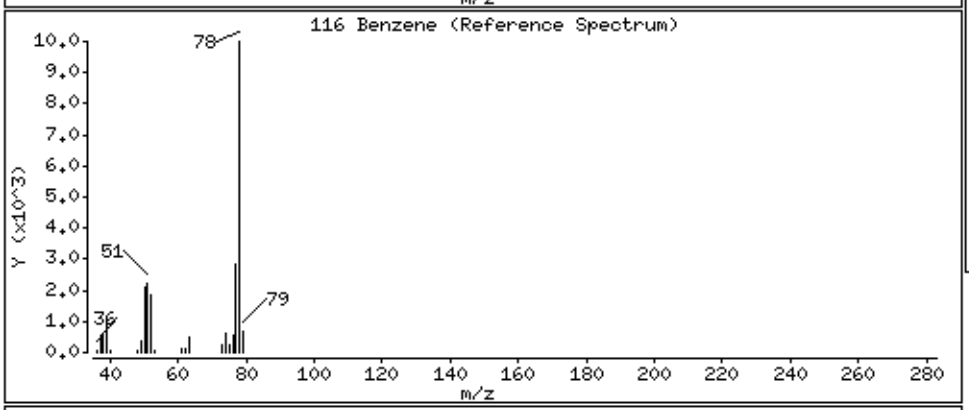
Column diameter: 0.25

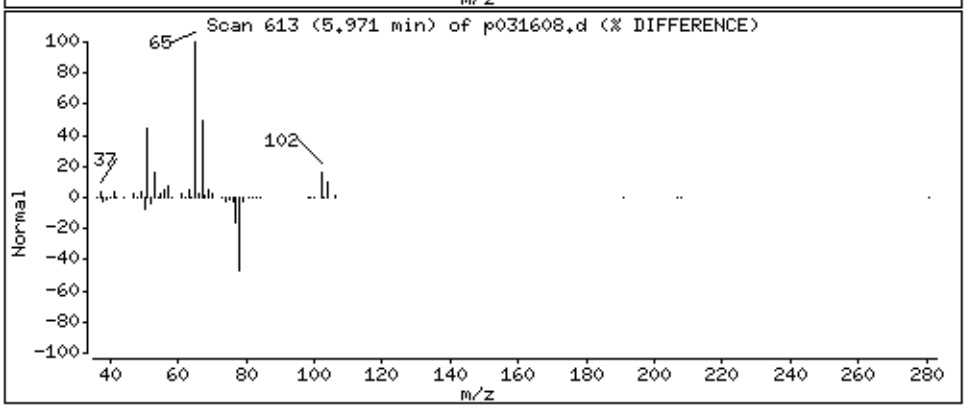
116 Benzene

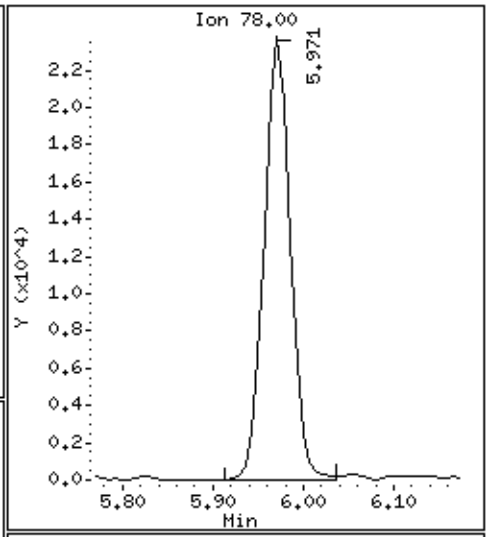
Concentration: 7.899 PPBV

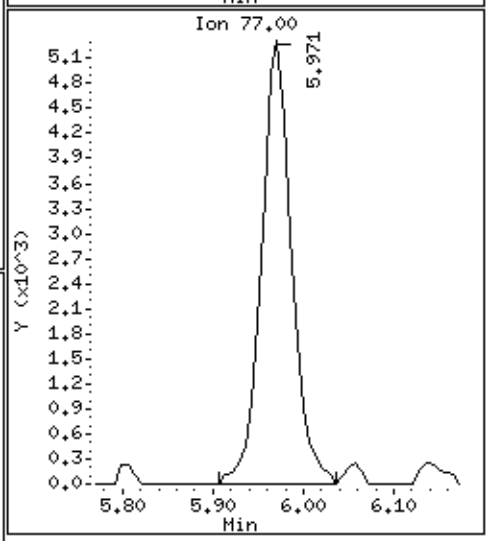












Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

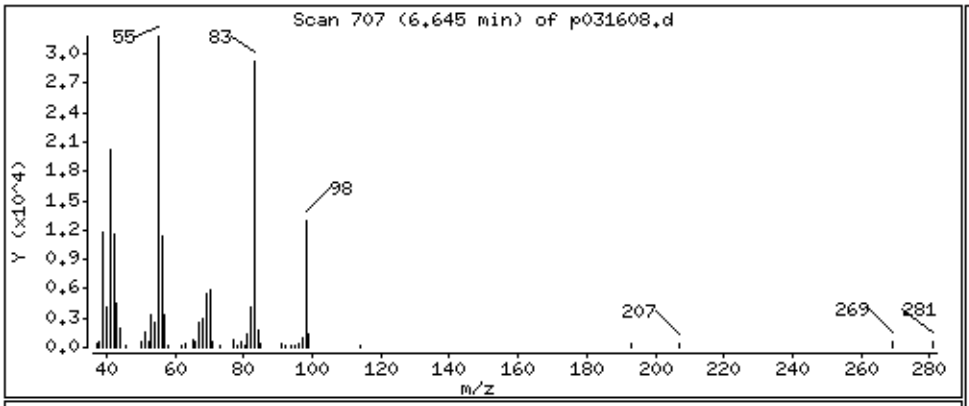
Operator: js

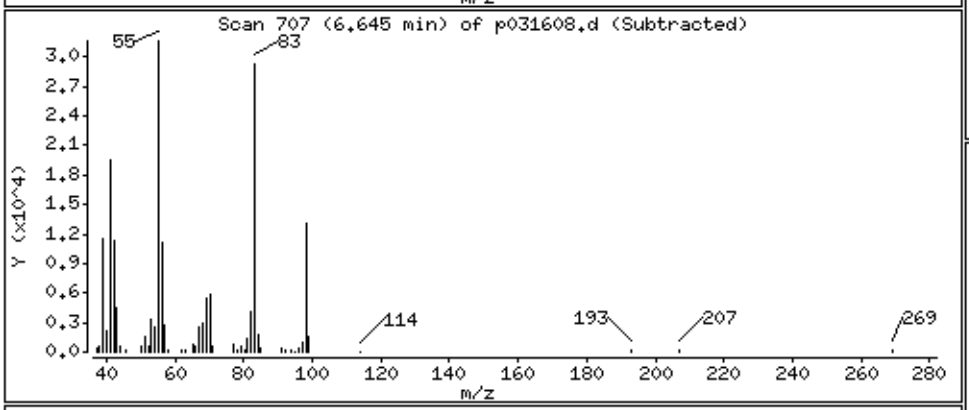
Column phase: RTX-624

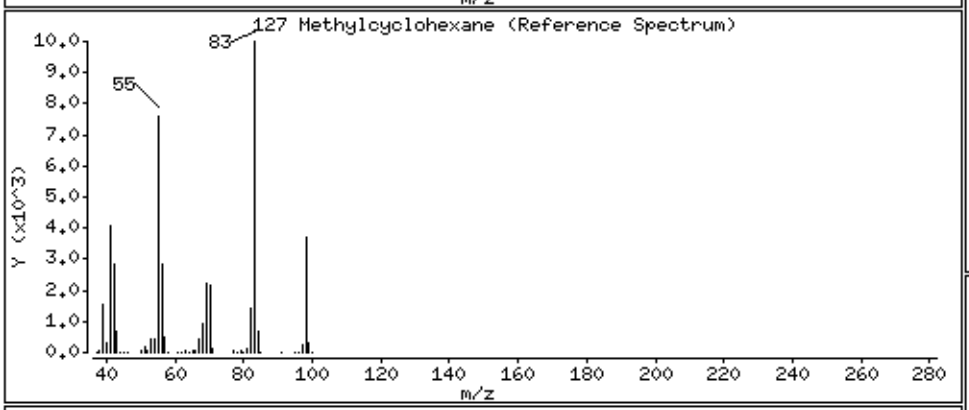
Column diameter: 0.25

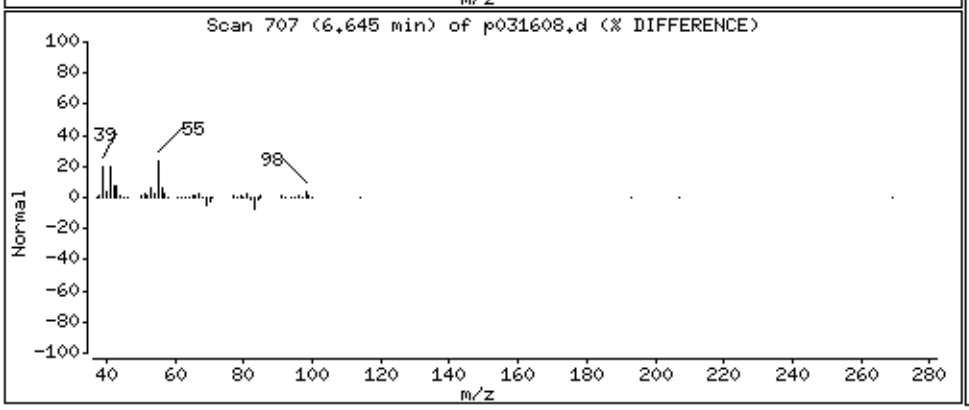
127 Methylcyclohexane

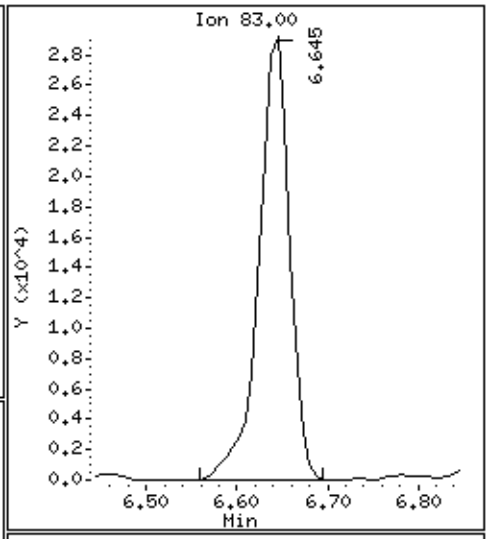
Concentration: 16.049 PPBV

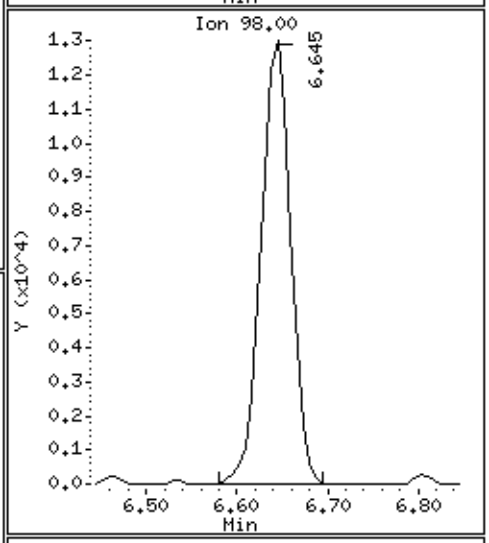


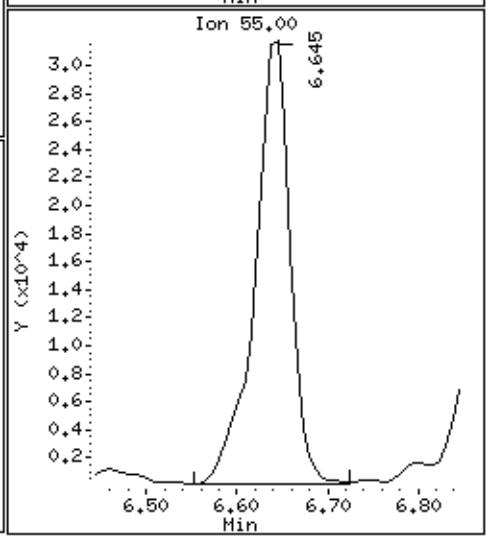












Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

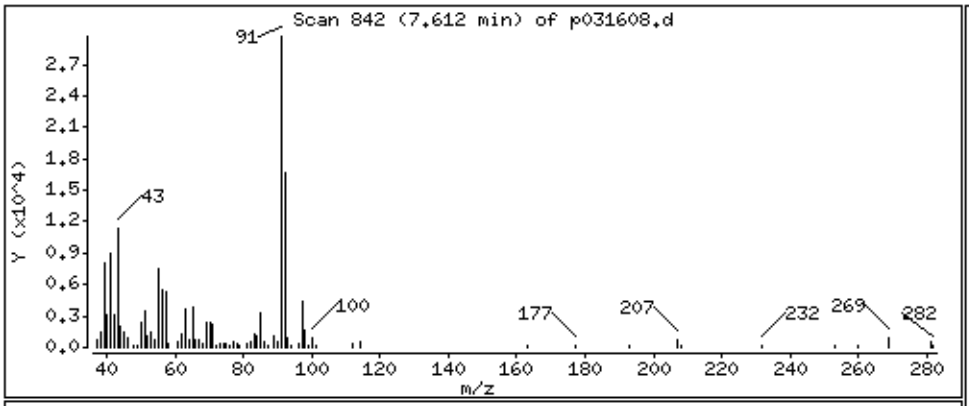
Operator: js

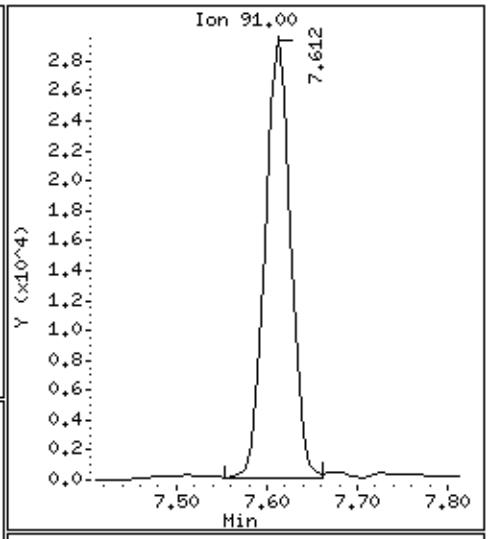
Column phase: RTX-624

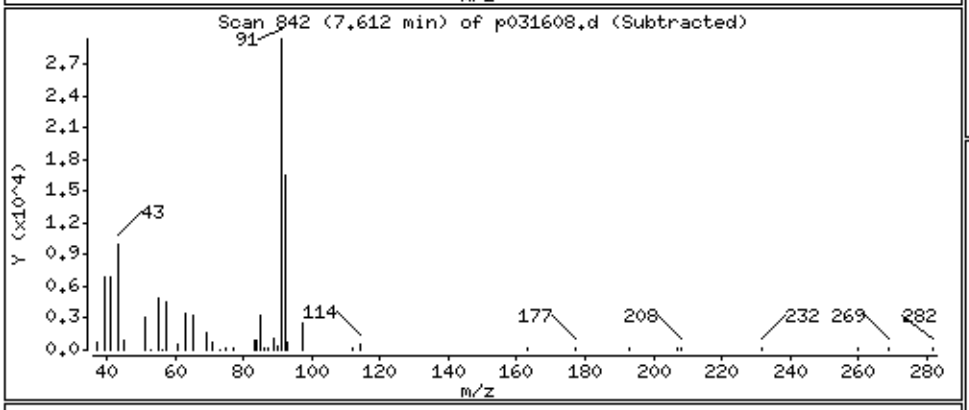
Column diameter: 0.25

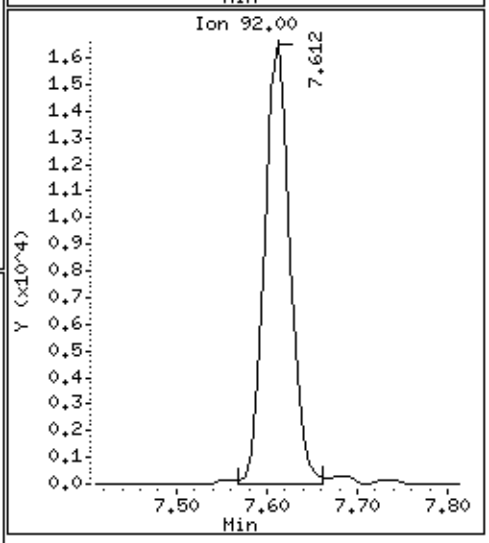
147 Toluene

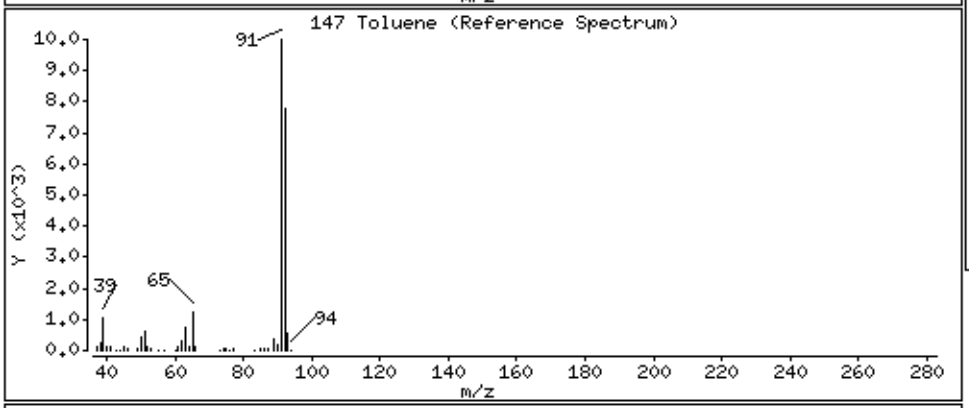
Concentration: 6.801 PPBV

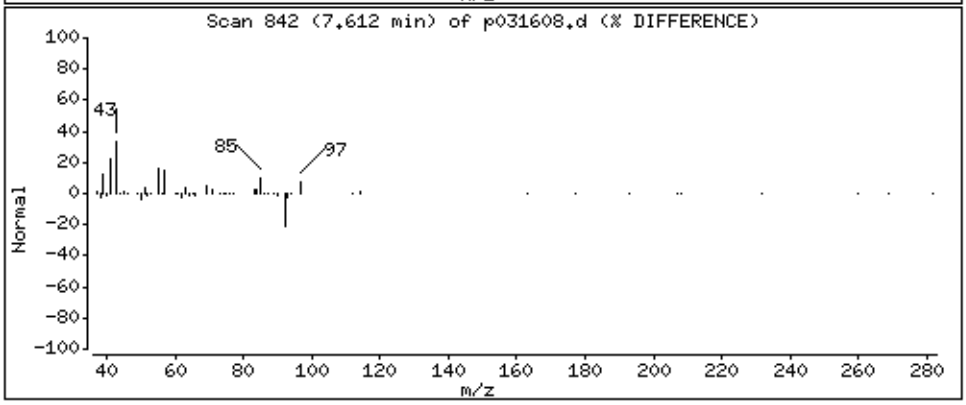












Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

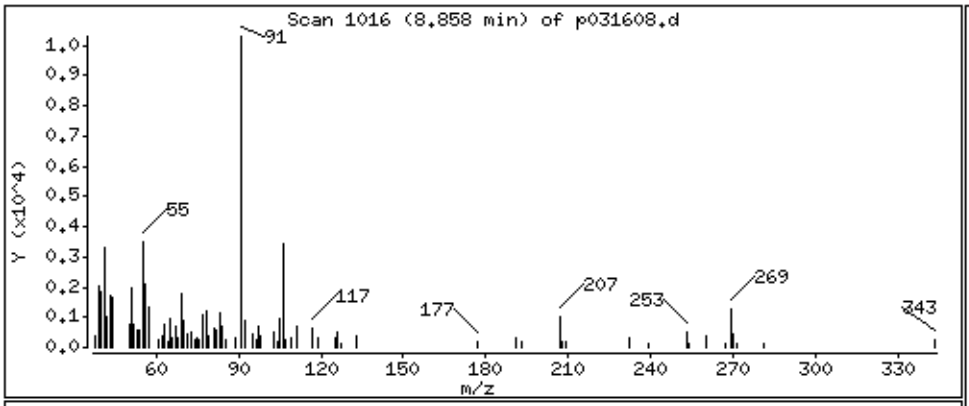
Operator: js

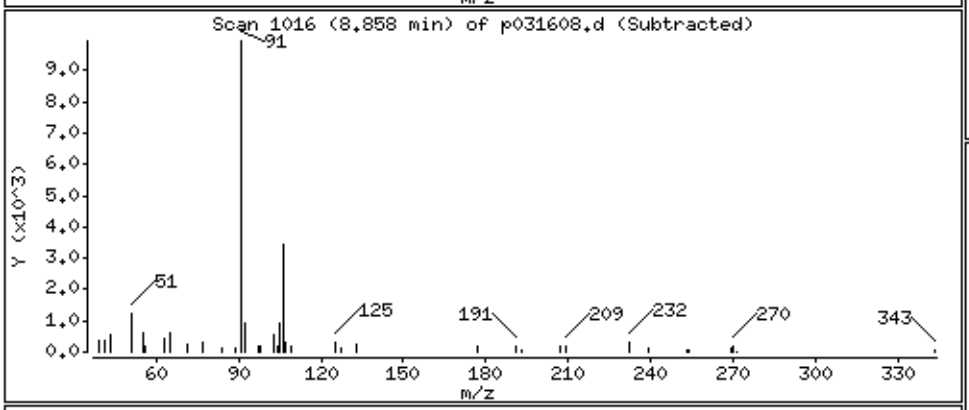
Column phase: RTX-624

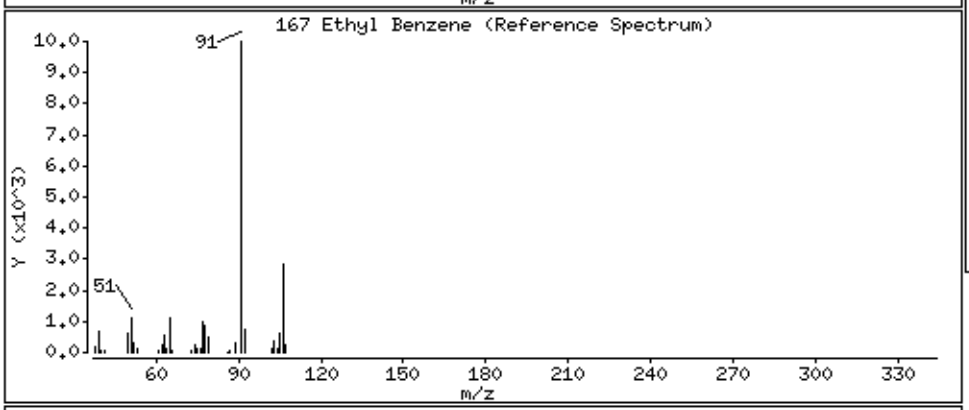
Column diameter: 0.25

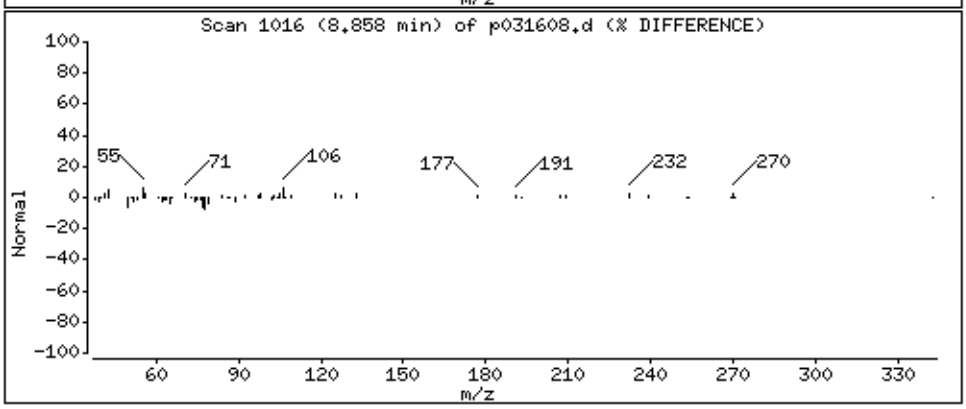
167 Ethyl Benzene

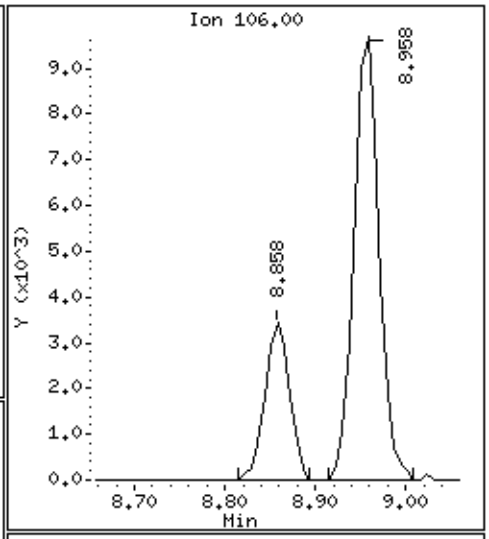
Concentration: 1.765 PPBV

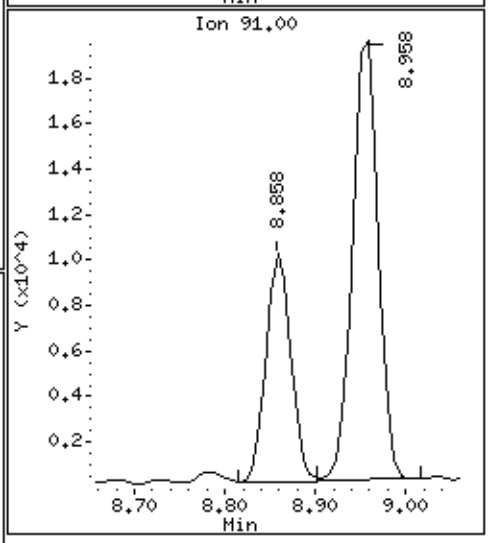












Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

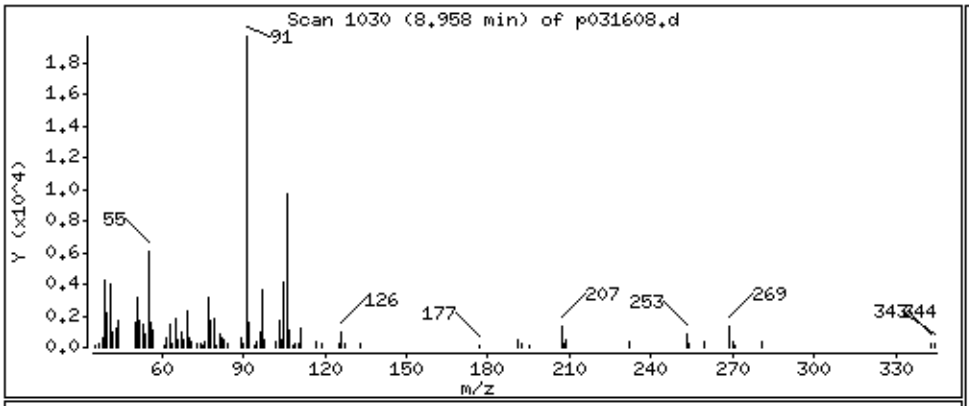
Operator: js

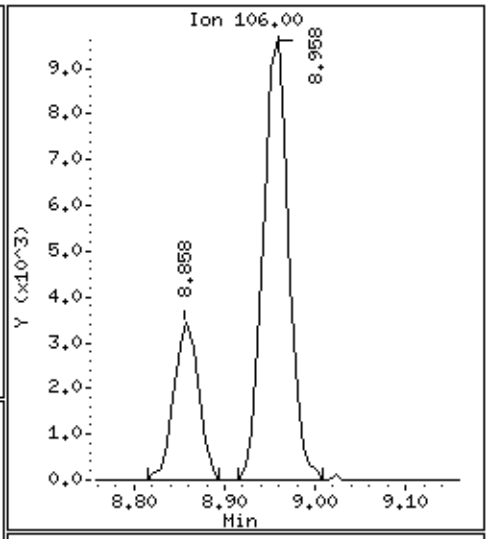
Column phase: RTX-624

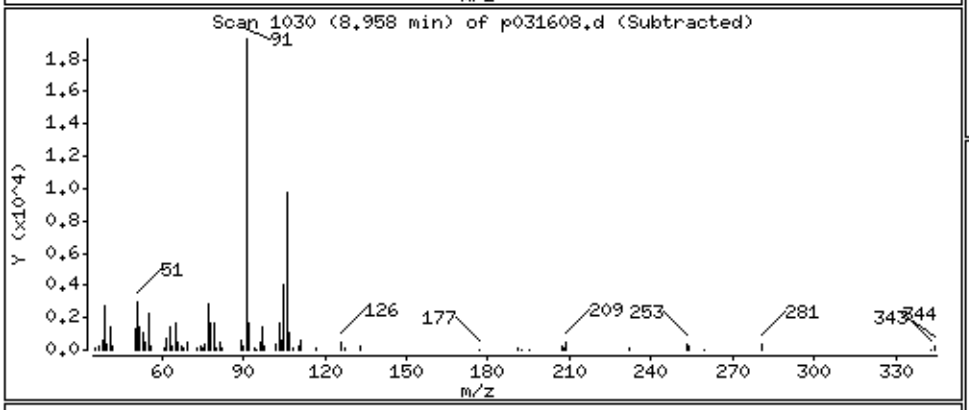
Column diameter: 0.25

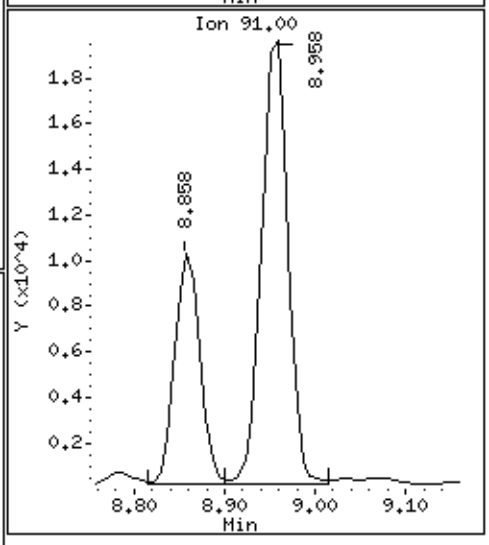
169 m,p-Xylene

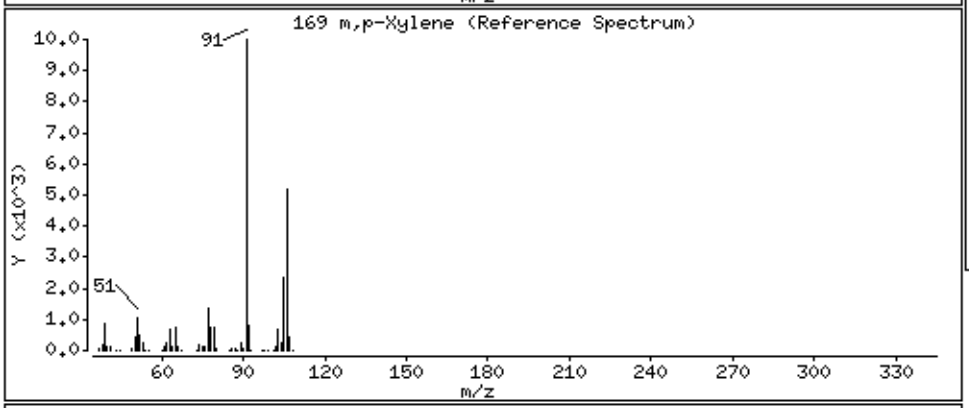
Concentration: 4.206 PPBV

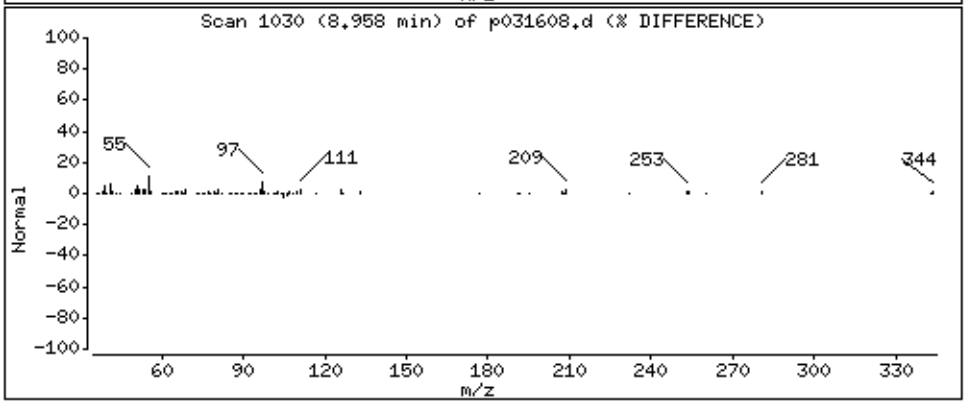












Data File: /chem/msdp.i/16mar16.b/p031608.d

Date : 16-MAR-2016 14:45

Client ID:

Instrument: msdp.i

Sample Info: 200ml 11835

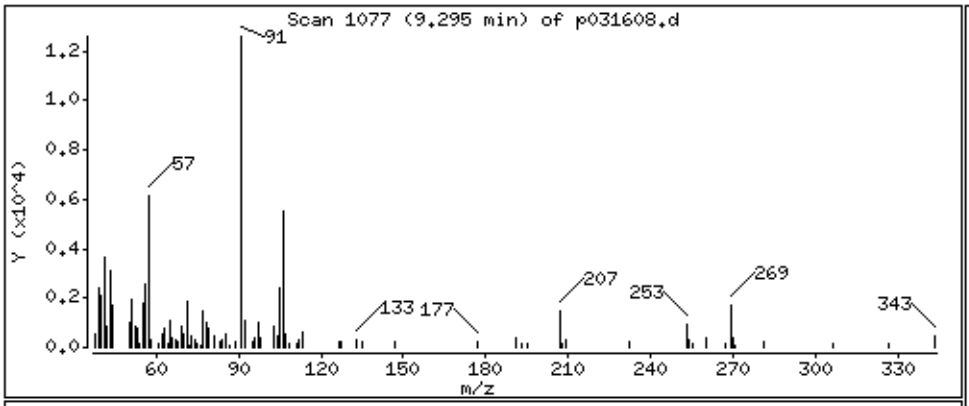
Operator: js

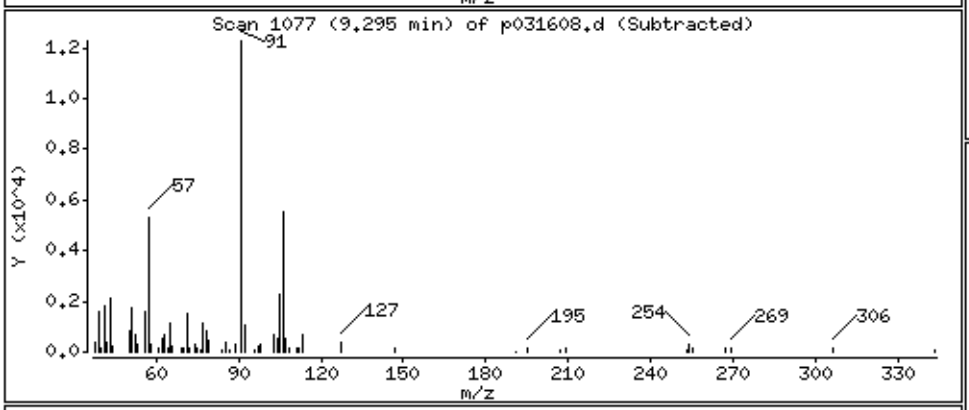
Column phase: RTX-624

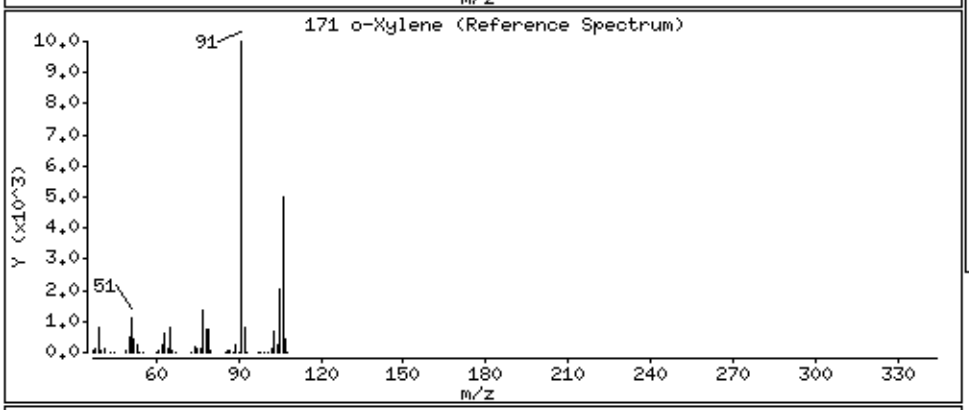
Column diameter: 0.25

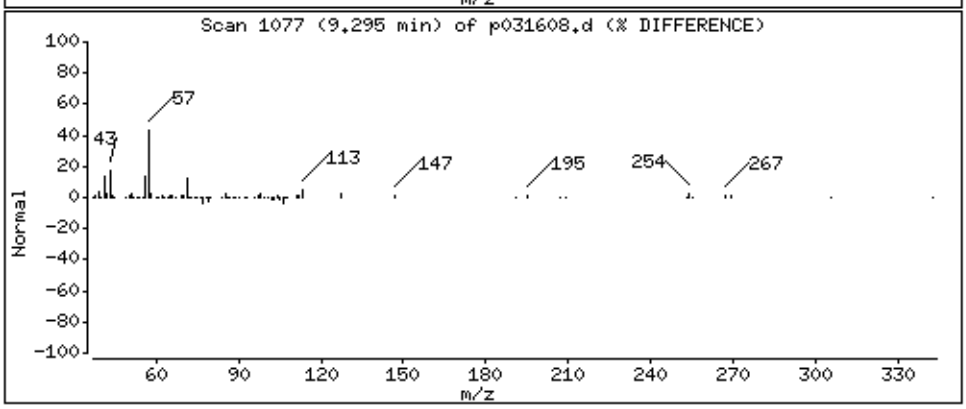
171 o-Xylene

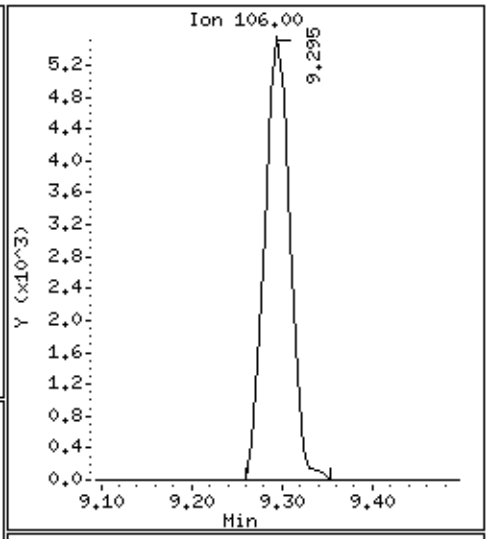
Concentration: 2.526 PPBV

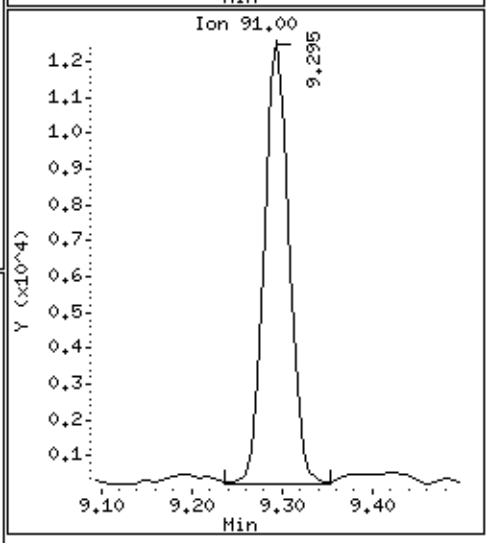












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-B9-2

Lab ID#: 1603115-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	12	15	29	36
Cyclohexane	1.2	1.6	4.2	5.6
Benzene	1.2	2.4	3.9	7.6
Toluene	1.2	7.7	4.6	29
m,p-Xylene	1.2	3.9	5.2	17
o-Xylene	1.2	1.7	5.2	7.5

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Client Sample ID: SV-B9-2

Lab ID#: 1603115-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031609**	**Date of Collection: 3/3/16 2:05:00 PM**	
Dil. Factor:	**2.42**	**Date of Analysis: 3/16/16 03:11 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Acetone	12	15	29	36
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Chloroform	1.2	Not Detected	5.9	Not Detected
Cyclohexane	1.2	1.6	4.2	5.6
Benzene	1.2	2.4	3.9	7.6
Trichloroethene	1.2	Not Detected	6.5	Not Detected
Toluene	1.2	7.7	4.6	29
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	3.9	5.2	17
o-Xylene	1.2	1.7	5.2	7.5
Cumene	1.2	Not Detected	5.9	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,2,3-Trimethylbenzene	4.8	Not Detected	24	Not Detected
Naphthalene	2.4	Not Detected	13	Not Detected
Methylcyclohexane	4.8	Not Detected	19	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
1,2,4,5-Tetramethylbenzene	95-93-2	NA	Not Detected
1,2,3,4-Tetramethylbenzene	488-23-3	NA	Not Detected
Indene	95-13-6	NA	Not Detected
Indan	496-11-7	NA	Not Detected
Thiophene	110-02-1	NA	Not Detected
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031609.d
Lab Smp Id: 1603115-02A
Inj Date : 16-MAR-2016 15:11
Operator : js Inst ID: msdp.i
Smp Info : 200ml 35604
Misc Info : 5.0 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 4
Dil Factor: 2.42000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.42000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.449 (1.000)	130	116950	25.0000		80.00- 120.00	100.00
5.456	5.449 (1.000)	128	89706			49.06- 109.06	76.71
5.456	5.449 (1.000)	49	210094			124.20- 184.20	179.64
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	478918	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	68409			0.00- 44.57	14.28
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	457620	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	236485			20.36- 80.36	51.68
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.097)	65	179245	25.9717	25.972	80.00- 120.00	100.00
5.986	5.986 (1.097)	67	87361			26.68- 86.68	48.74

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	481315	25.1544	25.154	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	53435			0.00- 40.62	11.10
7.554	7.554 (1.191)	100	329719			36.74- 96.74	68.50
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	361065	24.4646	24.464	80.00- 120.00	100.00
9.761	9.761 (1.112)	95	341311			65.95- 125.95	94.53
9.761	9.761 (1.112)	176	347593			65.80- 125.80	96.27
52 Acetone					CAS #: 67-64-1		
3.393	3.386 (0.622)	58	19283	6.25428	15.135	80.00- 120.00	100.00
3.393	3.386 (0.622)	43	71569			323.05- 383.05	371.15
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	4924	0.67723	1.639	80.00- 120.00	100.00
5.635	5.628 (1.033)	56	14480			115.43- 175.43	294.05
5.635	5.628 (1.033)	41	7619			53.65- 113.65	154.72
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	14276	0.97808	2.367	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	3667			0.00- 53.91	25.69
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	65089	3.18953	7.719	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	37803			27.38- 87.38	58.08
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	17817	1.61763	3.915	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	33656			166.59- 226.59	188.90
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	7529	0.71209	1.723	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	16580			176.08- 236.08	220.21

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031609.d
Lab Smp Id: 1603115-02A
Inj Date : 16-MAR-2016 15:11
Operator : js Inst ID: msdp.i
Smp Info : 200ml 35604
Misc Info : 5.0 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 4
Dil Factor: 2.42000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031609.d
Lab Smp Id: 1603115-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 5.0 Hg->15 psi

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	116950	-1.83
123 1,4-Difluorobenze	491164	294698	687630	478918	-2.49
163 Chlorobenzene-d5	462293	277376	647210	457620	-1.01

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 21-Mar-2016 15:36

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1603115-02A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: Arc21131.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 5.0 Hg->15 psi

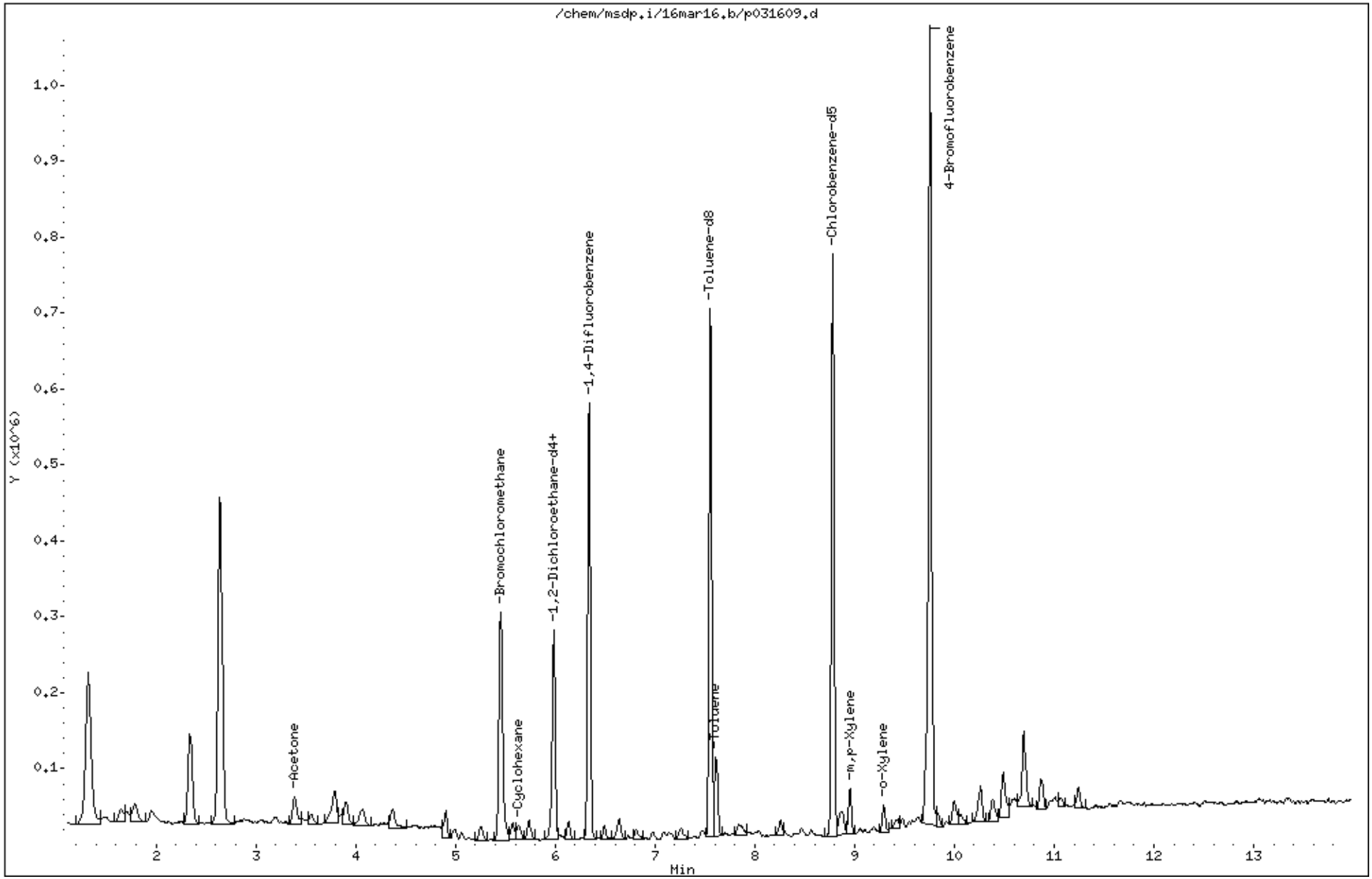
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.972	103.89	70-130
$ 146 Toluene-d8	25.000	25.154	100.62	70-130
$ 177 4-Bromofluorobenze	25.000	24.464	97.86	70-130

Data File: /chem/msdp.i/16mar16.b/p031609.d
Date : 16-MAR-2016 15:11
Client ID:
Sample Info: 200ml 35604

Column phase: RTX-624

Instrument: msdp.i

Operator: js
Column diameter: 0.25



Data File: /chem/msdp.i/16mar16.b/p031609.d

Date : 16-MAR-2016 15:11

Client ID:

Instrument: msdp.i

Sample Info: 200ml 35604

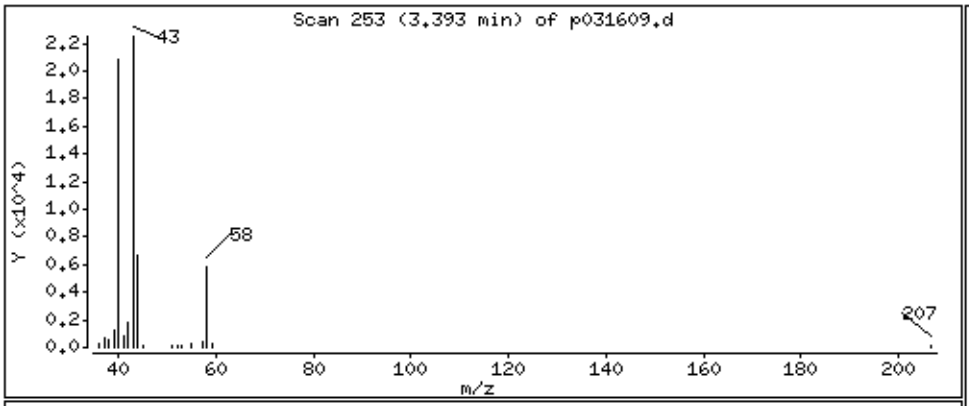
Operator: js

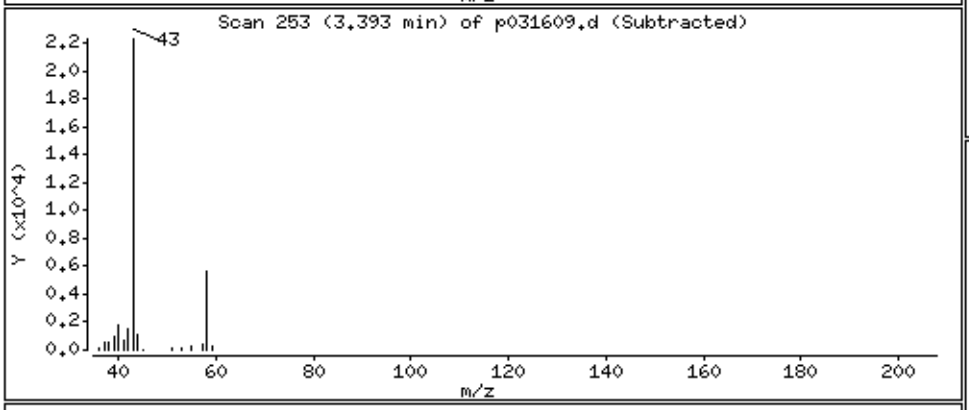
Column phase: RTX-624

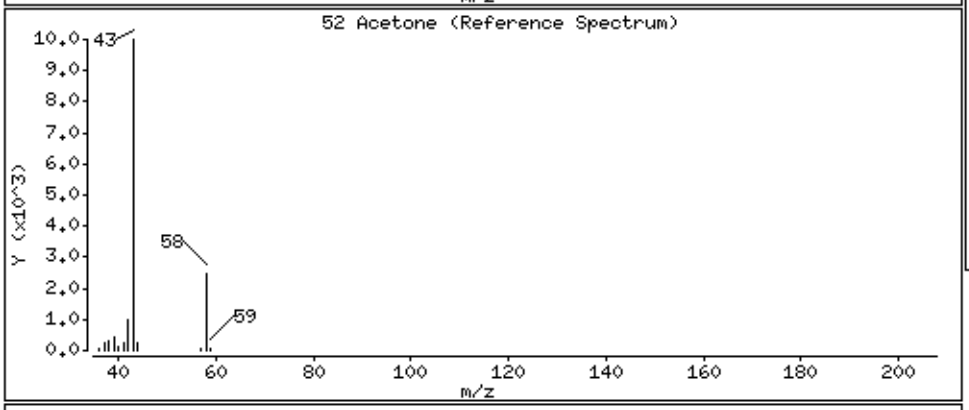
Column diameter: 0.25

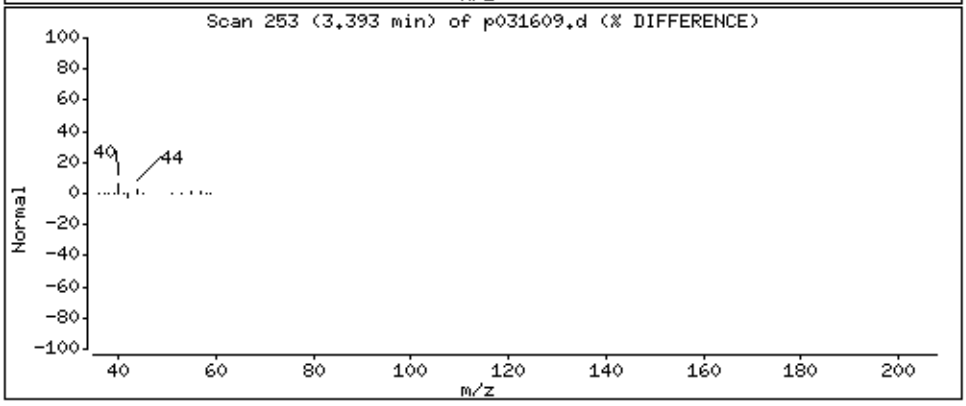
52 Acetone

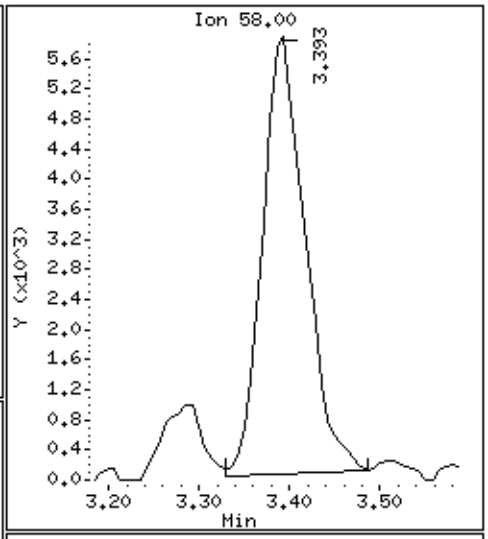
Concentration: 15.135 PPBV

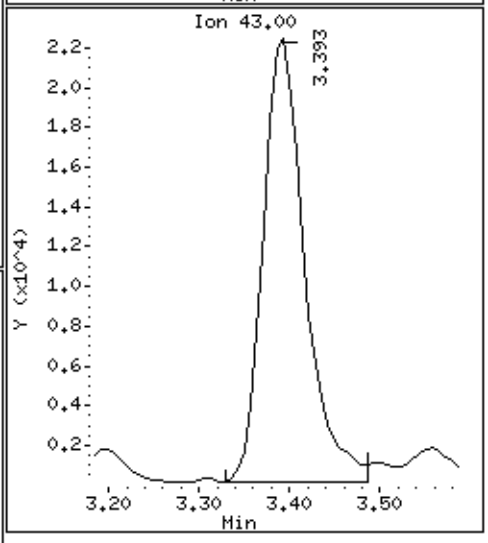












Data File: /chem/msdp.i/16mar16.b/p031609.d

Date : 16-MAR-2016 15:11

Client ID:

Instrument: msdp.i

Sample Info: 200ml 35604

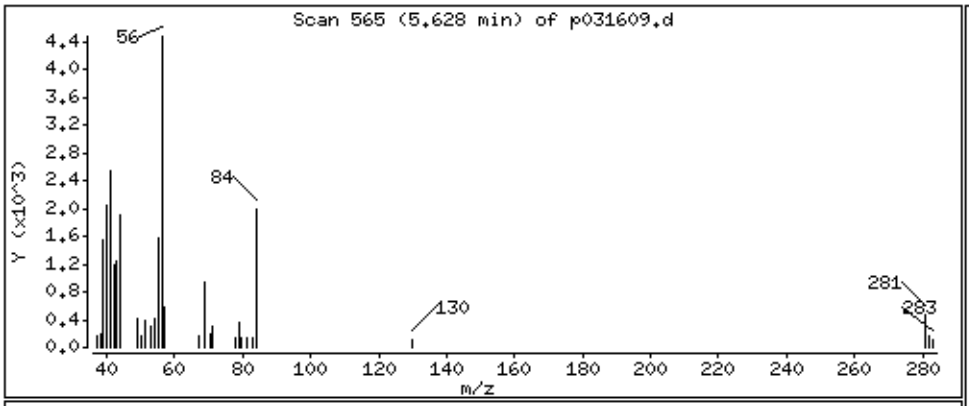
Operator: js

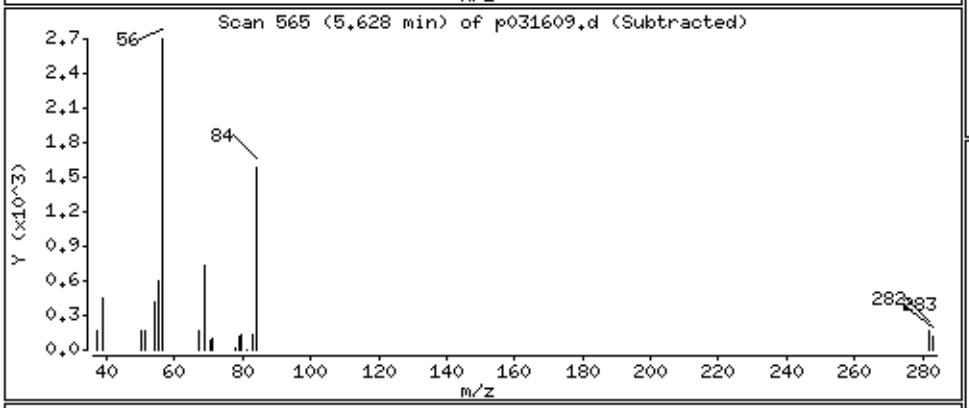
Column phase: RTX-624

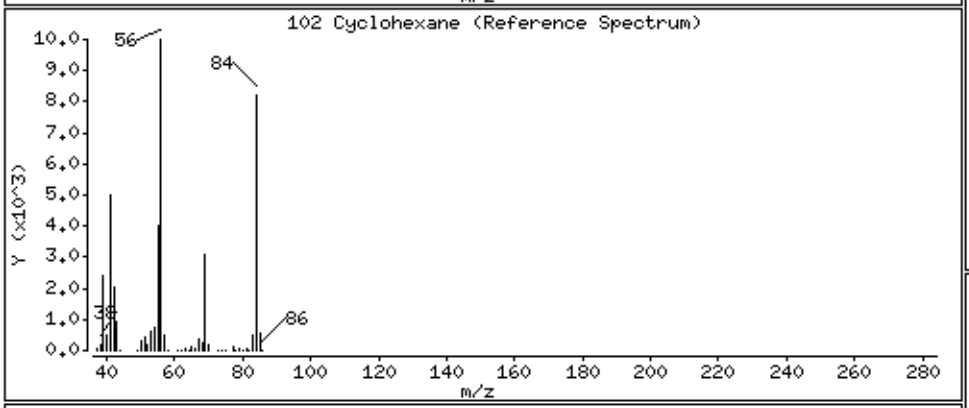
Column diameter: 0.25

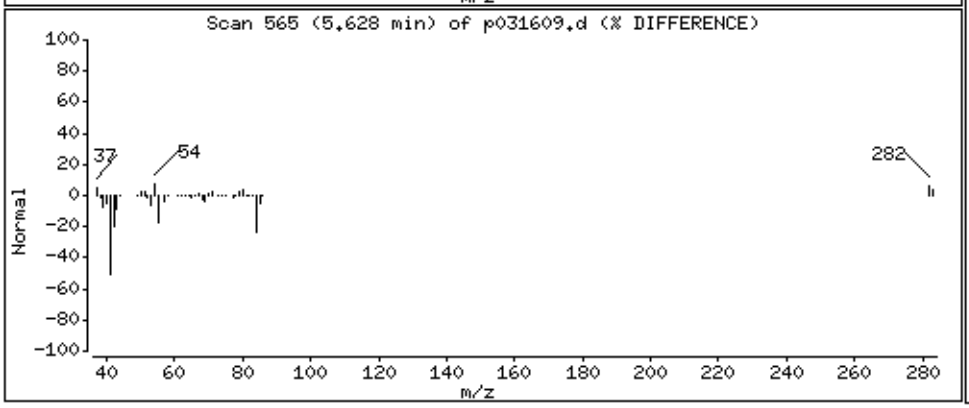
102 Cyclohexane

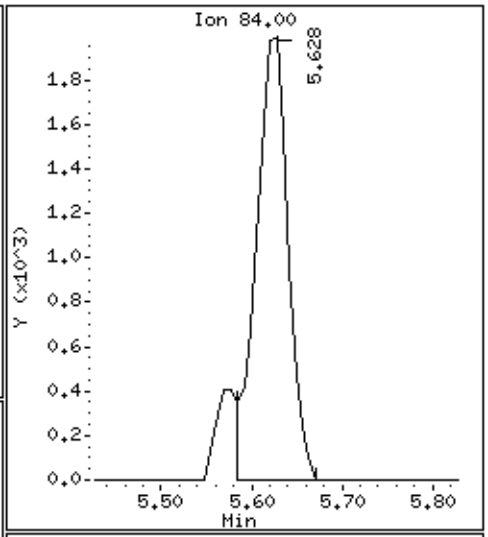
Concentration: 1.639 PPBV

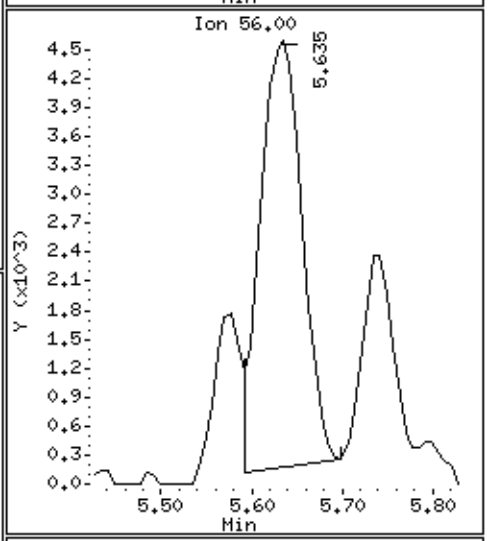


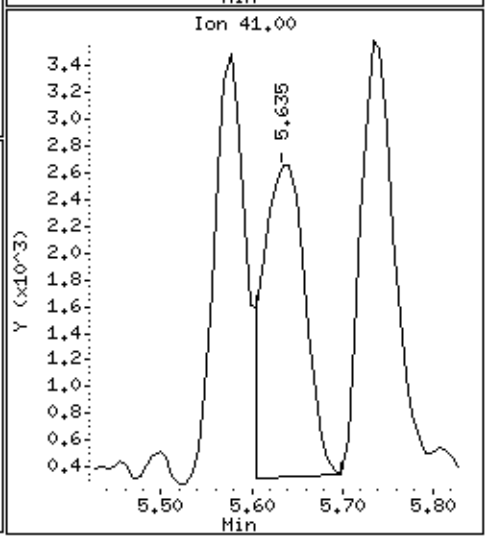












Data File: /chem/msdp.i/16mar16.b/p031609.d

Date : 16-MAR-2016 15:11

Client ID:

Instrument: msdp.i

Sample Info: 200ml 35604

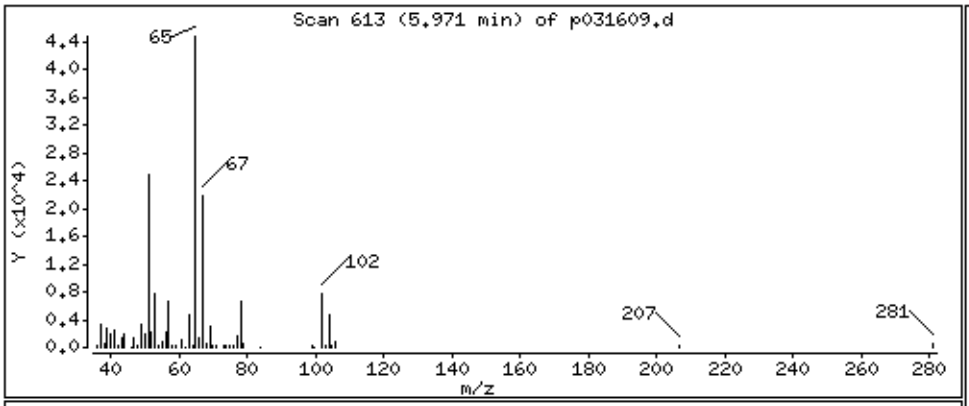
Operator: js

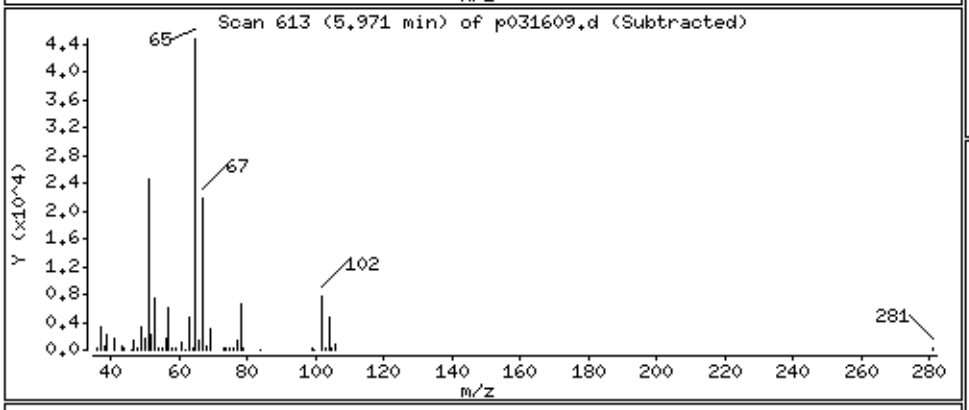
Column phase: RTX-624

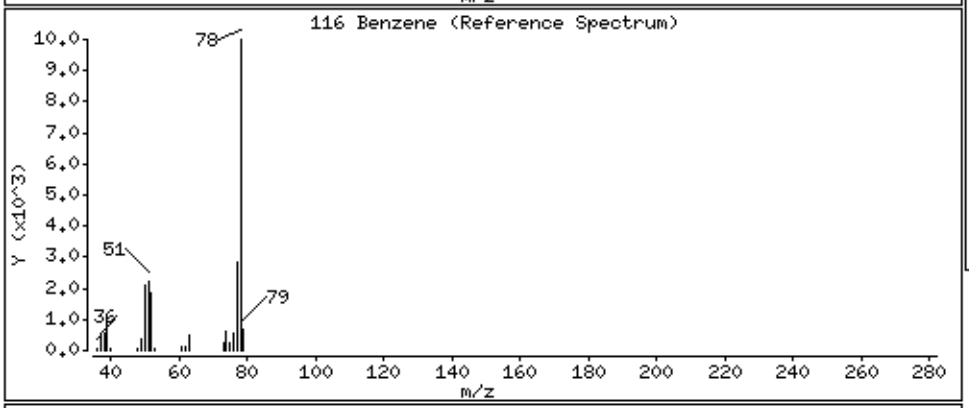
Column diameter: 0.25

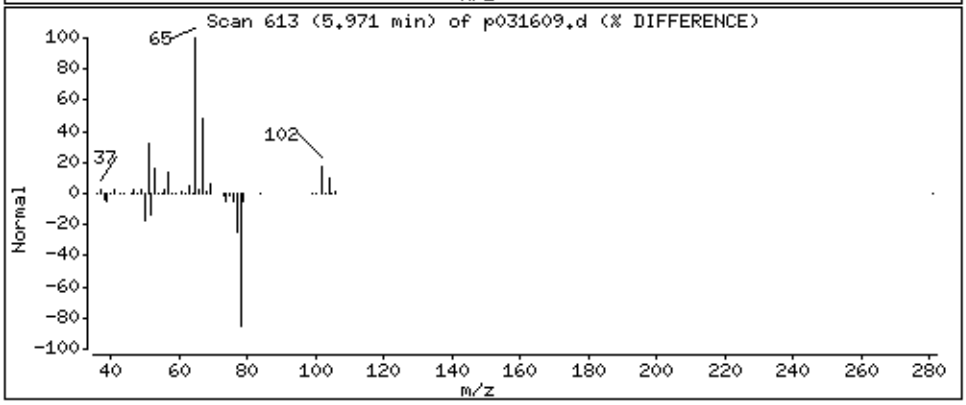
116 Benzene

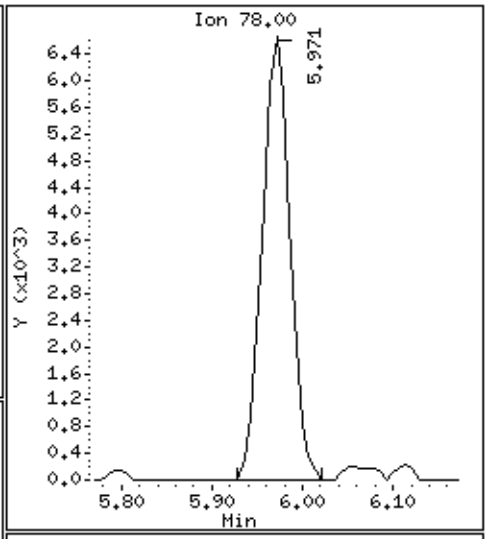
Concentration: 2.367 PPBV

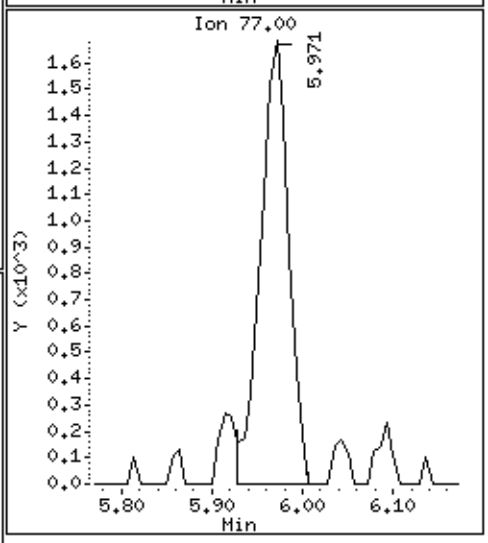












Data File: /chem/msdp.i/16mar16.b/p031609.d

Date : 16-MAR-2016 15:11

Client ID:

Instrument: msdp.i

Sample Info: 200ml 35604

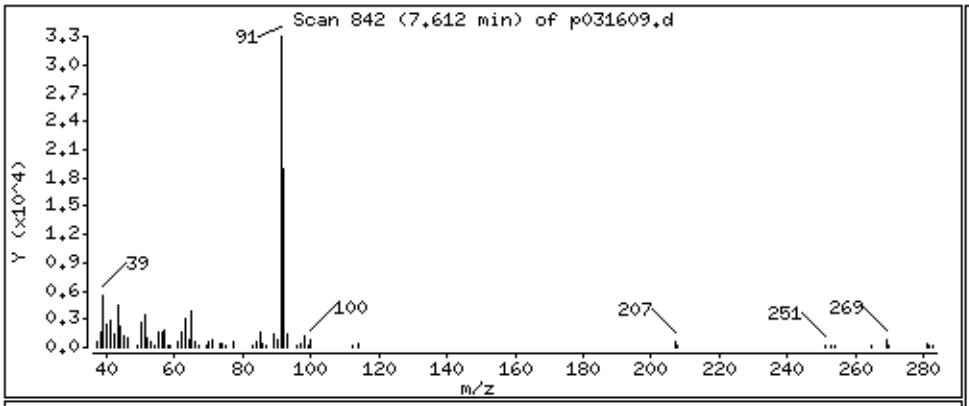
Operator: js

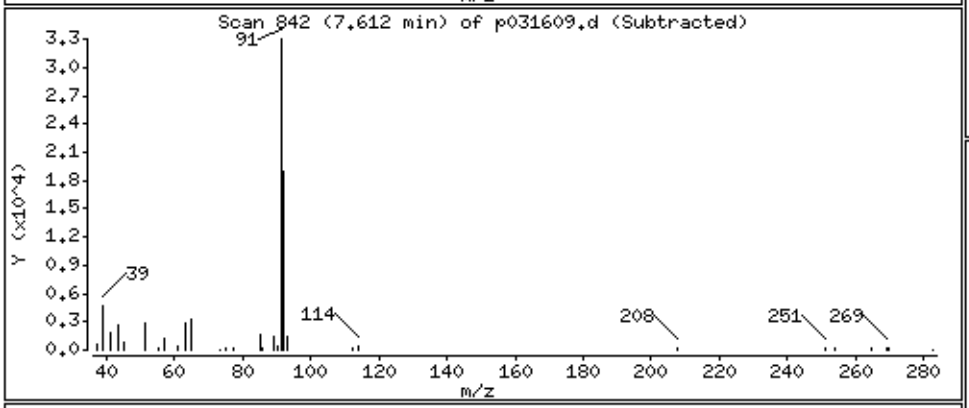
Column phase: RTX-624

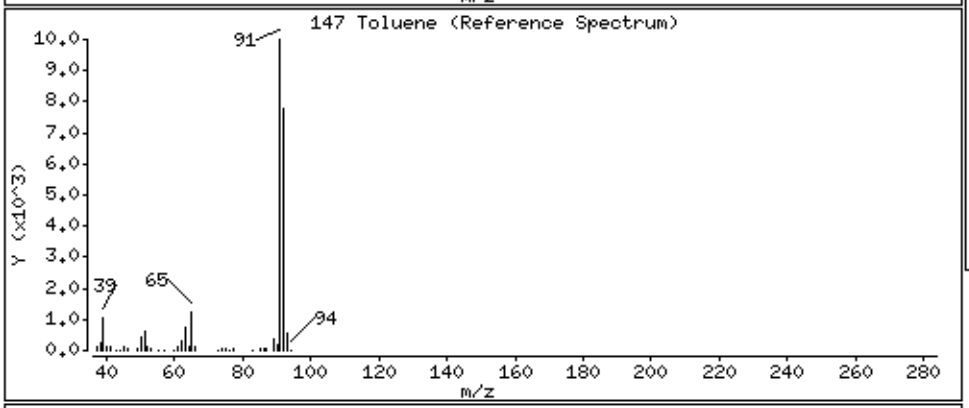
Column diameter: 0.25

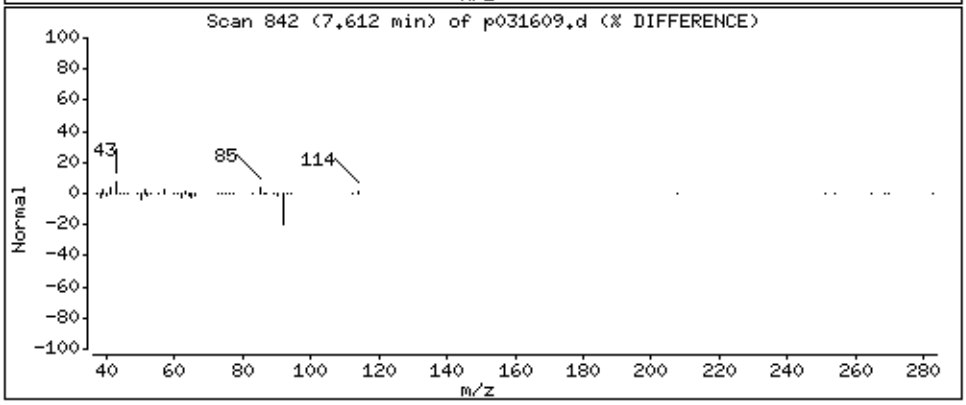
147 Toluene

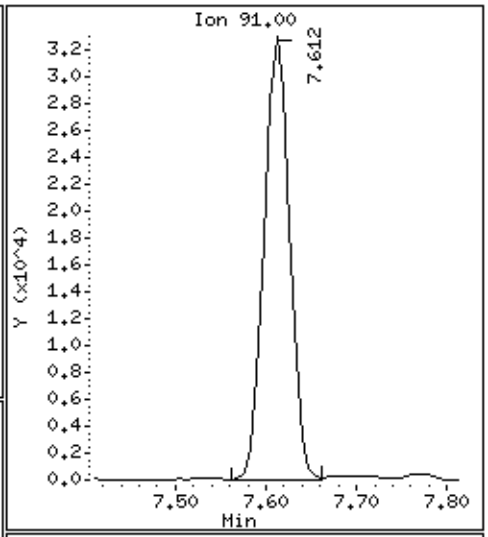
Concentration: 7.719 PPBV

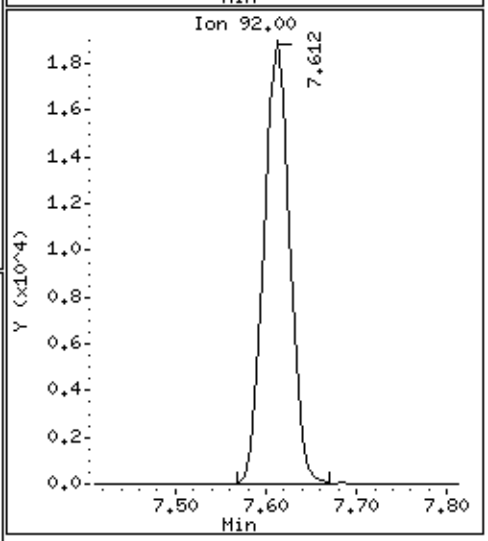












Data File: /chem/msdp.i/16mar16.b/p031609.d

Date : 16-MAR-2016 15:11

Client ID:

Instrument: msdp.i

Sample Info: 200ml 35604

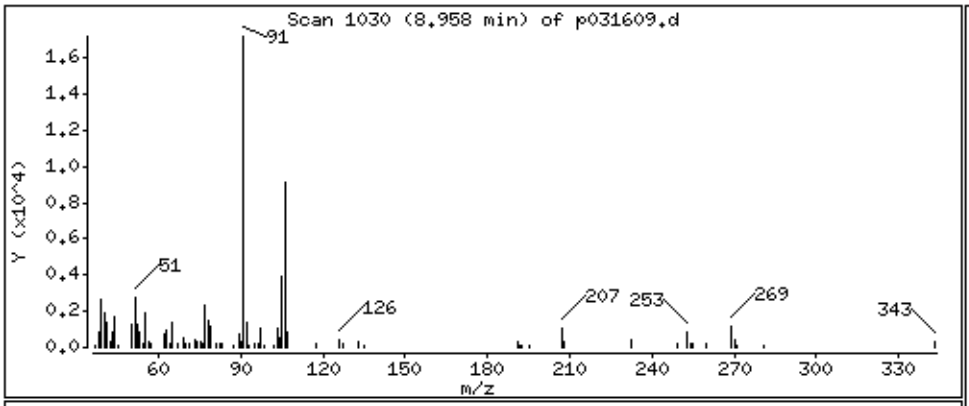
Operator: js

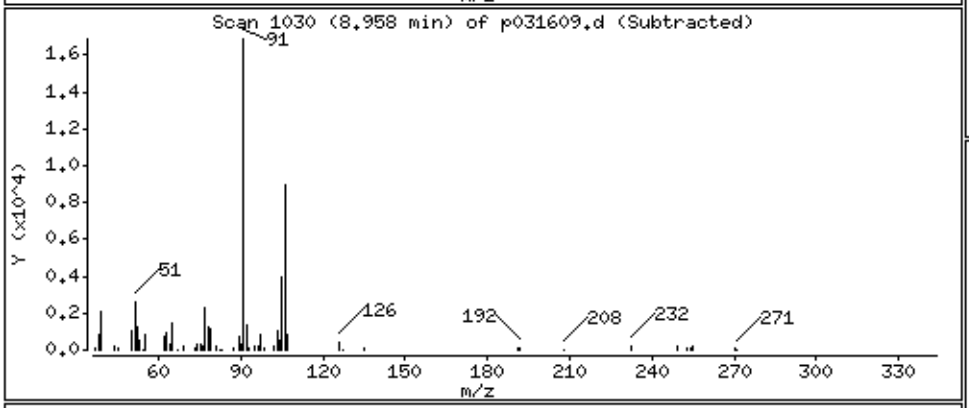
Column phase: RTX-624

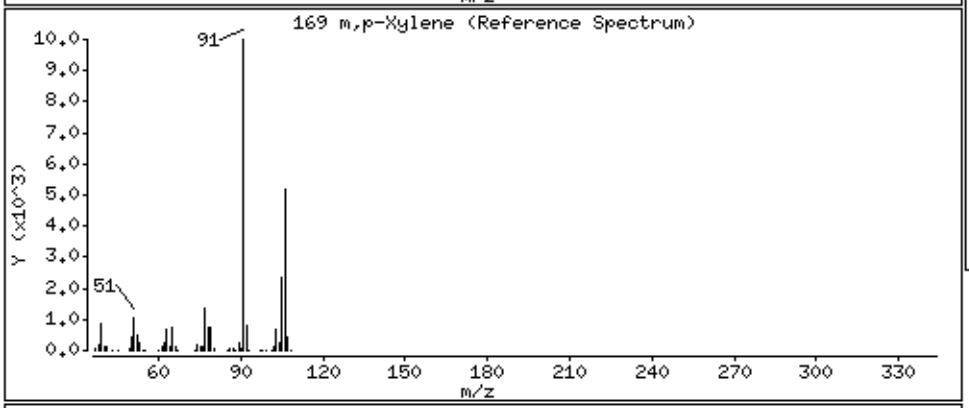
Column diameter: 0.25

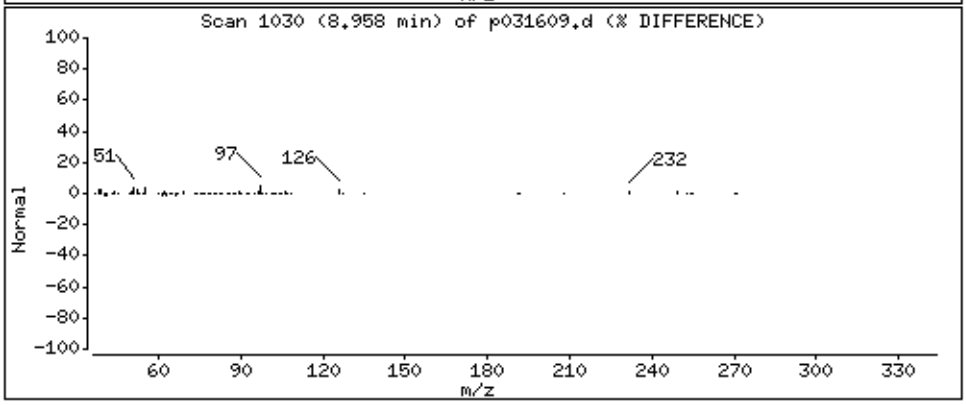
169 m,p-Xylene

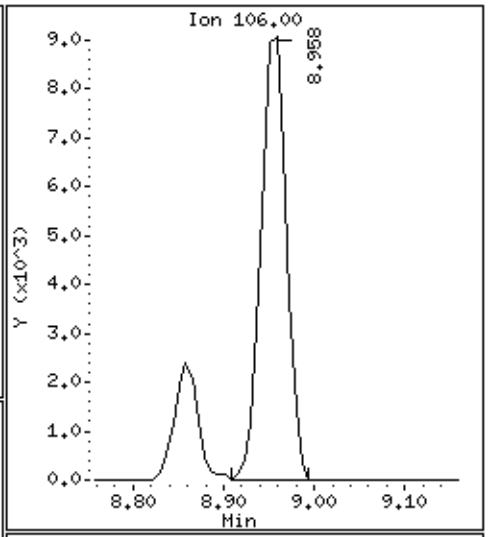
Concentration: 3.915 PPBV

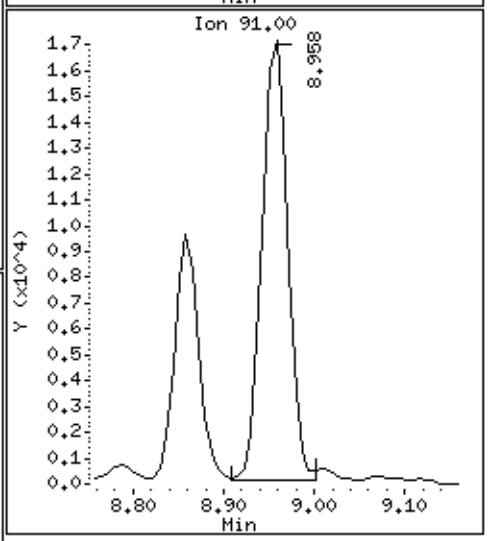












Data File: /chem/msdp.i/16mar16.b/p031609.d

Date : 16-MAR-2016 15:11

Client ID:

Instrument: msdp.i

Sample Info: 200ml 35604

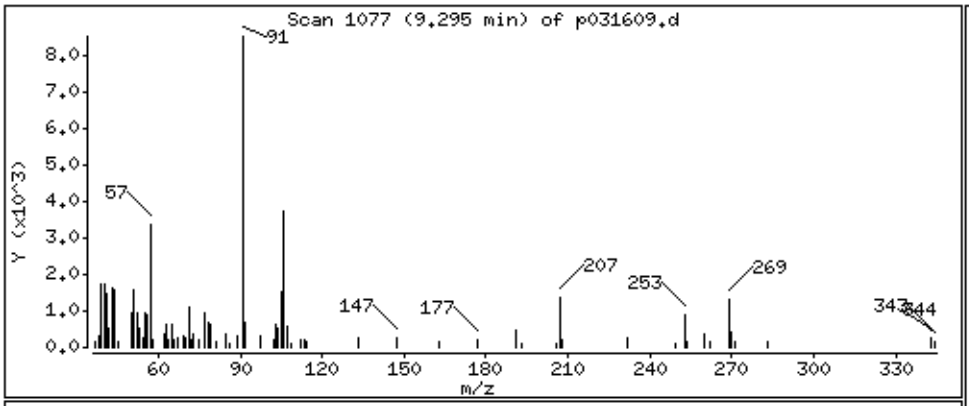
Operator: js

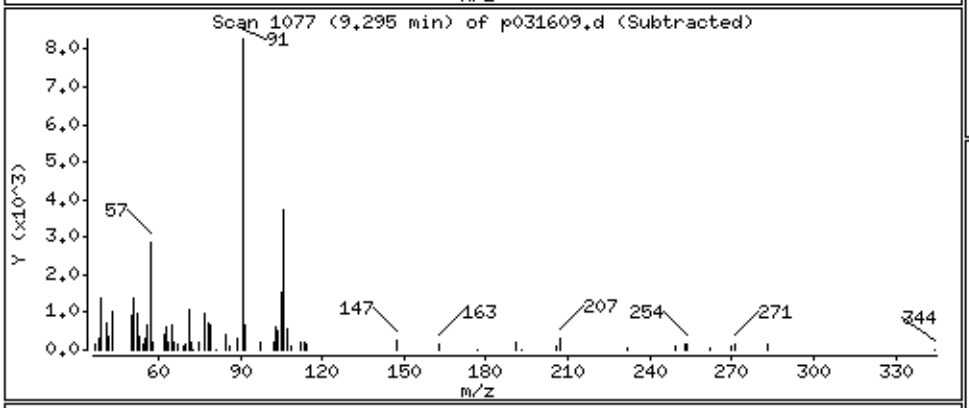
Column phase: RTX-624

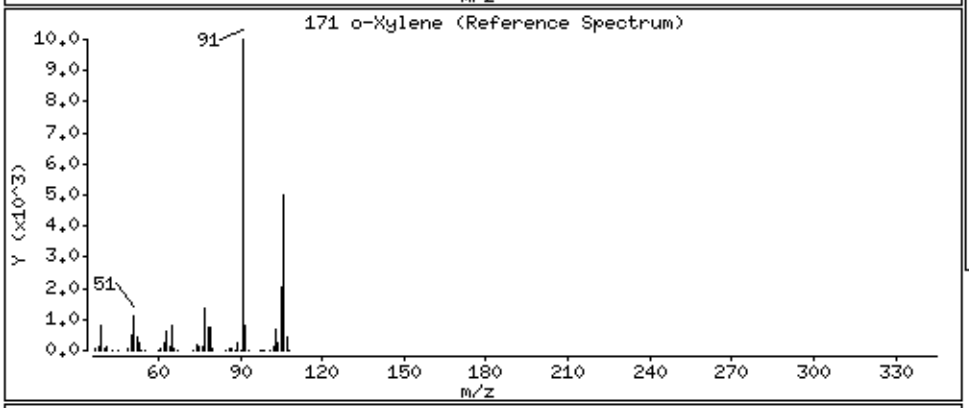
Column diameter: 0.25

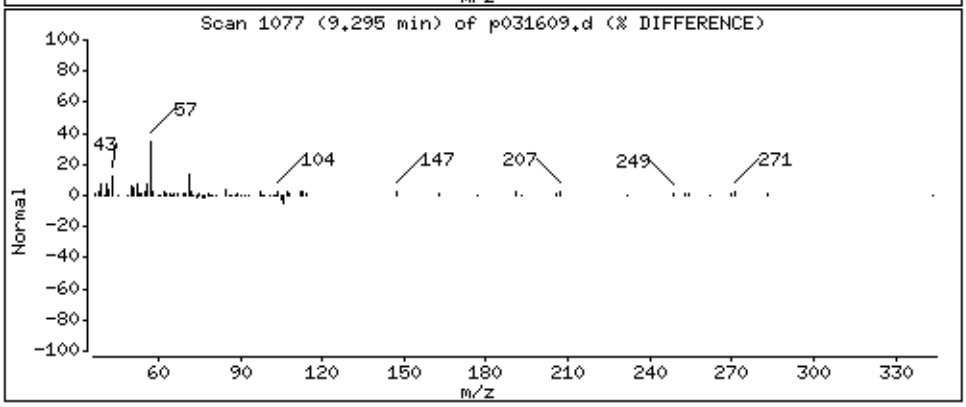
171 o-Xylene

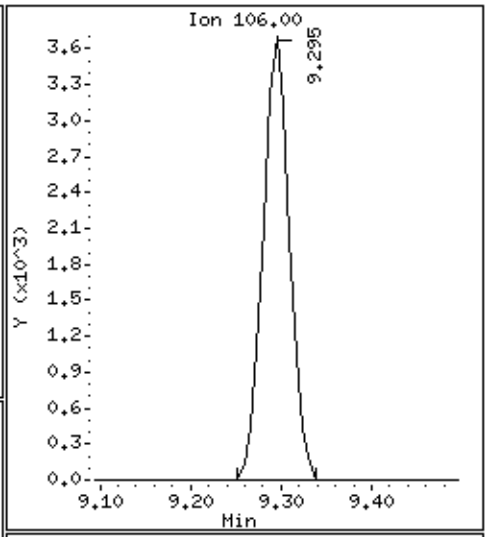
Concentration: 1.723 PPBV

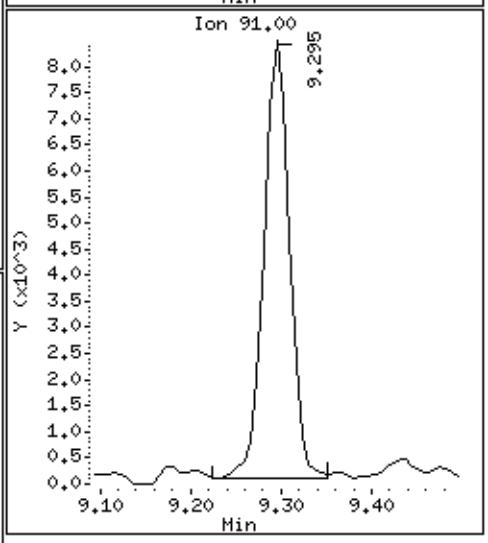












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-B9-3

Lab ID#: 1603115-03A

No Detections Were Found.

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Client Sample ID: SV-B9-3

Lab ID#: 1603115-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031610**	**Date of Collection:**	**3/3/16 3:00:00 PM**
Dil. Factor:	**2.76**	**Date of Analysis:**	**3/16/16 03:38 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.4	Not Detected	3.5	Not Detected
Acetone	14	Not Detected	33	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
Methylene Chloride	14	Not Detected	48	Not Detected
Chloroform	1.4	Not Detected	6.7	Not Detected
Cyclohexane	1.4	Not Detected	4.8	Not Detected
Benzene	1.4	Not Detected	4.4	Not Detected
Trichloroethene	1.4	Not Detected	7.4	Not Detected
Toluene	1.4	Not Detected	5.2	Not Detected
Ethyl Benzene	1.4	Not Detected	6.0	Not Detected
m,p-Xylene	1.4	Not Detected	6.0	Not Detected
o-Xylene	1.4	Not Detected	6.0	Not Detected
Cumene	1.4	Not Detected	6.8	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	6.8	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	6.8	Not Detected
1,2,3-Trimethylbenzene	5.5	Not Detected	27	Not Detected
Naphthalene	2.8	Not Detected	14	Not Detected
Methylcyclohexane	5.5	Not Detected	22	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
1,2,4,5-Tetramethylbenzene	95-93-2	NA	Not Detected
1,2,3,4-Tetramethylbenzene	488-23-3	NA	Not Detected
Indene	95-13-6	NA	Not Detected
Indan	496-11-7	NA	Not Detected
Thiophene	110-02-1	NA	Not Detected
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	97	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031610.d
Lab Smp Id: 1603115-03A
Inj Date : 16-MAR-2016 15:38
Operator : js Inst ID: msdp.i
Smp Info : 200ml 12356
Misc Info : 8.0 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 5
Dil Factor: 2.76000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.76000	Dilution Factor

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.456	5.449 (1.000)	130	115365	25.0000		80.00- 120.00	100.00
	5.456	5.449 (1.000)	128	92041			49.06- 109.06	79.78
	5.456	5.449 (1.000)	49	212459			124.20- 184.20	184.16
*	123 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.344	6.344 (1.000)	114	479364	25.0000		80.00- 120.00	100.00
	6.344	6.344 (1.000)	88	66775			0.00- 44.57	13.93
*	163 Chlorobenzene-d5					CAS #: 3114-55-4		
	8.779	8.779 (1.000)	117	450979	25.0000		80.00- 120.00	100.00
	8.779	8.779 (1.000)	82	235605			20.36- 80.36	52.24
$	117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	5.986	5.986 (1.097)	65	176285	25.8938	25.894	80.00- 120.00	100.00
	5.986	5.986 (1.097)	67	84434			26.68- 86.68	47.90

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	483485	25.2444	25.244	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	51832			0.00- 40.62	10.72
7.554	7.554 (1.191)	100	326821			36.74- 96.74	67.60
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	353566	24.3093	24.309	80.00- 120.00	100.00
9.761	9.761 (1.112)	95	329183			65.95- 125.95	93.10
9.761	9.761 (1.112)	176	339005			65.80- 125.80	95.88

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031610.d
Lab Smp Id: 1603115-03A
Inj Date : 16-MAR-2016 15:38
Operator : js Inst ID: msdp.i
Smp Info : 200ml 12356
Misc Info : 8.0 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 5
Dil Factor: 2.76000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031610.d
Lab Smp Id: 1603115-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 8.0 Hg->15 psi

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	115365	-3.16
123 1,4-Difluorobenze	491164	294698	687630	479364	-2.40
163 Chlorobenzene-d5	462293	277376	647210	450979	-2.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 21-Mar-2016 15:36

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1603115-03A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: Arc21131.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 8.0 Hg->15 psi

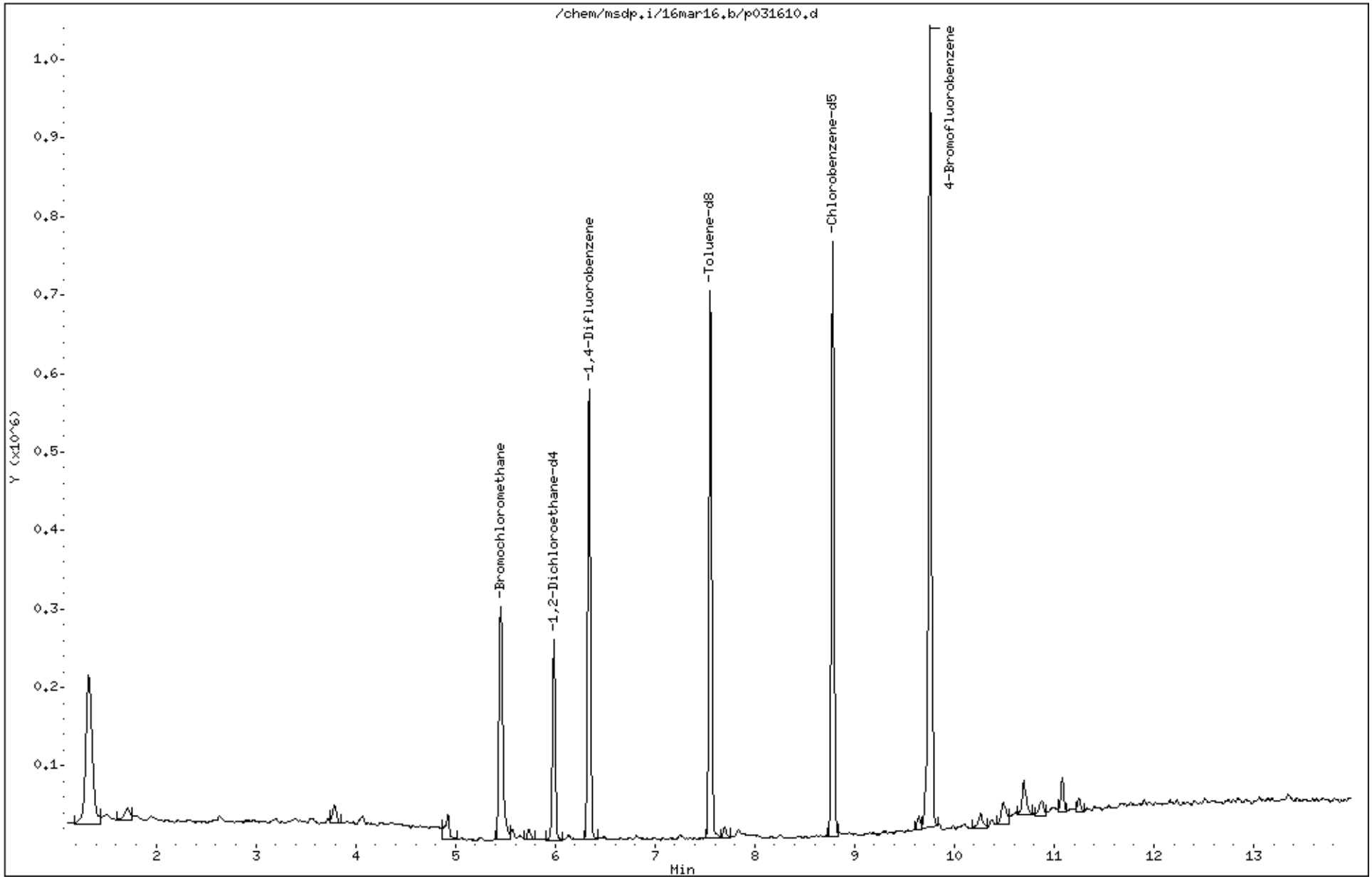
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.894	103.58	70-130
$ 146 Toluene-d8	25.000	25.244	100.98	70-130
$ 177 4-Bromofluorobenze	25.000	24.309	97.24	70-130

Data File: /chem/msdp.i/16mar16.b/p031610.d
Date : 16-MAR-2016 15:38
Client ID:
Sample Info: 200ml 12356

Instrument: msdp.i

Operator: js
Column diameter: 0.25

Column phase: RTX-624



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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: FD-030316

Lab ID#: 1603115-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	13	14	32	33

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Client Sample ID: FD-030316

Lab ID#: 1603115-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031611**	**Date of Collection: 3/3/16**	
Dil. Factor:	**2.69**	**Date of Analysis: 3/16/16 04:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
Acetone	13	14	32	33
trans-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
Chloroform	1.3	Not Detected	6.6	Not Detected
Cyclohexane	1.3	Not Detected	4.6	Not Detected
Benzene	1.3	Not Detected	4.3	Not Detected
Trichloroethene	1.3	Not Detected	7.2	Not Detected
Toluene	1.3	Not Detected	5.1	Not Detected
Ethyl Benzene	1.3	Not Detected	5.8	Not Detected
m,p-Xylene	1.3	Not Detected	5.8	Not Detected
o-Xylene	1.3	Not Detected	5.8	Not Detected
Cumene	1.3	Not Detected	6.6	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.6	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.6	Not Detected
1,2,3-Trimethylbenzene	5.4	Not Detected	26	Not Detected
Naphthalene	2.7	Not Detected	14	Not Detected
Methylcyclohexane	5.4	Not Detected	22	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
1,2,4,5-Tetramethylbenzene	95-93-2	NA	Not Detected
1,2,3,4-Tetramethylbenzene	488-23-3	NA	Not Detected
Indene	95-13-6	NA	Not Detected
Indan	496-11-7	NA	Not Detected
Thiophene	110-02-1	NA	Not Detected
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	95	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031611.d
Lab Smp Id: 1603115-04A
Inj Date : 16-MAR-2016 16:04
Operator : js Inst ID: msdp.i
Smp Info : 200ml 36496
Misc Info : 7.5 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 6
Dil Factor: 2.69000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.69000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.449 (1.000)	130	114684	25.0000		80.00- 120.00	100.00
5.456	5.449 (1.000)	128	87516			49.06- 109.06	76.31
5.456	5.449 (1.000)	49	213028			124.20- 184.20	185.75
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	476019	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	64844			0.00- 44.57	13.62
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	448971	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	232048			20.36- 80.36	51.68
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.097)	65	178095	26.3150	26.315	80.00- 120.00	100.00
5.986	5.986 (1.097)	67	80716			26.68- 86.68	45.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	479722	25.2239	25.224	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	52486			0.00- 40.62	10.94
7.554	7.554 (1.191)	100	322326			36.74- 96.74	67.19
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	343678	23.7351	23.735	80.00- 120.00	100.00
9.761	9.761 (1.112)	95	323034			65.95- 125.95	93.99
9.761	9.761 (1.112)	176	340330			65.80- 125.80	99.03
52 Acetone					CAS #: 67-64-1		
3.393	3.386 (0.622)	58	15489	5.12299	13.781	80.00- 120.00	100.00
3.393	3.386 (0.622)	43	57116			323.05- 383.05	368.74

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031611.d
Lab Smp Id: 1603115-04A
Inj Date : 16-MAR-2016 16:04
Operator : js Inst ID: msdp.i
Smp Info : 200ml 36496
Misc Info : 7.5 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 6
Dil Factor: 2.69000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031611.d
Lab Smp Id: 1603115-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 7.5 Hg->15 psi

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	114684	-3.73
123 1,4-Difluorobenze	491164	294698	687630	476019	-3.08
163 Chlorobenzene-d5	462293	277376	647210	448971	-2.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 21-Mar-2016 15:36

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1603115-04A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: Arc21131.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 7.5 Hg->15 psi

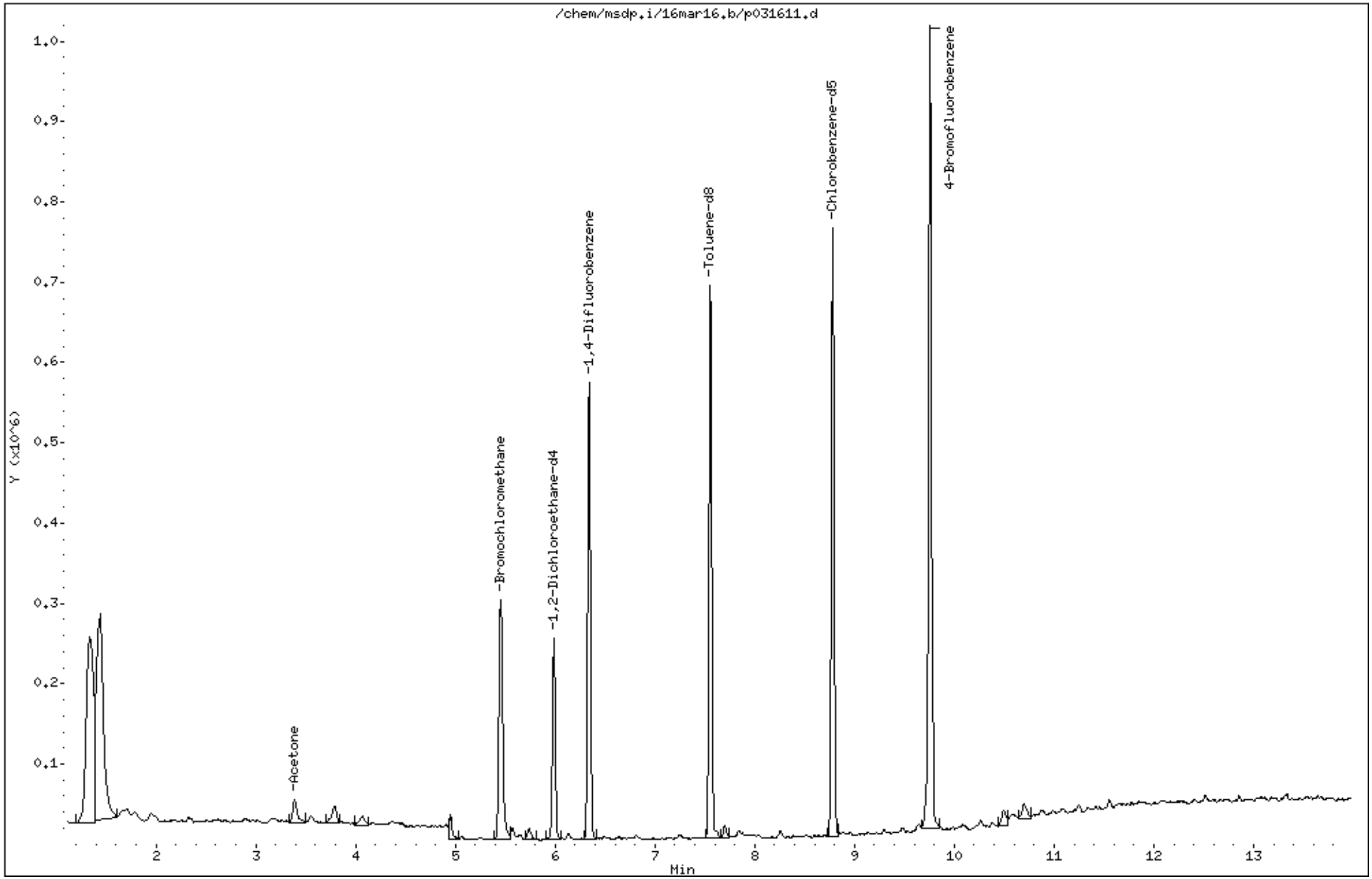
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.315	105.26	70-130
$ 146 Toluene-d8	25.000	25.224	100.90	70-130
$ 177 4-Bromofluorobenze	25.000	23.735	94.94	70-130

Data File: /chem/msdp.i/16mar16.b/p031611.d
Date : 16-MAR-2016 16:04
Client ID:
Sample Info: 200ml 36496

Column phase: RTX-624

Instrument: msdp.i

Operator: js
Column diameter: 0.25



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Data File: /chem/msdp.i/16mar16.b/p031611.d

Date : 16-MAR-2016 16:04

Client ID:

Instrument: msdp.i

Sample Info: 200ml 36496

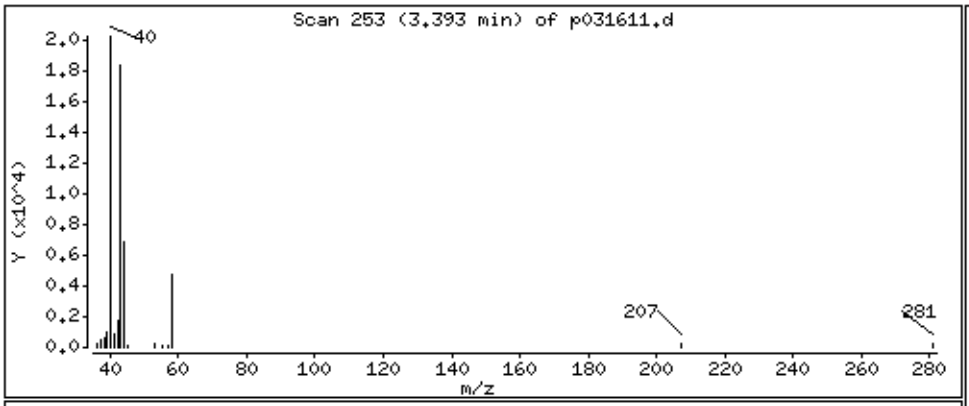
Operator: js

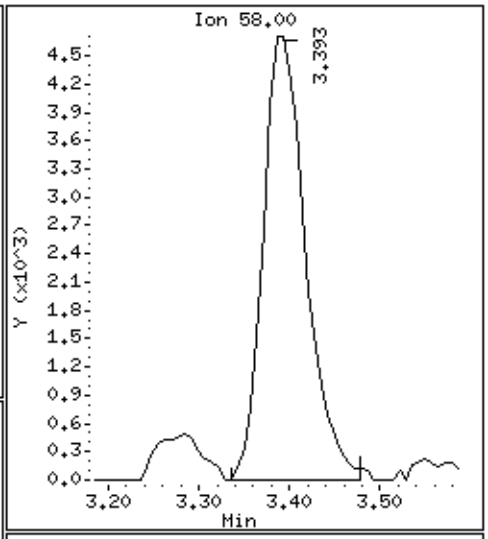
Column phase: RTX-624

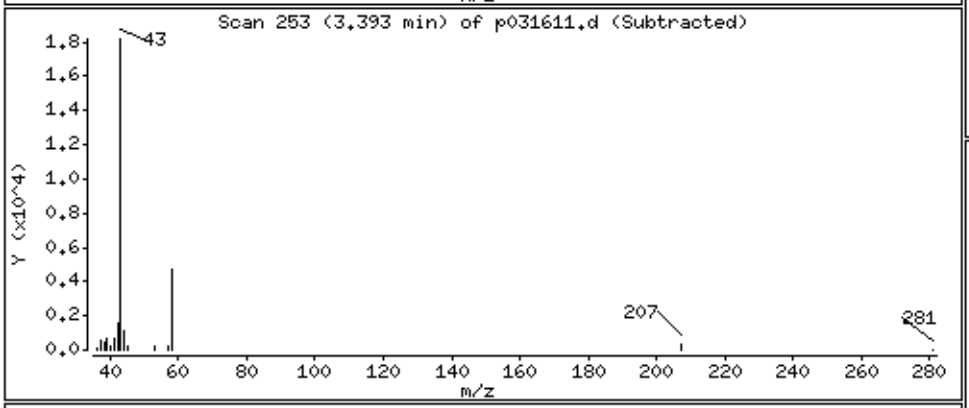
Column diameter: 0.25

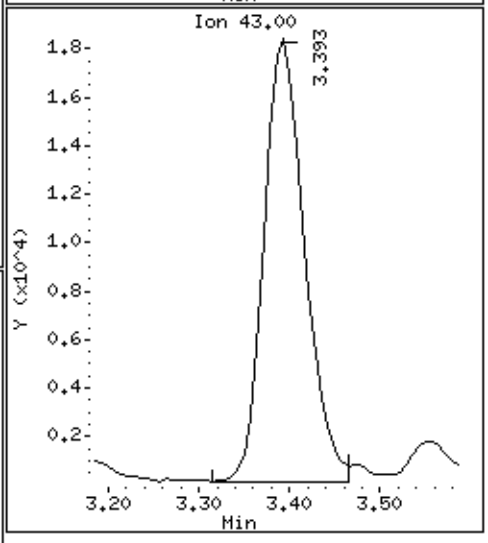
52 Acetone

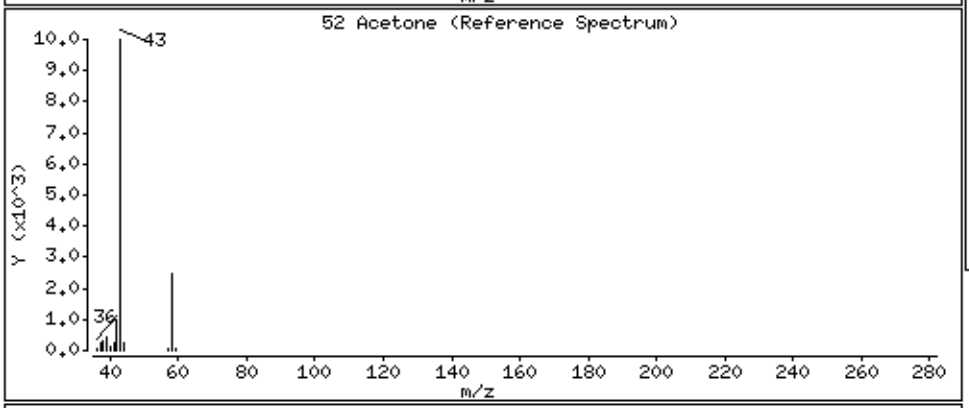
Concentration: 13.781 PPBV

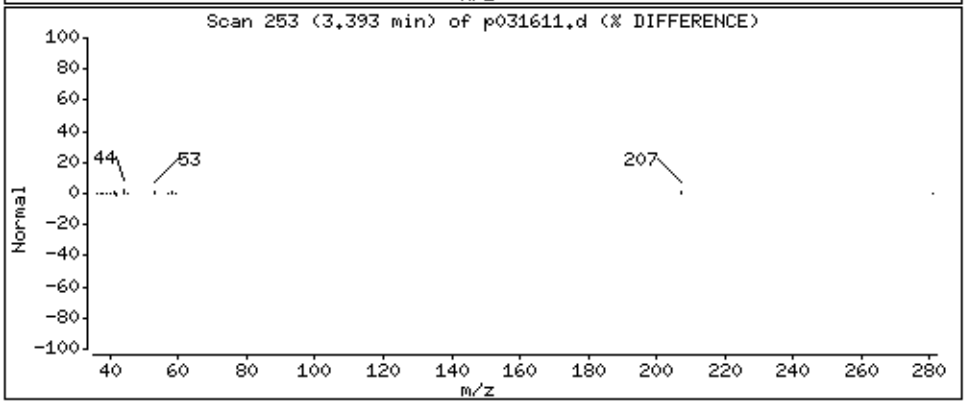












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1603115-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031606a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/16/16 12:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,3-Trimethylbenzene	2.0	Not Detected	9.8	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
Methylcyclohexane	2.0	Not Detected	8.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
1,2,4,5-Tetramethylbenzene	95-93-2	NA	Not Detected
1,2,3,4-Tetramethylbenzene	488-23-3	NA	Not Detected
Indene	95-13-6	NA	Not Detected
Indan	496-11-7	NA	Not Detected
Thiophene	110-02-1	NA	Not Detected
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031606a.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 16-MAR-2016 12:12
Operator : js Inst ID: msdp.i
Smp Info : 200ml #403
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.449 (1.000)	130	117255	25.0000		80.00- 120.00	100.00
5.456	5.449 (1.000)	128	92942			49.06- 109.06	79.26
5.456	5.449 (1.000)	49	209023			124.20- 184.20	178.26
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	498755	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	68782			0.00- 44.57	13.79
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	470834	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	242881			20.36- 80.36	51.59
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.097)	65	184882	26.7188	26.719	80.00- 120.00	100.00
5.986	5.986 (1.097)	67	90178			26.68- 86.68	48.78

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.555	7.554 (1.191)	98	504426	25.3138	25.314	80.00- 120.00	100.00
7.555	7.554 (1.191)	70	52815			0.00- 40.62	10.47
7.555	7.554 (1.191)	100	332334			36.74- 96.74	65.88
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.761 (1.113)	174	362768	23.8901	23.890	80.00- 120.00	100.00
9.768	9.761 (1.113)	95	343370			65.95- 125.95	94.65
9.768	9.761 (1.113)	176	349199			65.80- 125.80	96.26

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031606a.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 16-MAR-2016 12:12
Operator : js Inst ID: msdp.i
Smp Info : 200ml #403
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 16:22 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Arc21131.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031606a.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: Humid

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	117255	-1.57
123 1,4-Difluorobenze	491164	294698	687630	498755	1.55
163 Chlorobenzene-d5	462293	277376	647210	470834	1.85

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 21-Mar-2016 15:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: Arc21131.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: Humid

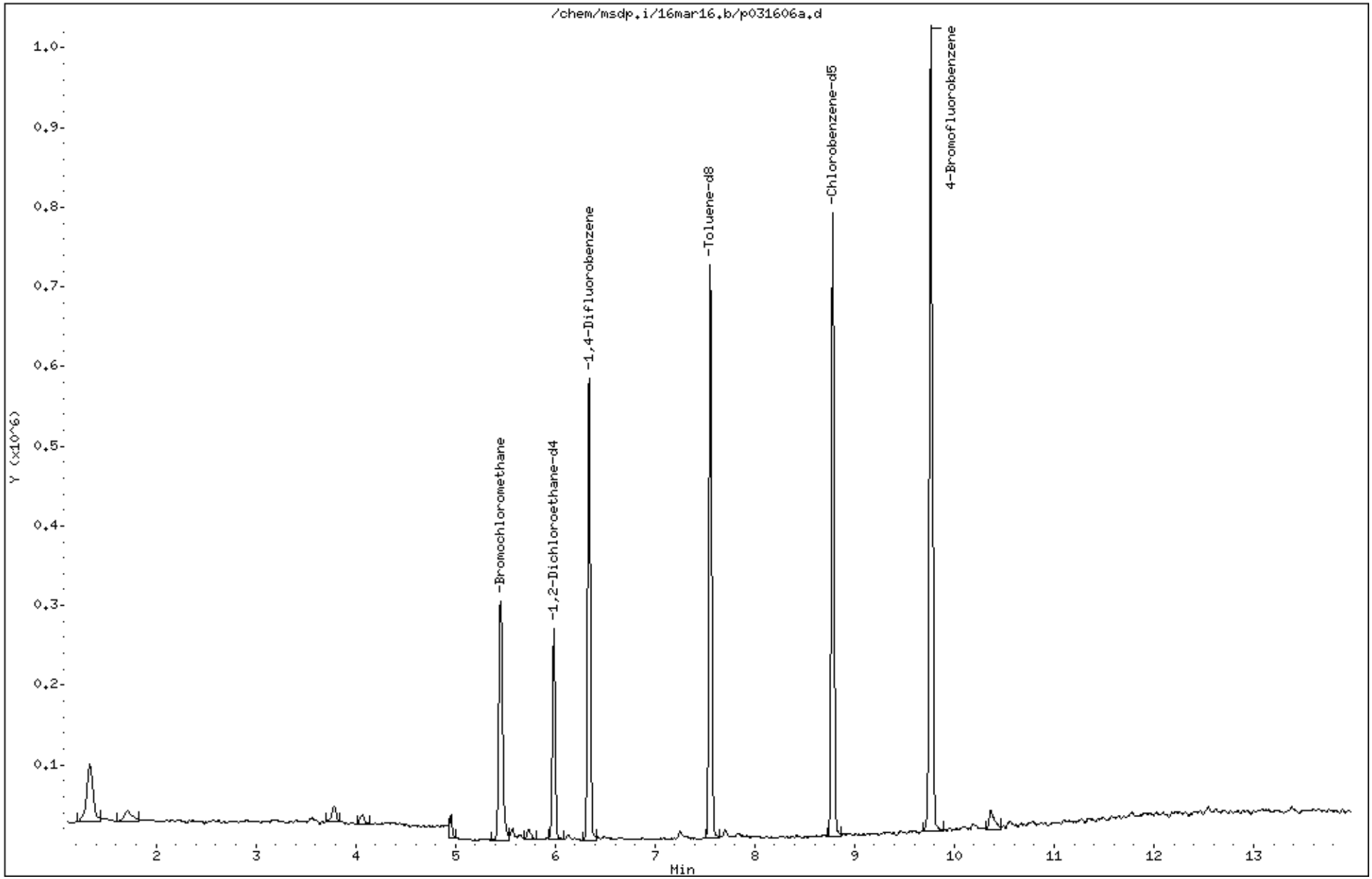
SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.719	106.88	70-130
$ 146 Toluene-d8	25.000	25.314	101.26	70-130
$ 177 4-Bromofluorobenze	25.000	23.890	95.56	70-130

Data File: /chem/msdp.i/16mar16.b/p031606a.d
Date : 16-MAR-2016 12:12
Client ID: Lab blank
Sample Info: 200ml #403

Instrument: msdp.i

Operator: js
Column diameter: 0.25

Column phase: RTX-624



LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1603115

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	SV-B9-1	105		101		96				0
02	SV-B9-2	104		101		98				0
03	SV-B9-3	104		101		97				0
04	FD-030316	105		101		95				0
05	Lab Blank	107		101		96				0
06	CCV	107		102		100				0
07	LCS	106		102		102				0
08	LCSD	104		103		100				0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1603115

Lab File ID: p031602.d | Date Analyzed: 03/16/2016

Instrument ID: msdp.i | Time Analyzed: 10:10 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	462293		8.78		491164		6.34		119129		5.45	
	UPPER LIMIT	647210		09.11		687630		06.67		166781		05.78	
	LOWER LIMIT	277376		08.45		294698		06.01		71477		05.12	
	CLIENT SAMPLE NO												
01	SV-B9-1	462264		8.78		492239		6.34		117319		5.46	
02	SV-B9-2	457620		8.78		478918		6.34		116950		5.46	
03	SV-B9-3	450979		8.78		479364		6.34		115365		5.46	
04	FD-030316	448971		8.78		476019		6.34		114684		5.46	
05	Lab Blank	470834		8.78		498755		6.34		117255		5.46	
06	CCV	462293		8.78		491164		6.34		119129		5.45	
07	LCS	451524		8.78		488439		6.34		121338		5.45	
08	LCSD	458163		8.78		485534		6.34		120352		5.46	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: p031604.d & p031603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 3/16/16 & 3/16/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
526-73-8	1,2,3-Trimethylbenzene	ND		ND		0	
95-63-6	1,2,4-Trimethylbenzene	104		103		0.97	
108-67-8	1,3,5-Trimethylbenzene	106		104		1.9	
67-64-1	Acetone	93		94		1.1	
71-43-2	Benzene	98		100		2.0	
67-66-3	Chloroform	101		101		0	
156-59-2	cis-1,2-Dichloroethene	96		95		1.0	
98-82-8	Cumene	100		100		0	
110-82-7	Cyclohexane	87		90		3.4	
100-41-4	Ethyl Benzene	101		98		3.0	
108-38-3	m,p-Xylene	102		101		0.98	
108-87-2	Methylcyclohexane	90		93		3.3	
75-09-2	Methylene Chloride	124		122		1.6	
91-20-3	Naphthalene	142		149		4.8	
95-47-6	o-Xylene	103		102		0.98	
108-88-3	Toluene	96		98		2.1	
156-60-5	trans-1,2-Dichloroethene	106		107		0.94	
79-01-6	Trichloroethene	104		105		0.96	
75-01-4	Vinyl Chloride	127		131		3.1	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-FEB-2016 14:10
End Cal Date : 18-FEB-2016 12:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/18feb16.b/p16q0201b.m
Cal Date : 19-Feb-2016 11:25 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/01feb16.b/p020102.d
Level 3: /chem/msdp.i/18feb16.b/p021805.d
Level 4: /chem/msdp.i/01feb16.b/p020104.d
Level 5: /chem/msdp.i/01feb16.b/p020105.d
Level 6: /chem/msdp.i/18feb16.b/p021806.d
Level 7: /chem/msdp.i/01feb16.b/p020107.d
Level 8: /chem/msdp.i/18feb16.b/p021807.d

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Propylene	+++++	1.22218	1.16725	0.89455	1.00513	1.00570	1.03215	1.05449	11.359
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 12	2.59267	2.96220	3.20968	2.33104	2.74728	2.76300	2.86211	2.78114	9.984
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 114	1.94248	2.28195	2.50346	1.87169	2.08254	2.13851	2.22077	2.14877	9.919
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Chloromethane	+++++	0.54605	0.68130	1.10699	1.20550	1.08320	0.93444	0.92625	28.149

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Butane	+++++	0.37044	0.31468	0.21988	0.23223	0.27876	0.29307	0.28484	19.427
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Vinyl Chloride	1.23517	1.21929	1.35376	0.98436	1.20075	1.34826	1.32686	1.23835	10.401
26 1,3-Butadiene	1.07224	1.14837	1.03955	0.89373	0.98511	1.00797	1.00236	1.02133	7.709
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Bromomethane	0.60030	0.57571	0.68441	0.68500	0.80578	0.83812	0.84811	0.71963	15.574
30 Chloroethane	+++++	0.61246	0.64726	0.43290	0.52412	0.55181	0.57072	0.55654	13.427
31 Isopentane	+++++	1.69640	1.71189	1.44845	1.48686	1.47681	1.55916	1.56326	7.368
32 Vinyl Bromide	+++++	0.80231	+++++	+++++	0.84170	+++++	0.98316	0.87573	10.860
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Freon 11	2.66782	3.09099	3.29818	2.57991	2.82365	2.88324	2.94446	2.89832	8.445
36 1-Pentene	+++++	1.27594	+++++	+++++	1.12678	+++++	1.28209	1.22827	7.160
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Ethanol	+++++	0.43472	0.44664	0.44978	0.49631	0.49626	0.52972	0.47557	7.846
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 Ethyl Ether	+++++	0.46041	+++++	+++++	0.40110	+++++	0.47801	0.44650	9.025
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Cal Date : 19-Feb-2016 11:25 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD	
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Freon 113	2.26773	2.50133	2.53731	2.25072	2.21388	2.17235	2.23646	2.31140	6.298	
50 1,1-Dichloroethene	0.57324	0.73798	0.72417	0.54118	0.61104	0.63438	0.65009	0.63887	11.408	
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 Acetone	+++++	0.88774	0.81233	0.50121	0.58124	0.58819	0.58377	0.65908	23.254	
53 Iodomethane	+++++	0.09554	+++++	+++++	1.44997	+++++	2.31437	1.28663	86.925	<-
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 Carbon Disulfide	+++++	3.16305	3.17577	2.37796	2.74601	2.77991	2.85733	2.85001	10.441	
57 2-Propanol	+++++	4.44593	3.02459	2.08511	2.44270	2.46557	2.40753	2.81191	30.440	<-

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
58 3-Chloropropene	+++++	0.55444	0.53886	0.35831	0.45356	0.46456	0.48362	0.47556	14.763
59 Cyclopentene	+++++	1.72282	+++++	+++++	1.62031	+++++	1.91213	1.75176	8.451
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
64 Cyclopentane	+++++	0.59353	+++++	+++++	0.48919	+++++	0.57411	0.55228	10.048
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Methylene Chloride	1.22675	1.76327	1.79089	1.27806	1.56532	1.59702	1.64997	1.55304	14.261
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 tert-Butyl alcohol	+++++	3.02069	3.17100	2.56871	2.74222	2.74380	2.85260	2.84984	7.594
72 Methyl tert-butyl ether	3.24468	3.17739	3.24556	3.01642	3.01019	2.95795	3.03342	3.09794	3.903
73 trans-1,2-Dichloroethene	0.46743	0.73660	0.74216	0.52027	0.65238	0.65925	0.68619	0.63775	16.508
74 Acrylonitrile	+++++	0.90988	+++++	+++++	0.80729	+++++	0.96549	0.89422	8.975
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1-Hexene	+++++	0.88055	+++++	+++++	0.82725	+++++	0.99661	0.90147	9.606
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
78 Hexane	2.09608	2.32732	2.33099	1.76982	2.00207	2.02027		
	2.10946						2.09372	9.348
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
82 1,1-Dichloroethane	1.83276	2.32175	2.47308	1.77183	2.07779	2.15736		
	2.23894						2.12479	11.941
83 Isopropyl ether	+++++	4.83741	4.90104	4.37823	4.51056	4.49119		
	4.62017						4.62310	4.467
84 1-Propanol	+++++	0.27459	+++++	+++++	0.23088	+++++		
	0.26360						0.25636	8.870
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
86 Vinyl Acetate	+++++	0.30349	0.28796	0.23236	0.27337	0.28951		
	0.28991						0.27943	8.932
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
88 Ethyl-tert-butyl ether	+++++	4.36884	4.55251	4.08753	4.22224	4.17287		
	4.32467						4.28811	3.841
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
90 2,2-Dichloropropane	+++++	1.90466	+++++	+++++	1.77573	+++++		
	2.01402						1.89814	6.284
91 cis-1,2-Dichloroethene	0.75901	0.77221	0.81328	0.55534	0.68803	0.69552		
	0.71282						0.71375	11.647
92 2-Butanone	+++++	0.60324	0.62285	0.43463	0.52239	0.52733		
	0.53398						0.54074	12.398
93 Methyl Acrylate	+++++	2.19049	+++++	+++++	2.02833	+++++		
	2.42899						2.21594	9.095
94 Ethyl Acetate	+++++	0.25093	+++++	+++++	0.17380	+++++		
	0.21152						0.21209	18.185
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
99 Tetrahydrofuran	1.36923 1.49774	1.74909	1.52432	1.14250	1.40198	1.43873	1.44623	12.645
100 Chloroform	2.02935 2.25181	2.46610	2.58396	1.78659	2.14799	2.21896	2.21211	12.003
101 1-Bromopropane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Cyclohexane	1.92865 1.43969	1.60795	1.60622	1.43223	1.45124	1.41379	1.55425	11.867
103 1,1,1-Trichloroethane	2.61672 2.43563	2.58757	2.76860	2.38692	2.48432	2.38664	2.52377	5.592
104 Chloroacetonitrile	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 n-Butylchloride	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Carbon Tetrachloride	2.54879 2.61967	2.63035	2.83092	2.54889	2.58779	2.56698	2.61905	3.772
107 1,1-Dichloropropene	+++++ 0.13994	0.12678	+++++	+++++	0.13193	+++++	0.13288	4.989
108 Thiophene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 2,2,4-Trimethylpentane	7.06861	7.02267	7.39335	6.36695	6.76083	6.63783	6.80232	6.86465	4.831
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 Isobutanol	+++++	0.08585	+++++	+++++	0.06555	+++++	0.06658	0.07266	15.740
116 Benzene	0.74028	0.79937	0.83504	0.66216	0.75092	0.76396	0.78173	0.76192	7.126
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 tert-Amyl methyl ether	+++++	0.21726	0.21407	0.19645	0.19911	0.20295	0.20573	0.20593	4.004
120 1,2-Dichloroethane	0.35302	0.44082	0.47212	0.35434	0.42560	0.44297	0.45491	0.42054	11.372

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msdp.i/18feb16.b/p16q0201b.m
Cal Date : 19-Feb-2016 11:25 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
121 Heptane	0.47627	0.37459	0.31865	0.27432	0.28710	0.28499		
	0.28958						0.32936	22.211
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
124 n-Butanol	+++++	0.40198	+++++	+++++	0.38231	+++++		
	0.41828						0.40086	4.492
125 Trichloroethene	0.35682	0.37811	0.40446	0.30930	0.36705	0.37207		
	0.38055						0.36691	7.999
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
127 Methylcyclohexane	0.61512	0.56239	0.54980	0.50767	0.52030	0.50672		
	0.51179						0.53911	7.409
128 Ethyl acrylate	+++++	0.02685	+++++	+++++	0.02956	+++++		
	0.03111						0.02917	7.398
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
131 2-Pentanone	+++++	0.72676	+++++	+++++	0.67384	+++++		
	0.69973						0.70011	3.780

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
132 1,2-Dichloropropane	0.34503	0.38089	0.37819	0.31788	0.33995	0.34038		
	0.34807						0.35006	6.390
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
134 Methyl Methacrylate	+++++	0.38041	+++++	+++++	0.33130	+++++		
	0.34298						0.35156	7.298
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
136 1,4-Dioxane	+++++	0.19206	0.18549	0.17258	0.19403	0.19683		
	0.19737						0.18973	4.972
137 Dibromomethane	+++++	0.31330	+++++	+++++	0.30137	+++++		
	0.31419						0.30962	2.313
138 Bromodichloromethane	0.61664	0.61828	0.65266	0.51929	0.59091	0.60910		
	0.62671						0.60480	6.955
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 cis-1,3-Dichloropropene	0.45406	0.52043	0.56121	0.44616	0.51059	0.52464	0.53833	0.50792	8.400
145 4-Methyl-2-pentanone	0.31589	0.31492	0.30460	0.30304	0.31050	0.31057	0.31727	0.31097	1.778
147 Toluene	1.05670	1.10093	1.16925	0.97431	1.03681	1.04988	1.06901	1.06527	5.618
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 trans-1,3-Dichloropropene	0.48078	0.49921	0.50619	0.42811	0.48053	0.49127	0.50185	0.48399	5.493
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	$\overline{RRF}$	% RSD	
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 1,1,2-Trichloroethane	0.36746	0.42216	0.40260	0.34407	0.36881	0.37410	0.37379	0.37900	6.752	
156 Tetrachloroethene	0.64881	0.71192	0.69542	0.61969	0.64525	0.64718	0.66172	0.66143	4.809	
157 1,3-Dichloropropane	+++++	0.40312	+++++	+++++	0.37229	+++++	0.38141	0.38561	4.107	
158 2-Hexanone	0.42251	0.36911	0.39443	0.42569	0.44351	0.44442	0.45272	0.42177	7.165	
159 Butyl Acetate	+++++	0.19892	+++++	+++++	0.08140	+++++	0.08219	0.12083	55.964	<-
160 Dibromochloromethane	0.72710	0.82482	0.80563	0.71894	0.77437	0.77765	0.78964	0.77402	5.024	
161 1,2-Dibromoethane (EDB)	0.59861	0.64679	0.64829	0.55741	0.61360	0.61794	0.61970	0.61462	5.031	
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Chlorobenzene	0.89973	0.94032	1.00012	0.91921	0.92845	0.94564	0.95152	0.94071	3.351
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Ethyl Benzene	0.52904	0.49377	0.49941	0.49482	0.48870	0.47536	0.48197	0.49472	3.476
168 1,1,1,2-Tetrachloroethane	+++++	0.40328	+++++	+++++	0.43872	+++++	0.42520	0.42240	4.235
169 m,p-Xylene	0.60806	0.59762	0.60979	0.60226	0.60391	0.59258	0.59776	0.60171	1.021
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 o-Xylene	0.59837	0.60358	0.54726	0.58199	0.57771	0.56393	0.57048	0.57762	3.378
172 Styrene	0.75922	0.74527	0.73663	0.96078	0.94508	0.94087	0.96920	0.86529	12.852
173 2-Heptanone	+++++	1.68256	+++++	+++++	1.85545	+++++	2.10859	1.88220	11.384

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
174 Bromoform	0.92015	0.94963	0.94731	0.93869	0.95215	0.95815		
	0.98841						0.95064	2.177
175 Cumene	1.95701	1.84142	1.77634	1.86418	1.82219	1.77301		
	1.77638						1.83008	3.631
176 Cyclohexanone	+++++	0.40885	+++++	+++++	0.37040	+++++		
	0.34910						0.37612	8.052
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
180 Bromobenzene	+++++	0.44541	+++++	+++++	0.45487	+++++		
	0.45520						0.45183	1.230
181 1,1,2,2-Tetrachloroethane	0.99077	0.97516	0.91752	0.92830	0.89339	0.86285		
	0.86082						0.91840	5.549
182 Propylbenzene	2.25055	2.14801	2.12363	2.22757	2.16746	2.08717		
	2.05892						2.15190	3.250
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
185 1,2,3-Trichloropropane	+++++	0.18794	+++++	+++++	0.17752	+++++	0.17248	0.17931	4.398
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 4-Ethyltoluene	0.54801	0.62276	0.58118	0.62372	0.61073	0.59440	0.55569	0.59093	5.203
189 2-Chlorotoluene	+++++	0.31981	+++++	+++++	0.34507	+++++	0.33159	0.33216	3.805
190 1,3,5-Trimethylbenzene	0.74026	0.70518	0.70470	0.79416	0.77568	0.75526	0.77033	0.74937	4.624
191 4-Chlorotoluene	+++++	0.31921	+++++	+++++	0.33642	+++++	0.32718	0.32761	2.629
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
195 tert-Butylbenzene	+++++	0.96197	+++++	+++++	1.01119	+++++	0.96321	0.97879	2.867
196 1,2,4-Trimethylbenzene	0.67787	0.66551	0.65085	0.72968	0.71250	0.69590	0.69541	0.68967	3.937
197 Pentachloroethane	+++++	0.31854	+++++	+++++	0.36380	+++++	0.36247	0.34827	7.395
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 sec-Butylbenzene	+++++	0.33466	+++++	+++++	0.33262	+++++	0.32361	0.33030	1.779
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	0.62210	+++++	+++++	0.67971	+++++	0.65917	0.65366	4.466
207 p-Cymene	+++++	1.19350	+++++	+++++	1.29350	+++++	1.23753	1.24151	4.037
208 1,3-Dichlorobenzene	1.14024	1.24337	1.16605	1.18466	1.17933	1.15425	1.16015	1.17544	2.848
209 1,4-Dichlorobenzene	1.26300	1.18486	1.20088	1.18236	1.18754	1.15984	1.16673	1.19217	2.856
210 1,2,3-Trimethylbenzene	+++++	0.43387	+++++	+++++	0.47763	+++++	0.46591	0.45914	4.933
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 alpha-Chlorotoluene	1.43055	1.45653	1.45178	1.55206	1.53035	1.48919	1.50627	1.48810	2.985
213 Butylbenzene	+++++	0.30802	+++++	+++++	0.34717	+++++	0.33966	0.33162	6.266
214 1,2-Dichlorobenzene	1.00441	1.18079	1.16986	1.14681	1.13458	1.09876	1.10813	1.12048	5.288

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215 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++	0.44518	+++++	+++++	0.47147	+++++	0.47297	0.46320	3.374
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
225 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,2,4-Trichlorobenzene	+++++	0.89435	1.13543	0.52711	0.91142	1.06613	1.15933	0.94896	24.718
227 Hexachlorobutadiene	+++++	0.85442	0.98247	0.43640	0.75916	0.90604	1.01762	0.82602	25.663
228 Naphthalene	+++++	1.43918	1.56050	1.01124	1.69629	1.94653	2.11234	1.62768	23.973
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-FEB-2016 14:10
End Cal Date : 18-FEB-2016 12:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/18feb16.b/p16q0201b.m
Cal Date : 19-Feb-2016 11:25 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-FEB-2016 14:10
End Cal Date : 18-FEB-2016 12:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/18feb16.b/p16q0201b.m
Cal Date : 19-Feb-2016 11:25 jscarbro
Curve Type : Average

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
265 C10-C12 Aliphatic ref Dodecan	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C8-C10 Aromatic	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
268 C10-C12 Aromatic	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 112 Benzene-d6	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 117 1,2-Dichloroethane-d4	1.40442 / 1.60295	1.43040	1.46941	1.42251	1.48031	1.51724	1.47532	4.625
$ 146 Toluene-d8	0.98040 / 1.01409	0.99952	0.99878	0.99634	1.00208	1.00063	0.99883	0.995
$ 177 4-Bromofluorobenzene	0.79005 / 0.81834	0.78980	0.79672	0.80589	0.82096	0.82217	0.80627	1.783

Calibration History

Method : /chem/msdp.i/18feb16.b/p16q0201b.m
Start Cal Date: 01-FEB-2016 14:10
End Cal Date : 18-FEB-2016 12:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.50000		
01-FEB-2016 14:10	AT12low	/chem/msdp.i/01feb16.b/p020102.d
Cal Level: 3 , Cal Amount: 2.00000		
18-FEB-2016 11:48	ComboICALmBP	/chem/msdp.i/18feb16.b/p021805.d
01-FEB-2016 15:17	AT12mdl	/chem/msdp.i/01feb16.b/p020103.d
Cal Level: 4 , Cal Amount: 5.00000		
01-FEB-2016 15:43	AT12mdl	/chem/msdp.i/01feb16.b/p020104.d
Cal Level: 5 , Cal Amount: 20.00000		
01-FEB-2016 16:07	AT12mdl	/chem/msdp.i/01feb16.b/p020105.d
Cal Level: 6 , Cal Amount: 50.00000		
18-FEB-2016 12:13	ComboICALmBP	/chem/msdp.i/18feb16.b/p021806.d
01-FEB-2016 16:31	AT12	/chem/msdp.i/01feb16.b/p020106.d
Cal Level: 7 , Cal Amount: 100.00000		
01-FEB-2016 16:56	AT12	/chem/msdp.i/01feb16.b/p020107.d
Cal Level: 8 , Cal Amount: 200.00000		
18-FEB-2016 12:39	ComboICALmBP	/chem/msdp.i/18feb16.b/p021807.d
01-FEB-2016 17:22	AT12	/chem/msdp.i/01feb16.b/p020108.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.000		
18-FEB-2016 10:16	AT12	/chem/msdp.i/18feb16.b/p021802.d
Ccal Level: 6 , Ccal Amount: 50.000		
18-FEB-2016 12:13	ComboICALmBP	/chem/msdp.i/18feb16.b/p021806a.d
Ccal Level: 6 , Ccal Amount: 50.000		
18-FEB-2016 12:13	ComboICALmBP	/chem/msdp.i/18feb16.b/p021806.d

Initial Calibration Narrative

P16Q0201B.m

A multi-point initial calibration was analyzed on MSD-P on 2/01/16.

ICAL: zero (0) out.

ICV: zero (0) out.

ICV File: P020203; 50mL: #2759-109A(100ppbv→50ppbv)
Ok for DoD and In-house control limits

BFB Tune File: A) P020101, P020201
B) P021801

A 3 pt **Combo minus Boiling Point and Acetonitrile** calibration was analyzed 2/18/16.
No Iodomethane. No Butyl Acetate.

MDL:
The current MDL was analyzed on 12/17/15

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-FEB-2016 14:10
End Cal Date : 18-FEB-2016 12:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/18feb16.b/p16q0201b.m
Cal Date : 19-Feb-2016 10:09 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/01feb16.b/p020102.d
Level 3: /chem/msdp.i/18feb16.b/p021805.d
Level 4: /chem/msdp.i/01feb16.b/p020104.d
Level 5: /chem/msdp.i/01feb16.b/p020105.d
Level 6: /chem/msdp.i/18feb16.b/p021806.d
Level 7: /chem/msdp.i/01feb16.b/p020107.d
Level 8: /chem/msdp.i/18feb16.b/p021807.d

Please see Calibration History page(s) for all the calibration files.

QA 2/19/16

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

MSDP

BFB verification of 176/174 ratio: (224704/231786)* 100 = 96.94%			
IS/Surr Std#	2759-216	Exp. Date:	5/1/2016
BCM	163,500		
1,4-DFB	658,886		
CB-d5	634,233		

Method TO-15/TO-14	
SOP# 6	
Vacuum:	NA
Please check all standards	
Surrogate# NA	Exp. Date: NA
Surrogate# NA	Exp. Date: NA

Verified CCV vs ICAL mid-point(-40%): na

Method: P16Q0201a

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	P020101	BFB Tune Check	#2759-216	12	36ng	1.0ml	1.00	kl	kl	02/01/16	1316	sab	
√	P020102	ICAL Level #2	2759-187	3	0.5ppbv (5.0ppbv)	20ml	1.00	sab for kl	sab for kl	02/01/16	1410	sab	exp. 4/6/16
√	P020103	ICAL Level #3	2759-187	3	2.0ppbv (5.0ppbv)	80ml	1.00	sab for kl	sab for kl	02/01/16	1517	sab	exp. 4/6/16
√	P020104	ICAL Level #4	2759-187	3	5.0ppbv (5.0ppbv)	200ml	1.00	sab for kl	sab for kl	02/01/16	1543	sab	exp. 4/6/16
√	P020105	ICAL Level #5	2759-209	13	20ppbv (200ppbv)	20ml	1.00	sab for kl	sab for kl	02/01/16	1607	sab	exp. 4/6/16
√	P020106	ICAL Level #6	2759-209	13	50ppbv (200ppbv)	50ml	1.00	sab for kl	sab for kl	02/01/16	1631	sab	exp. 4/6/16; CCV
√	P020107	ICAL Level #7	2759-209	13	100ppbv (200ppbv)	100ml	1.00	sab for kl	sab for kl	02/01/16	1656	sab	exp. 4/6/16
√	P020108	ICAL Level #8	2759-209	13	200ppbv (200ppbv)	200ml	1.00	sab for kl	sab for kl	02/01/16	1722	sab	exp. 4/6/16
X	P020109	System Blank	35149	12	humid	200ml	1.00	sab for kl	sab for kl	02/02/16	0727	sab	
√	P020110	System Blank	35149	12	humid	200ml	1.00	sab for kl	sab for kl	02/02/16	0754	sab	ok for ICV

2/2/16

MSDP

BFB verification of 176/174 ratio: (165632/169770 * 100 = 97.56%			
IS/Surr Std#	2759-264	Exp. Date:	5/18/2016
BCM	123,808		
1,4-DFB	495,497		
CB-d5	461,299		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	NA		
Please check all standards			
Surrogate#	NA	Exp. Date:	NA
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point(-40%): js

Method: P16Q0201a

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	P021801	BFB Tune Check	2759-264	12	36ng	1.0ml	1.00	js	js	2/18/16	0941	js	Exp:5/18/16
√	P021802	CCV	2759-209	13	50ppbv (200ppbv)	50ml	1.00	js	js	2/18/16	1016	js	Exp: 4/6/16, 1 out
√	P021803	LCS	2759-247	14	50ppbv(200ppbv)	100ml	1.00	js	js	2/18/16	1041	js	Exp: 5/16/16, 1 out
√	P021804	LCSD	2759-247	14	50ppbv(200ppbv)	100ml	1.00	js	js	2/18/16	1106	js	Exp: 5/16/16,
√	P021805	ICAL Level #3	2759-262	1	2.0ppbv (2.0ppbv)	200ml	1.00	js	js	2/18/16	1148	js	exp. 5/16/16; Combo minus BP
√	P021806	ICAL Level #6	2759-254	2	50ppbv (200ppbv)	50ml	1.00	js	js	2/18/16	1213	js	exp. 5/16/16; Combo minus BP; CCV
√	P021807	ICAL Level #8	2759-254	2	200ppbv (200ppbv)	200ml	1.00	js	js	2/18/16	1239	js	exp. 5/16/16; Combo minus BP
X	P021808	Lab Blank	35149	12	Humid	200mL	1.00	js	js	2/18/16	1331	js	> RL
X	P021809	Lab Blank	35149	12	Humid	200mL	1.00	js	js	2/18/16	1438	js	>1/2RL
	P021810	Lab Blank	35149	12	Humid	200mL	1.00		js	2/18/16			
	~~P021811~~	~~1602270-01A~~	~~37728~~	3	~~3.5 Hg->15 psi~~	~~200mL~~	~~2.29~~		~~js~~	~~2/18/16~~			
	P021812	1602308-01A	N0451	4	3.5 Hg->5 psi	200mL	1.52		js	2/18/16			
	P021813	1602309-01A	5703	5	1.0 Hg->5 psi	200mL	1.39		js	2/18/16			
	P021814	1602309-02A	35243	6	3.0 Hg->5 psi	200mL	1.49		js	2/18/16			
	P021815	1602309-03A	34460	7	2.0 Hg->5 psi	200mL	1.44		js	2/18/16			
	P021816	1602309-04A	N0592	8	7.0 Hg->5 psi	200mL	1.75		js	2/18/16			

2/18/16

MSDP

BFB verification of 176/174 ratio: (237141/241493)* 100 =98.20%			
IS/Surr Std#	2759-216	Exp. Date:	5/1/2016
BCM	176,731		
1,4-DFB	708,899		
CB-d5	674,445		

Method TO-15/TO-14	
SOP# 6	
Vacuum:	NA
Please check all standards	
Surrogate# NA	Exp. Date: NA
Surrogate# NA	Exp. Date: NA

Verified CCV vs ICAL mid-point(-40%): sab

Method: P16Q0201a

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	P020201	BFB Tune Check	2759-216	12	36ng	1.0ml	1.00	sab	sab	2/2/16	1239	sab	exp: 5/1/16
√	P020202	CCV	2759-209	13	50ppbv (200ppbv)	50ml	1.00	sab	sab	2/2/16	1313	sab	exp. 4/6/16
√	P020203	ICV/LCS	2759-109A	14	50ppbv(100ppbv)	100ml	1.00	sab	sab	2/2/16	1337	sab	exp: 2/24/16
	P020204	LCSD	2759-109A	14	50ppbv(100ppbv)	100ml	1.00	sab	sab				

2/2/16

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/02feb16.b/p020203.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 02-FEB-2016 13:37
Operator : sab Inst ID: msdp.i
Smp Info : 100ml 2759-109A
Misc Info : 50ppbv(100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/02feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 13:48 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 17:22 Cal File: p020108.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.449 (1.000)	130	172319	25.0000		80.00- 120.00	100.00
5.456	5.449 (1.000)	128	133172			49.06- 109.06	77.28
5.456	5.449 (1.000)	49	257554			124.20- 184.20	149.46
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	702482	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	101798			0.00- 44.57	14.49
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	666598	25.0000		80.00- 120.00	100.00
8.787	8.787 (1.000)	82	353425			20.36- 80.36	53.02
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.993	5.986 (1.098)	65	254650	25.0417	25.042	80.00- 120.00	100.00
5.986	5.986 (1.097)	67	137628			26.68- 86.68	54.05

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.555 (1.192)	98	691553	24.6398	24.640	80.00- 120.00	100.00
7.562	7.555 (1.192)	70	76211			0.00- 40.62	11.02
7.562	7.555 (1.192)	100	455130			36.74- 96.74	65.81
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.761 (1.112)	174	545168	25.3585	25.358	80.00- 120.00	100.00
9.768	9.761 (1.112)	95	525490			65.95- 125.95	96.39
9.768	9.761 (1.112)	176	524515			65.80- 125.80	96.21
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	360739	49.6313	49.631	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	239283			34.60- 94.60	66.33
1.479	1.479 (0.271)	39	274792			43.23- 103.23	76.17
11 Freon 12					CAS #: 75-71-8		
1.507	1.507 (0.276)	85	1044113	54.4668	54.467	80.00- 120.00	100.00
1.507	1.507 (0.276)	87	338964			1.76- 61.76	32.46
15 Freon 114					CAS #: 76-14-2		
1.633	1.633 (0.299)	135	829215	55.9866	55.986	80.00- 120.00	100.00
1.633	1.633 (0.299)	137	269614			2.23- 62.23	32.51
17 Chloromethane					CAS #: 74-87-3		
1.717	1.717 (0.315)	50	396516	62.1071	62.107	80.00- 120.00	100.00
1.717	1.717 (0.315)	52	125694			0.00- 59.98	31.70
23 Butane					CAS #: 106-97-8		
1.786	1.787 (0.327)	58	92335	47.0292	47.029	80.00- 120.00	100.00
1.786	1.787 (0.327)	43	733855			783.10- 843.10	794.77
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.829 (0.335)	62	501031	58.6987	58.699	80.00- 120.00	100.00
1.828	1.829 (0.335)	64	156462			5.16- 65.16	31.23
26 1,3-Butadiene					CAS #: 106-99-0		
1.856	1.843 (0.340)	54	366893	52.1169	52.117	80.00- 120.00	100.00
1.842	1.843 (0.338)	39	480976			81.92- 141.92	131.09
29 Bromomethane					CAS #: 74-83-9		
2.211	2.204 (0.405)	94	303020	61.0895	61.090	80.00- 120.00	100.00
2.211	2.204 (0.405)	96	285150			65.10- 125.10	94.10
30 Chloroethane					CAS #: 75-00-3		
2.326	2.318 (0.426)	64	209332	54.5685	54.568	80.00- 120.00	100.00
2.326	2.318 (0.426)	66	63063			0.00- 59.99	30.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.326	2.318 (0.426)	49	70660			5.85- 65.85	33.75
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	542108	50.3108	50.311	80.00- 120.00	100.00
2.347	2.340 (0.430)	57	362251			36.22- 96.22	66.82
35 Freon 11					CAS #: 75-69-4		
2.576	2.569 (0.472)	101	1078612	53.9915	53.991	80.00- 120.00	100.00
2.576	2.569 (0.472)	103	695100			34.50- 94.50	64.44
42 Ethanol					CAS #: 64-17-5		
2.884	2.884 (0.529)	45	170144	51.9049	51.905	80.00- 120.00	100.00
2.884	2.884 (0.529)	43	34615			0.00- 50.77	20.34
2.884	2.884 (0.529)	46	66096			8.68- 68.68	38.85
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	794663	49.8787	49.879	80.00- 120.00	100.00
3.221	3.214 (0.590)	153	505497			33.45- 93.45	63.61
3.221	3.214 (0.590)	101	836154			74.36- 134.36	105.22
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	234181	53.1799	53.180	80.00- 120.00	100.00
3.242	3.242 (0.594)	96	367267			133.60- 193.60	156.83
3.242	3.242 (0.594)	61	760134			302.57- 362.57	324.59
52 Acetone					CAS #: 67-64-1		
3.386	3.386 (0.621)	58	212189	46.7082	46.708	80.00- 120.00	100.00
3.386	3.386 (0.621)	43	752010			323.05- 383.05	354.41
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.479 (0.638)	76	902221	45.9276	45.928	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.550 (0.651)	45	936311	48.3088	48.309	80.00- 120.00	100.00
3.550	3.550 (0.651)	43	185190			0.00- 49.72	19.78
3.550	3.550 (0.651)	59	32918			0.00- 33.36	3.52
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.682)	76	161346	49.2223	49.222	80.00- 120.00	100.00
3.722	3.722 (0.682)	41	602759			339.09- 399.09	373.58
66 Methylene Chloride					CAS #: 75-09-2		
3.909	3.901 (0.716)	49	573465	53.5711	53.571	80.00- 120.00	100.00
3.909	3.909 (0.716)	84	320860			25.63- 85.63	55.95
3.909	3.901 (0.716)	51	172895			0.46- 60.46	30.15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.124 (0.756)	73	1075392	50.3617	50.362	80.00- 120.00	100.00
4.123	4.124 (0.756)	57	318874			0.00- 59.13	29.65
4.123	4.124 (0.756)	41	306120			0.00- 58.91	28.47
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.145	4.145 (0.760)	98	209094	47.5658	47.566	80.00- 120.00	100.00
4.145	4.145 (0.760)	61	572402			242.97- 302.97	273.75
4.152	4.145 (0.761)	96	329109			127.33- 187.33	157.40
78 Hexane					CAS #: 110-54-3		
4.374	4.374 (0.802)	57	739148	51.2177	51.218	80.00- 120.00	100.00
4.374	4.367 (0.802)	43	472169			34.30- 94.30	63.88
4.374	4.374 (0.802)	86	91650			0.00- 42.17	12.40
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	786943	53.7322	53.732	80.00- 120.00	100.00
4.639	4.639 (0.850)	65	232626			0.09- 60.09	29.56
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	100929	52.4020	52.402	80.00- 120.00	100.00
4.689	4.682 (0.860)	43	1355746			1535.12-1595.12	1343.27
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.957)	98	282222	57.3659	57.366	80.00- 120.00	100.00
5.219	5.219 (0.957)	96	441647			125.21- 185.21	156.49
5.219	5.219 (0.957)	61	687901			211.41- 271.41	243.74
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	190436	51.0941	51.094	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	924159			452.15- 512.15	485.29
5.248	5.248 (0.962)	57	71663			9.54- 69.54	37.63
99 Tetrahydrofuran					CAS #: 109-99-9		
5.449	5.442 (0.999)	42	512026	51.3644	51.364	80.00- 120.00	100.00
5.449	5.442 (0.999)	71	169291			2.09- 62.09	33.06
5.449	5.442 (0.999)	72	170485			3.61- 63.61	33.30
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.010)	83	795299	52.1592	52.159	80.00- 120.00	100.00
5.513	5.513 (1.010)	85	523063			35.60- 95.60	65.77
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	513551	47.9368	47.937	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	759876			115.43- 175.43	147.97
5.628	5.628 (1.032)	41	433564			53.65- 113.65	84.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.034)	97	873585	50.2183	50.218	80.00- 120.00	100.00
5.642	5.642 (1.034)	99	551680			33.21- 93.21	63.15
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.757	5.757 (1.055)	119	925356	51.2591	51.259	80.00- 120.00	100.00
5.757	5.757 (1.055)	117	970290			76.21- 136.21	104.86
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.093)	57	2408369	50.8992	50.899	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	769595			1.10- 61.10	31.96
5.964	5.964 (1.093)	41	675275			0.00- 57.08	28.04
116 Benzene					CAS #: 71-43-2		
5.972	5.972 (0.941)	78	1116000	52.1265	52.126	80.00- 120.00	100.00
5.972	5.972 (0.941)	77	266989			0.00- 53.91	23.92
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.058 (0.955)	62	628508	53.1874	53.187	80.00- 120.00	100.00
6.057	6.058 (0.955)	64	196249			0.29- 60.29	31.22
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	412319	44.5521	44.552	80.00- 120.00	100.00
6.136	6.129 (0.967)	43	830655			172.43- 232.43	201.46
6.136	6.129 (0.967)	57	467653			85.51- 145.51	113.42
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	539748	52.3524	52.352	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	596278			79.80- 139.80	110.47
6.537	6.537 (1.030)	97	342360			33.64- 93.64	63.43
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	737973	48.7154	48.715	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	351446			16.94- 76.94	47.62
6.645	6.645 (1.047)	55	710554			65.75- 125.75	96.28
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	506037	51.4458	51.446	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	348069			39.62- 99.62	68.78
6.774	6.774 (1.068)	41	311935			30.53- 90.53	61.64
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	276430	51.8515	51.852	80.00- 120.00	100.00
6.860	6.853 (1.081)	58	235094			52.00- 112.00	85.05
6.860	6.853 (1.081)	57	75674			0.00- 56.29	27.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	906594	53.3467	53.347	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	587812			34.30- 94.30	64.84
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.376 (1.163)	75	714261	50.0461	50.046	80.00- 120.00	100.00
7.375	7.376 (1.163)	77	227163			2.71- 62.71	31.80
7.375	7.368 (1.163)	39	460284			35.07- 95.07	64.44
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	439357	50.2813	50.281	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	1140712			230.95- 290.95	259.63
7.483	7.483 (1.180)	85	171187			7.98- 67.98	38.96
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	1504054	50.2468	50.247	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	876298			27.38- 87.38	58.26
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	689127	53.3996	53.400	80.00- 120.00	100.00
7.848	7.848 (0.893)	77	223254			2.10- 62.10	32.40
7.848	7.848 (0.893)	39	431117			30.98- 90.98	62.56
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	7.999 (0.911)	97	523139	51.7672	51.767	80.00- 120.00	100.00
8.006	7.999 (0.911)	99	321355			31.34- 91.34	61.43
7.999	7.999 (0.910)	83	450725			57.20- 117.20	86.16
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	918141	52.0599	52.060	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	597245			35.33- 95.33	65.05
8.049	8.049 (0.916)	131	592068			35.36- 95.36	64.49
158 2-Hexanone					CAS #: 591-78-6		
8.171	8.171 (0.930)	58	617029	54.8663	54.866	80.00- 120.00	100.00
8.171	8.171 (0.930)	43	1137252			156.39- 216.39	184.31
8.171	8.171 (0.930)	100	108863			0.00- 48.05	17.64
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	1092539	52.9371	52.937	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	853873			48.12- 108.12	78.15
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.429 (0.959)	107	856999	52.2937	52.294	80.00- 120.00	100.00
8.428	8.429 (0.959)	109	813805			63.87- 123.87	94.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	1308001	52.1466	52.147	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	412111			2.38- 62.38	31.51
8.808	8.808 (1.002)	77	700491			24.59- 84.59	53.55
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.858 (1.008)	106	668763	50.6973	50.697	80.00- 120.00	100.00
8.858	8.858 (1.008)	91	2043566			276.53- 336.53	305.57
169 m,p-Xylene					CAS #: 108-38-3		
8.959	8.959 (1.020)	106	835712	52.0887	52.089	80.00- 120.00	100.00
8.959	8.959 (1.020)	91	1639775			166.59- 226.59	196.21
171 o-Xylene					CAS #: 95-47-6		
9.302	9.295 (1.059)	106	802145	52.0822	52.082	80.00- 120.00	100.00
9.302	9.295 (1.059)	91	1675352			176.08- 236.08	208.86
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.060)	104	1316462	57.0586	57.058	80.00- 120.00	100.00
9.317	9.317 (1.060)	78	625929			17.58- 77.58	47.55
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	1782259	70.3120	70.312	80.00- 120.00	100.00
9.510	9.510 (1.082)	171	919227			21.36- 81.36	51.58
175 Cumene					CAS #: 98-82-8		
9.589	9.582 (1.091)	105	2483879	50.9023	50.902	80.00- 120.00	100.00
9.589	9.582 (1.091)	120	691313			0.00- 57.79	27.83
9.589	9.582 (1.091)	51	272125			0.00- 41.33	10.96
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.897	9.883 (1.126)	83	1221562	49.8837	49.884	80.00- 120.00	100.00
9.897	9.883 (1.126)	85	796677			34.22- 94.22	65.22
182 Propylbenzene					CAS #: 103-65-1		
9.933	9.926 (1.130)	91	2964176	51.6604	51.660	80.00- 120.00	100.00
9.940	9.926 (1.131)	120	741575			0.00- 54.34	25.02
9.933	9.926 (1.130)	105	111835			0.00- 33.54	3.77
188 4-Ethyltoluene					CAS #: 622-96-8		
10.033	10.019 (1.142)	120	788869	50.0665	50.066	80.00- 120.00	100.00
10.033	10.019 (1.142)	105	2518234			279.66- 339.66	319.22
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.083	10.069 (1.148)	120	1086243	54.3635	54.364	80.00- 120.00	100.00
10.083	10.069 (1.148)	105	2193179			169.72- 229.72	201.91

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.405	10.391 (1.184)	120	988375	53.7471	53.747	80.00- 120.00	100.00
10.405	10.391 (1.184)	105	2100479			185.64- 245.64	212.52
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.692	10.671 (1.217)	146	1621030	51.7211	51.721	80.00- 120.00	100.00
10.692	10.671 (1.217)	148	1041890			34.23- 94.23	64.27
10.692	10.671 (1.217)	111	598895			7.40- 67.40	36.95
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.771	10.749 (1.226)	146	1646161	51.7856	51.786	80.00- 120.00	100.00
10.771	10.749 (1.226)	148	1055447			33.60- 93.60	64.12
10.771	10.749 (1.226)	111	594505			4.87- 64.87	36.11
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.885	10.864 (1.239)	91	2073650	52.2611	52.261	80.00- 120.00	100.00
10.885	10.864 (1.239)	126	485788			0.00- 53.22	23.43
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.100	11.079 (1.263)	146	1565059	52.3846	52.385	80.00- 120.00	100.00
11.100	11.079 (1.263)	148	990081			33.66- 93.66	63.26
11.100	11.072 (1.263)	111	591690			7.92- 67.92	37.81
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.504	12.468 (1.423)	180	1337297	52.8511	52.851	80.00- 120.00	100.00
12.504	12.468 (1.423)	182	1279288			66.61- 126.61	95.66
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.597	12.562 (1.434)	225	1191042	54.0771	54.077	80.00- 120.00	100.00
12.597	12.562 (1.434)	223	754554			32.66- 92.66	63.35
228 Naphthalene					CAS #: 91-20-3		
12.769	12.733 (1.453)	128	257739	5.93865	5.939	80.00- 120.00	100.00
12.769	12.733 (1.453)	127	32099			0.00- 42.82	12.45

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020203.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msdp.i/02feb16.b/p16q0201a.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 02-FEB-2016
Calibration Time: 13:13
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	176731	106039	247423	172319	-2.50
123 1,4-Difluorobenze	708899	425339	992459	702482	-0.91
163 Chlorobenzene-d5	674445	404667	944223	666598	-1.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02feb16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: sab
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdp.i/02feb16.b/p16q0201a.m
Misc Info: 50ppbv(100ppbv)

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9	Propylene	50.000	49.631	99.26	60-140
11	Freon 12	50.000	54.467	108.93	70-130
15	Freon 114	50.000	55.986	111.97	70-130
17	Chloromethane	50.000	62.107	124.21	70-130
23	Butane	50.000	47.029	94.06	60-140
25	Vinyl Chloride	50.000	58.699	117.40	70-130
26	1,3-Butadiene	50.000	52.117	104.23	70-130
29	Bromomethane	50.000	61.090	122.18	70-130
30	Chloroethane	50.000	54.568	109.14	70-130
31	Isopentane	50.000	50.311	100.62	60-140
35	Freon 11	50.000	53.991	107.98	70-130
42	Ethanol	50.000	51.905	103.81	70-130
49	Freon 113	50.000	49.879	99.76	70-130
50	1,1-Dichloroethene	50.000	53.180	106.36	70-130
52	Acetone	50.000	46.708	93.42	70-130
56	Carbon Disulfide	50.000	45.928	91.86	70-130
57	2-Propanol	50.000	48.309	96.62	70-130
58	3-Chloropropene	50.000	49.222	98.44	70-130
66	Methylene Chloride	50.000	53.571	107.14	70-130
72	Methyl tert-butyl	50.000	50.362	100.72	70-130
73	trans-1,2-Dichloro	42.500	47.566	111.92	70-130
78	Hexane	50.000	51.218	102.44	70-130
82	1,1-Dichloroethane	50.000	53.732	107.46	70-130
86	Vinyl Acetate	50.000	52.402	104.80	70-130
91	cis-1,2-Dichloroet	56.500	57.366	101.53	70-130
92	2-Butanone	50.000	51.094	102.19	70-130
99	Tetrahydrofuran	50.000	51.364	102.73	70-130
100	Chloroform	50.000	52.159	104.32	70-130
103	1,1,1-Trichloroeth	50.000	50.218	100.44	70-130
106	Carbon Tetrachlori	50.000	51.259	102.52	70-130
102	Cyclohexane	50.000	47.937	95.87	70-130
113	2,2,4-Trimethylpen	50.000	50.899	101.80	70-130
116	Benzene	50.000	52.126	104.25	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	53.187	106.37	70-130
121 Heptane	50.000	44.552	89.10	70-130
125 Trichloroethene	50.000	52.352	104.70	70-130
127 Methylcyclohexane	50.000	48.715	97.43	60-140
132 1,2-Dichloropropan	50.000	51.446	102.89	70-130
136 1,4-Dioxane	50.000	51.852	103.70	70-130
138 Bromodichlorometha	50.000	53.347	106.69	70-130
144 cis-1,3-Dichloropr	50.000	50.046	100.09	70-130
145 4-Methyl-2-pentano	50.000	50.281	100.56	70-130
147 Toluene	50.000	50.247	100.49	70-130
150 trans-1,3-Dichloro	50.000	53.400	106.80	70-130
155 1,1,2-Trichloroeth	50.000	51.767	103.53	70-130
156 Tetrachloroethene	50.000	52.060	104.12	70-130
158 2-Hexanone	50.000	54.866	109.73	70-130
160 Dibromochlorometha	50.000	52.937	105.87	70-130
161 1,2-Dibromoethane	50.000	52.294	104.59	70-130
165 Chlorobenzene	50.000	52.147	104.29	70-130
167 Ethyl Benzene	50.000	50.697	101.39	70-130
169 m,p-Xylene	50.000	52.089	104.18	70-130
171 o-Xylene	50.000	52.082	104.16	70-130
172 Styrene	50.000	57.058	114.12	70-130
174 Bromoform	65.000	70.312	108.17	70-130
175 Cumene	50.000	50.902	101.80	70-130
181 1,1,2,2-Tetrachlor	50.000	49.884	99.77	70-130
182 Propylbenzene	50.000	51.660	103.32	70-130
188 4-Ethyltoluene	50.000	50.066	100.13	70-130
190 1,3,5-Trimethylben	50.000	54.364	108.73	70-130
196 1,2,4-Trimethylben	50.000	53.747	107.49	70-130
208 1,3-Dichlorobenzen	50.000	51.721	103.44	70-130
209 1,4-Dichlorobenzen	50.000	51.786	103.57	70-130
212 alpha-Chlorotoluen	50.000	52.261	104.52	70-130
214 1,2-Dichlorobenzen	50.000	52.385	104.77	70-130
226 1,2,4-Trichloroben	50.000	52.851	105.70	70-130
227 Hexachlorobutadien	50.000	54.077	108.15	70-130
228 Naphthalene	5.000	5.939	118.77	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.042	100.17	70-130
$ 146 Toluene-d8	25.000	24.640	98.56	70-130
$ 177 4-Bromofluorobenze	25.000	25.358	101.43	70-130

Data File: /chem/msdp.i/02feb16.b/p020203.d

Date : 02-FEB-2016 13:37

Client ID: ICV

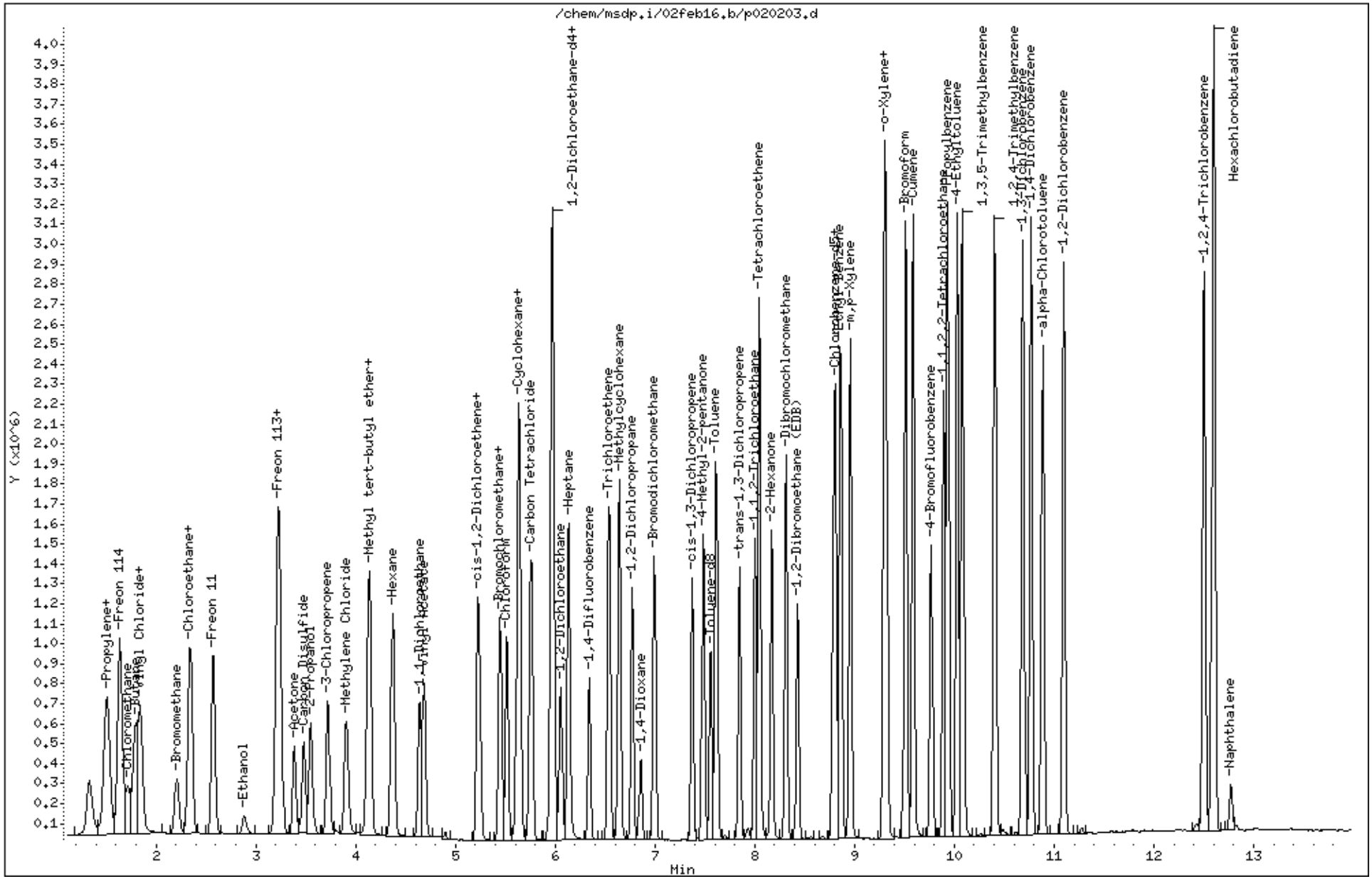
Sample Info: 100ml 2759-109A

Column phase: RTX-624

Instrument: msdp.i

Operator: sab

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020102.d
Lab Smp Id: ICAL Client Smp ID: Level 2
Inj Date : 01-FEB-2016 14:10
Operator : kl Inst ID: msdp.i
Smp Info : 20ml #2759-187
Misc Info : 0.5ppbv(5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 14:10 Cal File: p020102.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12low.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
11 Freon 12					CAS #: 75-71-8		
1.507	1.521 (0.276)	85	8625	0.50000	0.5000	80.00- 120.00	100.00
1.507	1.521 (0.276)	87	2916			1.76- 61.76	33.81
15 Freon 114					CAS #: 76-14-2		
1.632	1.646 (0.300)	135	6462	0.50000	0.5000	80.00- 120.00	100.00
1.632	1.646 (0.300)	137	1946			2.23- 62.23	30.11
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.336)	62	4109	0.50000	0.5000	80.00- 120.00	100.00
1.814	1.828 (0.333)	64	2044			5.16- 65.16	49.74
26 1,3-Butadiene					CAS #: 106-99-0		
1.842	1.856 (0.338)	54	3567	0.50000	0.5000	80.00- 120.00	100.00
1.842	1.856 (0.338)	39	3615			81.92- 141.92	101.35
29 Bromomethane					CAS #: 74-83-9		
2.211	2.211 (0.406)	94	1997	0.50000	0.5000	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
29 Bromomethane (continued)							
2.204	2.211 (0.404)	96	2491			65.10- 125.10	124.74
35 Freon 11					CAS #: 75-69-4		
2.569	2.576 (0.471)	101	8875	0.50000	0.5000	80.00- 120.00	100.00
2.569	2.576 (0.471)	103	5784			34.50- 94.50	65.17
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.591)	151	7544	0.50000	0.5000	80.00- 120.00	100.00
3.214	3.221 (0.590)	153	4723			33.45- 93.45	62.61
3.214	3.221 (0.590)	101	9094			74.36- 134.36	120.55
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.249 (0.595)	98	1907	0.50000	0.5000	80.00- 120.00	100.00
3.235	3.249 (0.594)	96	2975			133.60- 193.60	156.00
3.242	3.249 (0.595)	61	5399			302.57- 362.57	283.11
66 Methylene Chloride					CAS #: 75-09-2		
3.908	3.908 (0.717)	49	4081	0.50000	0.5000	80.00- 120.00	100.00(a)
3.901	3.908 (0.716)	84	2819			25.63- 85.63	69.08
3.901	3.908 (0.716)	51	2010			0.46- 60.46	49.25
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.131 (0.757)	73	10794	0.50000	0.5000	80.00- 120.00	100.00
4.066	4.131 (0.746)	57	14888			0.00- 59.13	137.93
4.116	4.131 (0.755)	41	3719			0.00- 58.91	34.45
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.762)	98	1555	0.50000	0.5000	80.00- 120.00	100.00
4.145	4.152 (0.761)	61	5011			242.97- 302.97	322.25
4.145	4.152 (0.761)	96	3587			127.33- 187.33	230.68
78 Hexane					CAS #: 110-54-3		
4.367	4.374 (0.801)	57	6973	0.50000	0.5000	80.00- 120.00	100.00
4.374	4.374 (0.803)	43	5017			34.30- 94.30	71.95
4.360	4.374 (0.800)	86	427			0.00- 42.17	6.12
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.646 (0.851)	63	6097	0.50000	0.5000	80.00- 120.00	100.00
4.639	4.646 (0.851)	65	2055			0.09- 60.09	33.71
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.226 (0.958)	98	2525	0.50000	0.5000	80.00- 120.00	100.00
5.219	5.226 (0.958)	96	3516			125.21- 185.21	139.25
5.219	5.226 (0.958)	61	4912			211.41- 271.41	194.53

					AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)		
RT	EXP RT (REL RT)	MASS	RESPONSE				TARGET RANGE	RATIO
99 Tetrahydrofuran						CAS #: 109-99-9		
5.448	5.449 (1.000)	42	4555	0.50000	0.5000		80.00- 120.00	100.00
5.448	5.449 (1.000)	71	1662				2.09- 62.09	36.49
5.448	5.449 (1.000)	72	1060				3.61- 63.61	23.27
* 98 Bromochloromethane						CAS #: 74-97-5		
5.448	5.463 (1.000)	130	166334	25.0000			80.00- 120.00	100.00
5.448	5.463 (1.000)	128	131614				49.06- 109.06	79.13
5.448	5.463 (1.000)	49	243295				124.20- 184.20	146.27
100 Chloroform						CAS #: 67-66-3		
5.513	5.520 (1.012)	83	6751	0.50000	0.5000		80.00- 120.00	100.00
5.513	5.520 (1.012)	85	3918				35.60- 95.60	58.04
102 Cyclohexane						CAS #: 110-82-7		
5.620	5.628 (1.032)	84	6416	0.50000	0.5000		80.00- 120.00	100.00
5.628	5.628 (1.033)	56	13022				115.43- 175.43	202.96
5.628	5.628 (1.033)	41	7643				53.65- 113.65	119.12
103 1,1,1-Trichloroethane						CAS #: 71-55-6		
5.642	5.649 (1.035)	97	8705	0.50000	0.5000		80.00- 120.00	100.00
5.642	5.649 (1.035)	99	5430				33.21- 93.21	62.38
106 Carbon Tetrachloride						CAS #: 56-23-5		
5.756	5.764 (1.057)	119	8479	0.50000	0.5000		80.00- 120.00	100.00
5.756	5.764 (1.057)	117	8078				76.21- 136.21	95.27
113 2,2,4-Trimethylpentane						CAS #: 540-84-1		
5.964	5.964 (1.095)	57	23515	0.50000	0.5000		80.00- 120.00	100.00
5.957	5.964 (1.093)	56	7609				1.10- 61.10	32.36
5.964	5.964 (1.095)	41	7776				0.00- 57.08	33.07
116 Benzene						CAS #: 71-43-2		
5.971	5.979 (0.941)	78	9730	0.50000	0.5000		80.00- 120.00	100.00
5.971	5.979 (0.941)	77	2778				0.00- 53.91	28.55
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.986	5.993 (1.099)	65	233603	25.0000	25.000		80.00- 120.00	100.00
5.986	5.993 (1.099)	67	115991				26.68- 86.68	49.65
120 1,2-Dichloroethane						CAS #: 107-06-2		
6.057	6.057 (0.955)	62	4640	0.50000	0.5000		80.00- 120.00	100.00
6.050	6.057 (0.954)	64	1812				0.29- 60.29	39.05
121 Heptane						CAS #: 142-82-5		
6.129	6.136 (0.966)	71	6260	0.50000	0.5000		80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.136 (0.966)	43	12694			172.43- 232.43	202.78
6.129	6.136 (0.966)	57	7267			85.51- 145.51	116.09
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	657188	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	94524			0.00- 44.57	14.38
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	4690	0.50000	0.5000	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	4532			79.80- 139.80	96.63
6.537	6.537 (1.030)	97	3136			33.64- 93.64	66.87
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	8085	0.50000	0.5000	80.00- 120.00	100.00(a)
6.645	6.645 (1.047)	98	3658			16.94- 76.94	45.24
6.645	6.645 (1.047)	55	7126			65.75- 125.75	88.14
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.774 (1.067)	63	4535	0.50000	0.5000	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	3046			39.62- 99.62	67.17
6.774	6.774 (1.068)	41	3237			30.53- 90.53	71.38
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	8105	0.50000	0.5000	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	4682			34.30- 94.30	57.77
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.375 (1.163)	75	5968	0.50000	0.5000	80.00- 120.00	100.00
7.368	7.375 (1.161)	77	2376			2.71- 62.71	39.81
7.375	7.375 (1.163)	39	4144			35.07- 95.07	69.44
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	4152	0.50000	0.5000	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	9798			230.95- 290.95	235.98
7.483	7.483 (1.180)	85	1717			7.98- 67.98	41.35
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.562 (1.191)	98	644309	25.0000	25.000	80.00- 120.00	100.00
7.554	7.562 (1.191)	70	70476			0.00- 40.62	10.94
7.554	7.562 (1.191)	100	426912			36.74- 96.74	66.26
147 Toluene					CAS #: 108-88-3		
7.612	7.619 (1.200)	91	13889	0.50000	0.5000	80.00- 120.00	100.00
7.612	7.619 (1.200)	92	7590			27.38- 87.38	54.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	5957	0.50000	0.5000	80.00- 120.00	100.00
7.841	7.848 (0.892)	77	6816			2.10- 62.10	114.42
7.841	7.848 (0.892)	39	4091			30.98- 90.98	68.68
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	4553	0.50000	0.5000	80.00- 120.00	100.00
7.999	8.006 (0.910)	99	2898			31.34- 91.34	63.65
7.999	8.006 (0.910)	83	4860			57.20- 117.20	106.74
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	8039	0.50000	0.5000	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	4999			35.33- 95.33	62.18
8.049	8.049 (0.916)	131	4845			35.36- 95.36	60.27
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.930)	58	5235	0.50000	0.5000	80.00- 120.00	100.00(a)
8.170	8.170 (0.930)	43	9664			156.39- 216.39	184.60
8.178	8.170 (0.931)	100	824			0.00- 48.05	15.74
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	9009	0.50000	0.5000	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	7480			48.12- 108.12	83.03
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	7417	0.50000	0.5000	80.00- 120.00	100.00
8.428	8.428 (0.959)	109	6657			63.87- 123.87	89.75
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.786	8.787 (1.000)	117	619516	25.0000		80.00- 120.00	100.00
8.786	8.787 (1.000)	82	317931			20.36- 80.36	51.32
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	11148	0.50000	0.5000	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	3992			2.38- 62.38	35.81
8.801	8.808 (1.002)	77	12643			24.59- 84.59	113.41
167 Ethyl Benzene					CAS #: 100-41-4		
8.865	8.865 (1.009)	106	6555	0.50000	0.5000	80.00- 120.00	100.00
8.858	8.865 (1.008)	91	18817			276.53- 336.53	287.06
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	7534	0.50000	0.5000	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	15295			166.59- 226.59	203.01
171 o-Xylene					CAS #: 95-47-6		
9.302	9.302 (1.059)	106	7414	0.50000	0.5000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
171 o-Xylene (continued)							
9.302	9.302 (1.059)	91	16058			176.08- 236.08	216.59
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.060)	104	9407	0.50000	0.5000	80.00- 120.00	100.00
9.317	9.317 (1.060)	78	4896			17.58- 77.58	52.05
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	11401	0.50000	0.5000	80.00- 120.00	100.00
9.510	9.510 (1.082)	171	5796			21.36- 81.36	50.84
175 Cumene					CAS #: 98-82-8		
9.589	9.589 (1.091)	105	24248	0.50000	0.5000	80.00- 120.00	100.00
9.589	9.589 (1.091)	120	6686			0.00- 57.79	27.57
9.589	9.589 (1.091)	51	3464			0.00- 41.33	14.29
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.768 (1.112)	174	489448	25.0000	25.000	80.00- 120.00	100.00
9.768	9.768 (1.112)	95	486663			65.95- 125.95	99.43
9.768	9.768 (1.112)	176	479463			65.80- 125.80	97.96
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.897	9.897 (1.126)	83	12276	0.50000	0.5000	80.00- 120.00	100.00
9.897	9.897 (1.126)	85	7295			34.22- 94.22	59.42
182 Propylbenzene					CAS #: 103-65-1		
9.933	9.940 (1.130)	91	27885	0.50000	0.5000	80.00- 120.00	100.00
9.940	9.940 (1.131)	120	7770			0.00- 54.34	27.86
9.933	9.940 (1.130)	105	1732			0.00- 33.54	6.21
188 4-Ethyltoluene					CAS #: 622-96-8		
10.033	10.033 (1.142)	120	6790	0.50000	0.5000	80.00- 120.00	100.00
10.033	10.033 (1.142)	105	22869			279.66- 339.66	336.80
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.083	10.083 (1.148)	120	9172	0.50000	0.5000	80.00- 120.00	100.00
10.083	10.083 (1.148)	105	17953			169.72- 229.72	195.74
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.405	10.405 (1.184)	120	8399	0.50000	0.5000	80.00- 120.00	100.00
10.405	10.405 (1.184)	105	18045			185.64- 245.64	214.85
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.692	10.692 (1.217)	146	14128	0.50000	0.5000	80.00- 120.00	100.00
10.692	10.692 (1.217)	148	9692			34.23- 94.23	68.60
10.692	10.692 (1.217)	111	4826			7.40- 67.40	34.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.771	10.771 (1.226)	146	15649	0.50000	0.5000	80.00- 120.00	100.00
10.771	10.771 (1.226)	148	8565			33.60- 93.60	54.73
10.771	10.771 (1.226)	111	5143			4.87- 64.87	32.86
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.885	10.885 (1.239)	91	17725	0.50000	0.5000	80.00- 120.00	100.00
10.885	10.885 (1.239)	126	4044			0.00- 53.22	22.82
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.100	11.100 (1.263)	146	12445	0.50000	0.5000	80.00- 120.00	100.00
11.100	11.100 (1.263)	148	8892			33.66- 93.66	71.45
11.100	11.100 (1.263)	111	5751			7.92- 67.92	46.21

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 02-Feb-2016 16:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020102.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 0.5ppbv(5.0ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	166334	1.73
123 1,4-Difluorobenze	658886	395332	922440	657188	-0.26
163 Chlorobenzene-d5	634233	380540	887926	619516	-2.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.45	-0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020102.d

Date : 01-FEB-2016 14:10

Client ID: Level 2

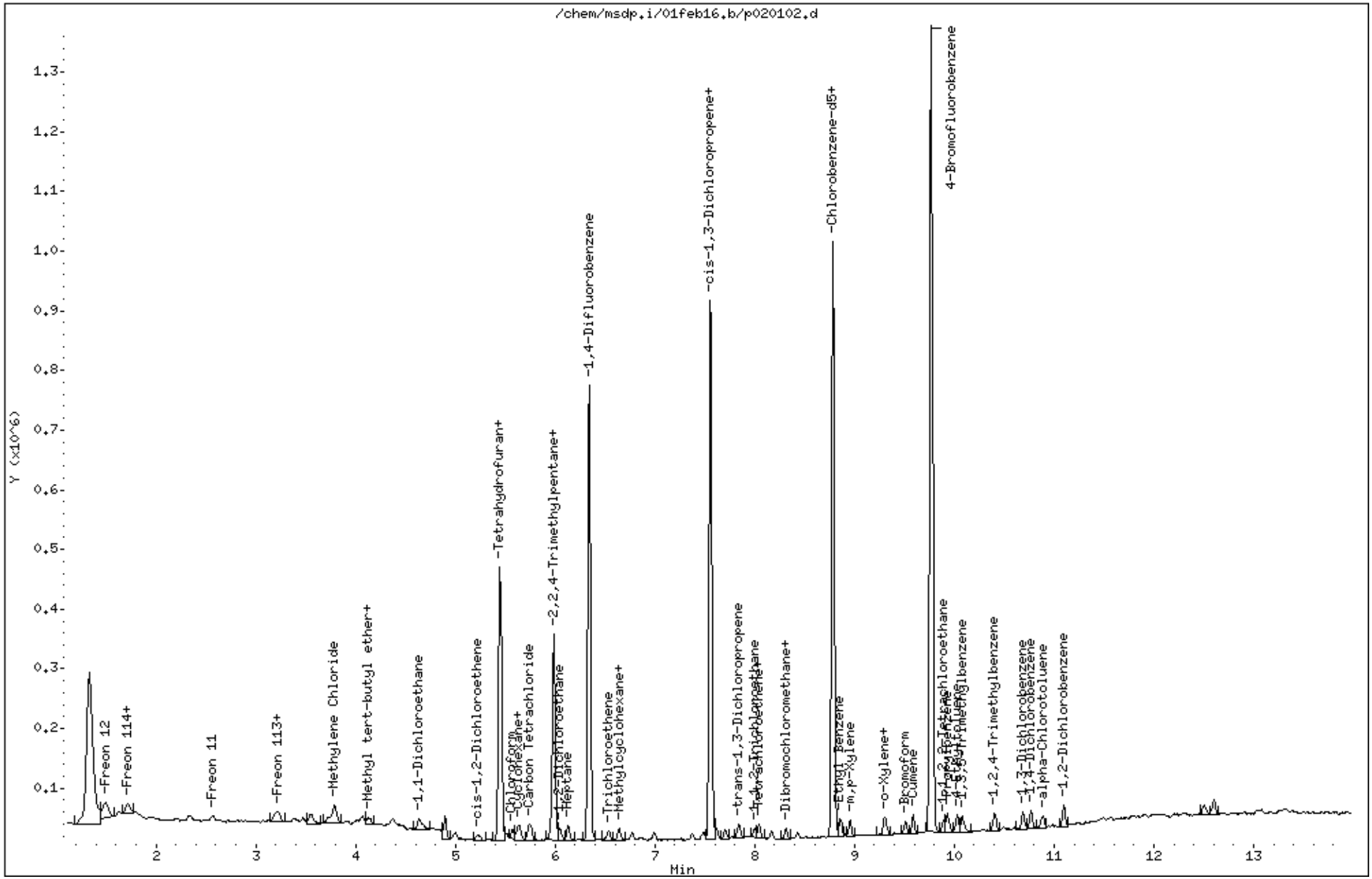
Sample Info: 20ml #2759-187

Column phase: RTX-624

Instrument: msdp.i

Operator: kl

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/18feb16.b/p021805.d
Lab Smp Id: ICAL Level #3
Inj Date : 18-FEB-2016 11:48
Operator : js Inst ID: msdp.i
Smp Info : 200ml 2759-262
Misc Info : 2.0ppbv (2.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/18feb16.b/p16q0201b.m
Meth Date : 19-Feb-2016 15:31 sblack Quant Type: ISTD
Cal Date : 18-FEB-2016 11:48 Cal File: p021805.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICALmBP.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

				AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
32 Vinyl Bromide					CAS #: 593-60-2			
2.533	2.533 (0.464)	106	8070	2.00000	1.832	0.00-	0.00	100.00
2.533	2.533 (0.464)	108	8739			0.00-	0.00	108.29
36 1-Pentene					CAS #: 109-67-1			
2.583	2.583 (0.474)	55	12834	2.00000	2.078	0.00-	0.00	100.00
2.583	2.583 (0.474)	42	17183			0.00-	0.00	133.89
44 Ethyl Ether					CAS #: 60-29-7			
2.956	2.956 (0.542)	74	4631	2.00000	2.062	0.00-	0.00	100.00(T)
2.949	2.949 (0.540)	59	7257			0.00-	0.00	156.70
0.000	1.000 (0.000)	31	0			0.00-	0.00	0.00
53 Iodomethane					CAS #: 74-88-4			
3.443	3.443 (0.631)	142	961	2.00000	0.1485	0.00-	0.00	100.00(a)
3.436	3.436 (0.630)	127	150			0.00-	0.00	15.61

				AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
59 Cyclopentene					CAS #: 142-29-0			
3.737	3.737 (0.685)	67	17329	2.00000	1.967	0.00-	0.00	100.00
3.737	3.737 (0.685)	68	7128			0.00-	0.00	41.13
3.737	3.737 (0.685)	53	6316			0.00-	0.00	36.45
64 Cyclopentane					CAS #: 287-92-3			
3.851	3.851 (0.706)	70	5970	2.00000	2.149	0.00-	0.00	100.00
3.851	3.851 (0.706)	55	10521			0.00-	0.00	176.23
74 Acrylonitrile					CAS #: 107-13-1			
4.245	4.245 (0.778)	52	9152	2.00000	2.035	0.00-	0.00	100.00
4.245	4.245 (0.778)	53	12411			0.00-	0.00	135.61
76 1-Hexene					CAS #: 592-41-6			
4.302	4.302 (0.789)	55	8857	2.00000	1.954	0.00-	0.00	100.00
4.302	4.302 (0.789)	41	11981			0.00-	0.00	135.27
4.302	4.302 (0.789)	84	2387			0.00-	0.00	26.95
84 1-Propanol					CAS #: 71-23-8			
4.768	4.768 (0.874)	59	2762	2.00000	2.142	0.00-	0.00	100.00
4.761	4.761 (0.873)	42	3425			0.00-	0.00	124.00
4.768	4.768 (0.874)	41	2036			0.00-	0.00	73.71
90 2,2-Dichloropropane					CAS #: 594-20-7			
5.191	5.191 (0.951)	77	19158	2.00000	2.007	0.00-	0.00	100.00
5.191	5.191 (0.951)	79	5583			0.00-	0.00	29.14
5.191	5.191 (0.951)	97	4132			0.00-	0.00	21.57
94 Ethyl Acetate					CAS #: 141-78-6			
5.269	5.269 (0.966)	70	2524	2.00000	2.366	0.00-	0.00	100.00
5.269	5.269 (0.966)	61	3567			0.00-	0.00	141.32
5.269	5.269 (0.966)	45	5320			0.00-	0.00	210.78
93 Methyl Acrylate					CAS #: 96-33-3			
5.312	5.312 (0.974)	55	22033	2.00000	1.977	0.00-	0.00	100.00
5.320	5.320 (0.975)	85	2440			0.00-	0.00	11.07
5.320	5.320 (0.975)	58	1998			0.00-	0.00	9.07
* 98 Bromochloromethane					CAS #: 74-97-5			
5.456	5.456 (1.000)	130	125731	25.0000		80.00-	120.00	100.00
5.456	5.456 (1.000)	128	95114			49.06-	109.06	75.65
5.456	5.456 (1.000)	49	194765			124.20-	184.20	154.91
107 1,1-Dichloropropene					CAS #: 563-58-6			
5.792	5.792 (0.913)	110	5114	2.00000	1.908	0.00-	0.00	100.00
5.792	5.792 (0.913)	75	13963			0.00-	0.00	273.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
115 Isobutanol					CAS #: 78-83-1		
5.928	5.928 (0.934)	39	3463	2.00000	2.363	0.00- 0.00	100.00
5.928	5.928 (0.934)	43	12247			0.00- 0.00	353.65
5.928	5.928 (0.934)	41	8801			0.00- 0.00	254.14
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	504227	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	72414			0.00- 44.57	14.36
124 n-Butanol					CAS #: 71-36-3		
6.494	6.494 (1.024)	56	16215	2.00000	2.006	0.00- 0.00	100.00
6.494	6.494 (1.024)	41	12269			0.00- 0.00	75.66
6.502	6.502 (1.025)	43	8903			0.00- 0.00	54.91
128 Ethyl acrylate					CAS #: 140-88-5		
6.645	6.645 (0.756)	99	1031	2.00000	1.840	0.00- 0.00	100.00
6.638	6.638 (0.755)	45	2972			0.00- 0.00	288.26
6.638	6.638 (0.755)	55	21507			0.00- 0.00	2086.03
131 2-Pentanone					CAS #: 107-87-9		
6.731	6.731 (0.766)	43	27908	2.00000	2.076	0.00- 0.00	100.00
6.731	6.731 (0.766)	58	2575			0.00- 0.00	9.23
6.731	6.731 (0.766)	86	3957			0.00- 0.00	14.18
134 Methyl Methacrylate					CAS #: 80-62-6		
6.831	6.831 (0.777)	41	14608	2.00000	2.164	0.00- 0.00	100.00
6.831	6.831 (0.777)	69	8873			0.00- 0.00	60.74
6.838	6.838 (0.778)	100	2978			0.00- 0.00	20.39
137 Dibromomethane					CAS #: 74-95-3		
6.881	6.881 (0.783)	174	12031	2.00000	2.024	0.00- 0.00	100.00
6.874	6.874 (0.782)	93	9435			0.00- 0.00	78.42
6.874	6.874 (0.782)	95	7472			0.00- 0.00	62.11
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.149	8.149 (1.285)	76	16261	2.00000	2.091	0.00- 0.00	100.00
8.149	8.149 (1.285)	41	12374			0.00- 0.00	76.10
8.149	8.149 (1.285)	78	4991			0.00- 0.00	30.69
159 Butyl Acetate					CAS #: 123-86-4		
8.249	8.249 (1.300)	56	8024	2.00000	3.292	0.00- 0.00	100.00
8.235	8.235 (1.298)	73	2569			0.00- 0.00	32.02
8.235	8.235 (1.298)	43	12611			0.00- 0.00	157.17
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	480007	25.0000		80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 163 Chlorobenzene-d5 (continued)							
8.787	8.787 (1.000)	82	245054			20.36- 80.36	51.05
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.873	8.873 (1.010)	131	15486	2.00000	1.909	0.00- 0.00	100.00
8.873	8.873 (1.010)	117	14706			0.00- 0.00	94.96
8.873	8.873 (1.010)	95	5355			0.00- 0.00	34.58
173 2-Heptanone					CAS #: 110-43-0		
9.388	9.388 (1.721)	58	16924	2.00000	1.788	0.00- 0.00	100.00
9.388	9.388 (1.721)	43	29150			0.00- 0.00	172.24
176 Cyclohexanone					CAS #: 108-94-1		
9.739	9.739 (1.108)	55	15700	2.00000	2.174	0.00- 0.00	100.00
9.739	9.739 (1.108)	98	5028			0.00- 0.00	32.03
9.739	9.739 (1.108)	42	10250			0.00- 0.00	65.29
180 Bromobenzene					CAS #: 108-86-1		
9.897	9.897 (1.126)	156	17104	2.00000	1.972	0.00- 0.00	100.00
9.897	9.897 (1.126)	158	16832			0.00- 0.00	98.41
9.897	9.897 (1.126)	77	23065			0.00- 0.00	134.85
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.940	9.940 (1.131)	110	7217	2.00000	2.096	0.00- 0.00	100.00
9.940	9.940 (1.131)	75	23384			0.00- 0.00	324.01
9.940	9.940 (1.131)	61	5824			0.00- 0.00	80.70
189 2-Chlorotoluene					CAS #: 95-49-8		
10.040	10.040 (1.143)	126	12281	2.00000	1.926	0.00- 0.00	100.00
10.040	10.040 (1.143)	91	35978			0.00- 0.00	292.96
10.040	10.040 (1.143)	65	4292			0.00- 0.00	34.95
191 4-Chlorotoluene					CAS #: 106-43-4		
10.133	10.133 (1.153)	126	12258	2.00000	1.949	0.00- 0.00	100.00
10.133	10.133 (1.153)	91	32791			0.00- 0.00	267.51
10.133	10.133 (1.153)	63	5350			0.00- 0.00	43.64
195 tert-Butylbenzene					CAS #: 98-06-6		
10.341	10.341 (1.177)	119	36940	2.00000	1.966	0.00- 0.00	100.00
10.341	10.341 (1.177)	134	10051			0.00- 0.00	27.21
10.341	10.341 (1.177)	91	24008			0.00- 0.00	64.99
197 Pentachloroethane					CAS #: 76-01-7		
10.405	10.405 (1.184)	167	12232	2.00000	1.829	0.00- 0.00	100.00
10.405	10.405 (1.184)	117	10896			0.00- 0.00	89.08
10.405	10.405 (1.184)	169	6461			0.00- 0.00	52.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
203 sec-Butylbenzene					CAS #: 135-98-8			
10.527	10.527 (1.198)	134	12851	2.00000	2.026	0.00-	0.00	100.00
10.527	10.527 (1.198)	105	54407			0.00-	0.00	423.37
10.527	10.527 (1.198)	91	8163			0.00-	0.00	63.52
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
10.599	10.599 (1.206)	93	23889	2.00000	1.903	0.00-	0.00	100.00
10.592	10.592 (1.205)	95	6835			0.00-	0.00	28.61
207 p-Cymene					CAS #: 99-87-6			
10.642	10.642 (1.211)	119	45831	2.00000	1.923	0.00-	0.00	100.00
10.635	10.635 (1.210)	134	13259			0.00-	0.00	28.93
10.635	10.635 (1.210)	91	11132			0.00-	0.00	24.29
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
10.756	10.756 (1.224)	120	16661	2.00000	1.890	0.00-	0.00	100.00
10.756	10.756 (1.224)	105	39682			0.00-	0.00	238.17
10.756	10.756 (1.224)	77	4582			0.00-	0.00	27.50
213 Butylbenzene					CAS #: 104-51-8			
10.986	10.986 (1.250)	134	11828	2.00000	1.858	0.00-	0.00	100.00
10.986	10.986 (1.250)	91	42767			0.00-	0.00	361.57
10.986	10.986 (1.250)	92	21132			0.00-	0.00	178.66
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8			
11.752	11.752 (1.337)	157	17095	2.00000	1.922	0.00-	0.00	100.00
11.752	11.752 (1.337)	75	13597			0.00-	0.00	79.54
11.752	11.752 (1.337)	155	13072			0.00-	0.00	76.47

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p021805.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/18feb16.b/p16q0201b.m
Misc Info: 2.0ppbv (2.0ppbv)

Calibration Date: 18-FEB-2016
Calibration Time: 10:16
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	123808	74285	173331	125731	1.55
123 1,4-Difluorobenze	495497	297298	693696	504227	1.76
163 Chlorobenzene-d5	461299	276779	645819	480007	4.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/18feb16.b/p021805.d

Date : 18-FEB-2016 11:48

Client ID:

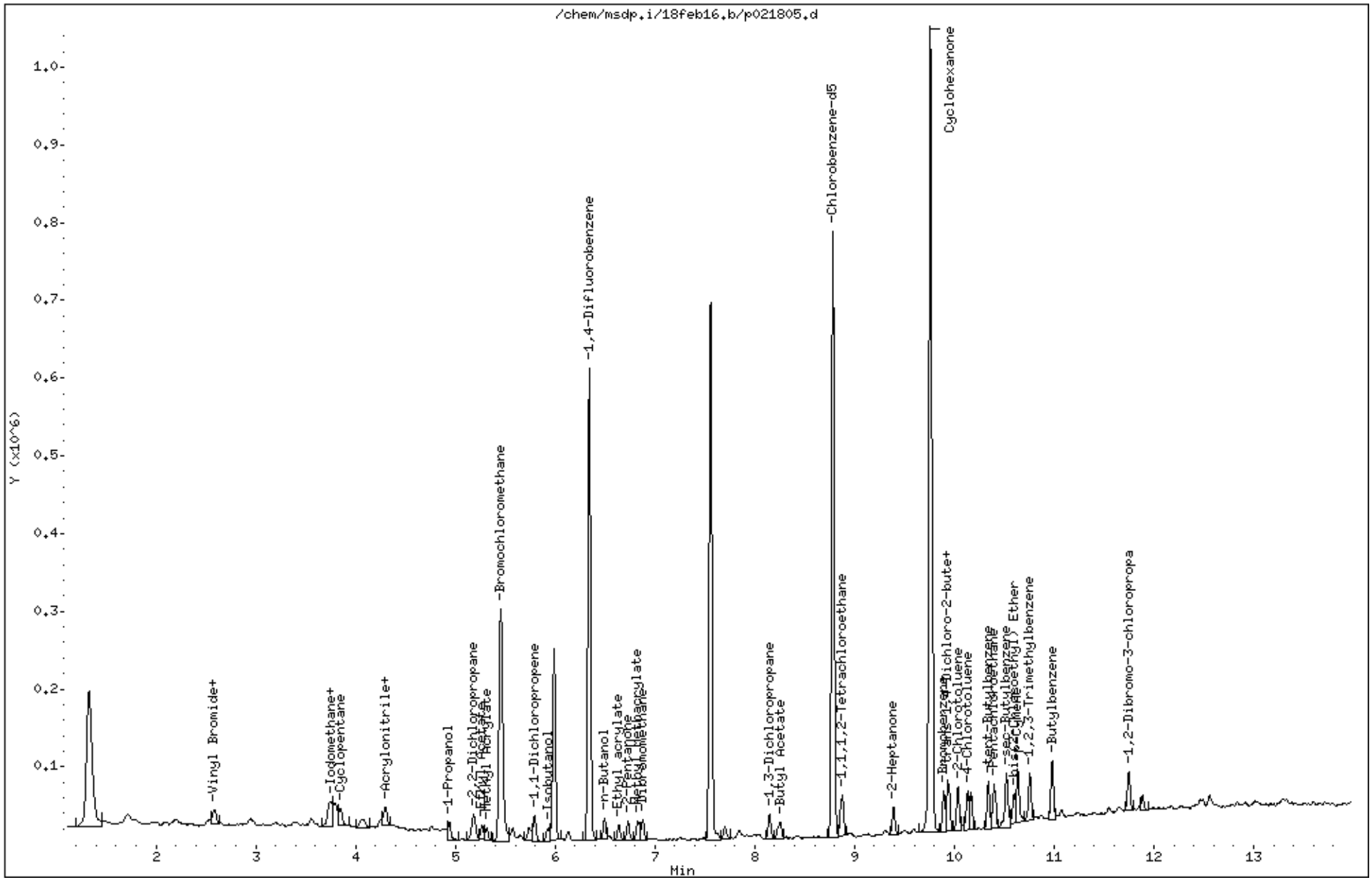
Sample Info: 200ml 2759-262

Column phase: RTX-624

Instrument: msdp.i

Operator: js

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020103.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 01-FEB-2016 15:17
Operator : kl Inst ID: msdp.i
Smp Info : 80ml #2759-187
Misc Info : 2.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 15:17 Cal File: p020103.d
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.463 (1.000)	130	163928	25.0000		80.00- 120.00	100.00
5.456	5.463 (1.000)	128	122749			49.06- 109.06	74.88
5.456	5.463 (1.000)	49	244045			124.20- 184.20	148.87
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	665289	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	98911			0.00- 44.57	14.87
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.786	8.787 (1.000)	117	643945	25.0000		80.00- 120.00	100.00
8.786	8.787 (1.000)	82	327282			20.36- 80.36	50.82
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.993 (1.097)	65	234483	25.0000	25.229	80.00- 120.00	100.00
5.986	5.993 (1.097)	67	116666			26.68- 86.68	49.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.562 (1.192)	98	664971	25.0000	25.241	80.00- 120.00	100.00
7.554	7.562 (1.191)	70	71933			0.00- 40.62	10.82
7.562	7.562 (1.192)	100	439047			36.74- 96.74	66.02
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.768 (1.111)	174	508586	25.0000	24.996	80.00- 120.00	100.00
9.761	9.768 (1.111)	95	498764			65.95- 125.95	98.07
9.761	9.768 (1.111)	176	491484			65.80- 125.80	96.64
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	16028	2.00000	2.000	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	9147			34.60- 94.60	57.07
1.479	1.479 (0.271)	39	12295			43.23- 103.23	76.71
11 Freon 12					CAS #: 75-71-8		
1.520	1.521 (0.279)	85	38847	2.00000	2.133	80.00- 120.00	100.00
1.520	1.521 (0.279)	87	12555			1.76- 61.76	32.32
15 Freon 114					CAS #: 76-14-2		
1.646	1.646 (0.302)	135	29926	2.00000	2.161	80.00- 120.00	100.00
1.646	1.646 (0.302)	137	9297			2.23- 62.23	31.07
17 Chloromethane					CAS #: 74-87-3		
1.730	1.730 (0.317)	50	7161	2.00000	2.000	80.00- 120.00	100.00(a)
1.716	1.730 (0.315)	52	2984			0.00- 59.98	41.67
23 Butane					CAS #: 106-97-8		
1.786	1.800 (0.327)	58	4858	2.00000	2.000	80.00- 120.00	100.00
1.800	1.800 (0.330)	43	39382			783.10- 843.10	810.66
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	15990	2.00000	1.987	80.00- 120.00	100.00
1.828	1.828 (0.335)	64	6127			5.16- 65.16	38.32
26 1,3-Butadiene					CAS #: 106-99-0		
1.856	1.856 (0.340)	54	15060	2.00000	2.068	80.00- 120.00	100.00
1.856	1.856 (0.340)	39	14475			81.92- 141.92	96.12
29 Bromomethane					CAS #: 74-83-9		
2.204	2.211 (0.404)	94	7550	2.00000	1.958	80.00- 120.00	100.00(a)
2.204	2.211 (0.404)	96	7671			65.10- 125.10	101.60
30 Chloroethane					CAS #: 75-00-3		
2.318	2.325 (0.425)	64	8032	2.00000	2.000	80.00- 120.00	100.00
2.318	2.325 (0.425)	66	2223			0.00- 59.99	27.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.325	2.325 (0.426)	49	2637			5.85- 65.85	32.83
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	22247	2.00000	2.000	80.00- 120.00	100.00
2.340	2.347 (0.429)	57	13561			36.22- 96.22	60.96
35 Freon 11					CAS #: 75-69-4		
2.569	2.576 (0.471)	101	40536	2.00000	2.147	80.00- 120.00	100.00
2.576	2.576 (0.472)	103	25595			34.50- 94.50	63.14
42 Ethanol					CAS #: 64-17-5		
2.884	2.891 (0.529)	45	5701	2.00000	2.000	80.00- 120.00	100.00
2.877	2.891 (0.527)	43	631			0.00- 50.77	11.07
2.891	2.891 (0.530)	46	2304			8.68- 68.68	40.41
49 Freon 113					CAS #: 76-13-1		
3.214	3.221 (0.589)	151	32803	2.00000	2.098	80.00- 120.00	100.00
3.221	3.221 (0.590)	153	19456			33.45- 93.45	59.31
3.221	3.221 (0.590)	101	33799			74.36- 134.36	103.04
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.249 (0.594)	98	9678	2.00000	2.251	80.00- 120.00	100.00
3.242	3.249 (0.594)	96	13751			133.60- 193.60	142.09
3.242	3.249 (0.594)	61	29462			302.57- 362.57	304.42
52 Acetone					CAS #: 67-64-1		
3.385	3.393 (0.621)	58	11642	2.00000	2.000	80.00- 120.00	100.00(a)
3.385	3.393 (0.621)	43	43494			323.05- 383.05	373.60
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.486 (0.638)	76	41481	2.00000	2.000	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.557	3.557 (0.652)	45	58305	2.00000	2.000	80.00- 120.00	100.00
3.550	3.557 (0.651)	43	12573			0.00- 49.72	21.56
3.557	3.557 (0.652)	59	2203			0.00- 33.36	3.78
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.729 (0.682)	76	7271	2.00000	2.000	80.00- 120.00	100.00
3.729	3.729 (0.684)	41	24984			339.09- 399.09	343.61
66 Methylene Chloride					CAS #: 75-09-2		
3.908	3.908 (0.716)	49	23124	2.00000	2.359	80.00- 120.00	100.00(a)
3.908	3.908 (0.716)	84	13272			25.63- 85.63	57.39
3.908	3.908 (0.716)	51	8047			0.46- 60.46	34.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.016	4.016 (0.736)	59	39614	2.00000	2.000	80.00- 120.00	100.00
4.016	4.016 (0.736)	41	7789			0.00- 51.45	19.66
4.066	4.016 (0.745)	57	17862			0.00- 41.07	45.09
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.131 (0.757)	73	41669	2.00000	1.979	80.00- 120.00	100.00
4.123	4.131 (0.756)	57	13655			0.00- 59.13	32.77
4.123	4.131 (0.756)	41	13571			0.00- 58.91	32.57
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.145	4.152 (0.760)	98	9660	2.00000	2.447	80.00- 120.00	100.00
4.145	4.152 (0.760)	61	25828			242.97- 302.97	267.37
4.145	4.152 (0.760)	96	16103			127.33- 187.33	166.70
78 Hexane					CAS #: 110-54-3		
4.367	4.374 (0.800)	57	30521	2.00000	2.104	80.00- 120.00	100.00
4.374	4.374 (0.802)	43	20435			34.30- 94.30	66.95
4.374	4.374 (0.802)	86	4632			0.00- 42.17	15.18
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.646 (0.850)	63	30448	2.00000	2.235	80.00- 120.00	100.00
4.639	4.646 (0.850)	65	10334			0.09- 60.09	33.94
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	63439	2.00000	2.000	80.00- 120.00	100.00
4.646	4.639 (0.852)	87	13167			0.00- 51.39	20.76
4.639	4.639 (0.850)	59	6425			0.00- 40.68	10.13
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	3980	2.00000	2.000	80.00- 120.00	100.00
4.682	4.689 (0.858)	43	51592			1535.12-1595.12	1296.28
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	57294	2.00000	2.000	80.00- 120.00	100.00
4.997	4.997 (0.916)	87	18711			4.09- 64.09	32.66
4.997	4.997 (0.916)	41	11490			0.00- 49.07	20.05
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.226 (0.957)	98	10127	2.00000	2.017	80.00- 120.00	100.00
5.219	5.226 (0.957)	96	15857			125.21- 185.21	156.58
5.219	5.226 (0.957)	61	24232			211.41- 271.41	239.28
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	7911	2.00000	2.000	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	36945			452.15- 512.15	467.01

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	2751			9.54- 69.54	34.77
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.449 (0.999)	42	22938	2.00000	2.244	80.00- 120.00	100.00
5.448	5.449 (0.999)	71	7958			2.09- 62.09	34.69
5.448	5.449 (0.999)	72	6530			3.61- 63.61	28.47
100 Chloroform					CAS #: 67-66-3		
5.513	5.520 (1.010)	83	32341	2.00000	2.194	80.00- 120.00	100.00
5.513	5.520 (1.010)	85	20905			35.60- 95.60	64.64
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	21087	2.00000	1.819	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	35624			115.43- 175.43	168.94
5.628	5.628 (1.032)	41	19575			53.65- 113.65	92.83
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.649 (1.034)	97	33934	2.00000	1.989	80.00- 120.00	100.00
5.642	5.649 (1.034)	99	22736			33.21- 93.21	67.00
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.764 (1.055)	119	34495	2.00000	2.031	80.00- 120.00	100.00
5.756	5.764 (1.055)	117	35464			76.21- 136.21	102.81
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.093)	57	92097	2.00000	1.993	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	31448			1.10- 61.10	34.15
5.964	5.964 (1.093)	41	25375			0.00- 57.08	27.55
116 Benzene					CAS #: 71-43-2		
5.971	5.979 (0.941)	78	42545	2.00000	2.077	80.00- 120.00	100.00
5.971	5.979 (0.941)	77	10030			0.00- 53.91	23.58
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	11563	2.00000	2.000	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	46948			386.56- 446.56	406.02
6.043	6.043 (0.953)	55	13628			96.75- 156.75	117.86
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	23462	2.00000	2.221	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	7473			0.29- 60.29	31.85
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	19937	2.00000	1.761	80.00- 120.00	100.00
6.136	6.136 (0.967)	43	37663			172.43- 232.43	188.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.136	6.136 (0.967)	57	22011			85.51- 145.51	110.40
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	20124	2.00000	2.058	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	23514			79.80- 139.80	116.85
6.537	6.537 (1.030)	97	14661			33.64- 93.64	72.85
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	29932	2.00000	1.910	80.00- 120.00	100.00(a)
6.645	6.645 (1.047)	98	15011			16.94- 76.94	50.15
6.645	6.645 (1.047)	55	27239			65.75- 125.75	91.00
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	20272	2.00000	2.099	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	13205			39.62- 99.62	65.14
6.774	6.774 (1.068)	41	13445			30.53- 90.53	66.32
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	10222	2.00000	2.000	80.00- 120.00	100.00
6.860	6.860 (1.081)	58	8648			52.00- 112.00	84.60
6.852	6.860 (1.080)	57	2801			0.00- 56.29	27.40
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	32907	2.00000	2.003	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	23706			34.30- 94.30	72.04
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.375 (1.163)	75	27699	2.00000	2.136	80.00- 120.00	100.00
7.375	7.375 (1.163)	77	9562			2.71- 62.71	34.52
7.368	7.375 (1.161)	39	18016			35.07- 95.07	65.04
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	16761	2.00000	1.997	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	40333			230.95- 290.95	240.64
7.483	7.483 (1.180)	85	6157			7.98- 67.98	36.73
147 Toluene					CAS #: 108-88-3		
7.612	7.619 (1.200)	91	58595	2.00000	2.041	80.00- 120.00	100.00
7.612	7.619 (1.200)	92	33587			27.38- 87.38	57.32
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	25717	2.00000	2.038	80.00- 120.00	100.00
7.848	7.848 (0.893)	77	12453			2.10- 62.10	48.42
7.848	7.848 (0.893)	39	18467			30.98- 90.98	71.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	21748	2.00000	2.138	80.00- 120.00	100.00
7.998	8.006 (0.910)	99	12815			31.34- 91.34	58.92
8.006	8.006 (0.911)	83	17662			57.20- 117.20	81.21
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	36675	2.00000	2.093	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	21857			35.33- 95.33	59.60
8.049	8.049 (0.916)	131	21399			35.36- 95.36	58.35
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.930)	58	19015	2.00000	1.865	80.00- 120.00	100.00(a)
8.170	8.170 (0.930)	43	35678			156.39- 216.39	187.63
8.178	8.170 (0.931)	100	3078			0.00- 48.05	16.19
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	42491	2.00000	2.126	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	31811			48.12- 108.12	74.87
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	33320	2.00000	2.077	80.00- 120.00	100.00
8.428	8.428 (0.959)	109	33091			63.87- 123.87	99.31
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	48441	2.00000	2.044	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	16223			2.38- 62.38	33.49
8.808	8.808 (1.002)	77	33840			24.59- 84.59	69.86
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.865 (1.008)	106	25437	2.00000	1.931	80.00- 120.00	100.00
8.858	8.865 (1.008)	91	78468			276.53- 336.53	308.48
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	30787	2.00000	1.983	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	61718			166.59- 226.59	200.47
171 o-Xylene					CAS #: 95-47-6		
9.302	9.302 (1.059)	106	31094	2.00000	2.009	80.00- 120.00	100.00
9.295	9.302 (1.058)	91	61426			176.08- 236.08	197.55
172 Styrene					CAS #: 100-42-5		
9.316	9.317 (1.060)	104	38393	2.00000	1.981	80.00- 120.00	100.00
9.316	9.317 (1.060)	78	20084			17.58- 77.58	52.31
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	48921	2.00000	2.032	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.082)	171	24650			21.36- 81.36	50.39
175 Cumene					CAS #: 98-82-8		
9.582	9.589 (1.090)	105	94862	2.00000	1.939	80.00- 120.00	100.00
9.582	9.589 (1.090)	120	25939			0.00- 57.79	27.34
9.582	9.589 (1.090)	51	11285			0.00- 41.33	11.90
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.882	9.897 (1.125)	83	50236	2.00000	1.984	80.00- 120.00	100.00
9.882	9.897 (1.125)	85	31797			34.22- 94.22	63.30
182 Propylbenzene					CAS #: 103-65-1		
9.925	9.940 (1.130)	91	110656	2.00000	1.953	80.00- 120.00	100.00
9.925	9.940 (1.130)	120	27075			0.00- 54.34	24.47
9.925	9.940 (1.130)	105	3377			0.00- 33.54	3.05
188 4-Ethyltoluene					CAS #: 622-96-8		
10.018	10.033 (1.140)	120	32082	2.00000	2.128	80.00- 120.00	100.00
10.018	10.033 (1.140)	105	94299			279.66- 339.66	293.93
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.083 (1.146)	120	36328	2.00000	1.951	80.00- 120.00	100.00
10.069	10.083 (1.146)	105	74715			169.72- 229.72	205.67
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.391	10.405 (1.183)	120	34284	2.00000	1.982	80.00- 120.00	100.00
10.391	10.405 (1.183)	105	72298			185.64- 245.64	210.88
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.692 (1.214)	146	64053	2.00000	2.086	80.00- 120.00	100.00
10.670	10.692 (1.214)	148	38748			34.23- 94.23	60.49
10.670	10.692 (1.214)	111	23418			7.40- 67.40	36.56
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.771 (1.223)	146	61039	2.00000	1.936	80.00- 120.00	100.00
10.749	10.771 (1.223)	148	40752			33.60- 93.60	66.76
10.749	10.771 (1.223)	111	23622			4.87- 64.87	38.70
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.885 (1.236)	91	75034	2.00000	2.018	80.00- 120.00	100.00
10.864	10.885 (1.236)	126	16970			0.00- 53.22	22.62
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.079	11.100 (1.261)	146	60829	2.00000	2.161	80.00- 120.00	100.00
11.079	11.100 (1.261)	148	38364			33.66- 93.66	63.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.079	11.100 (1.261)	111	23614			7.92- 67.92	38.82
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.504 (1.419)	180	46073	2.00000	2.000	80.00- 120.00	100.00
12.468	12.504 (1.419)	182	43776			66.61- 126.61	95.01
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.569	12.597 (1.430)	225	44016	2.00000	2.000	80.00- 120.00	100.00
12.561	12.597 (1.430)	223	29060			32.66- 92.66	66.02
228 Naphthalene					CAS #: 91-20-3		
12.733	12.769 (1.449)	128	7414	0.20000	0.2000	80.00- 120.00	100.00(a)
12.733	12.769 (1.449)	127	1049			0.00- 42.82	14.15

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020103.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 2.0ppbv(5.0ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	163928	0.26
123 1,4-Difluorobenze	658886	395332	922440	665289	0.97
163 Chlorobenzene-d5	634233	380540	887926	643945	1.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020103.d

Date : 01-FEB-2016 15:17

Client ID: Level 3

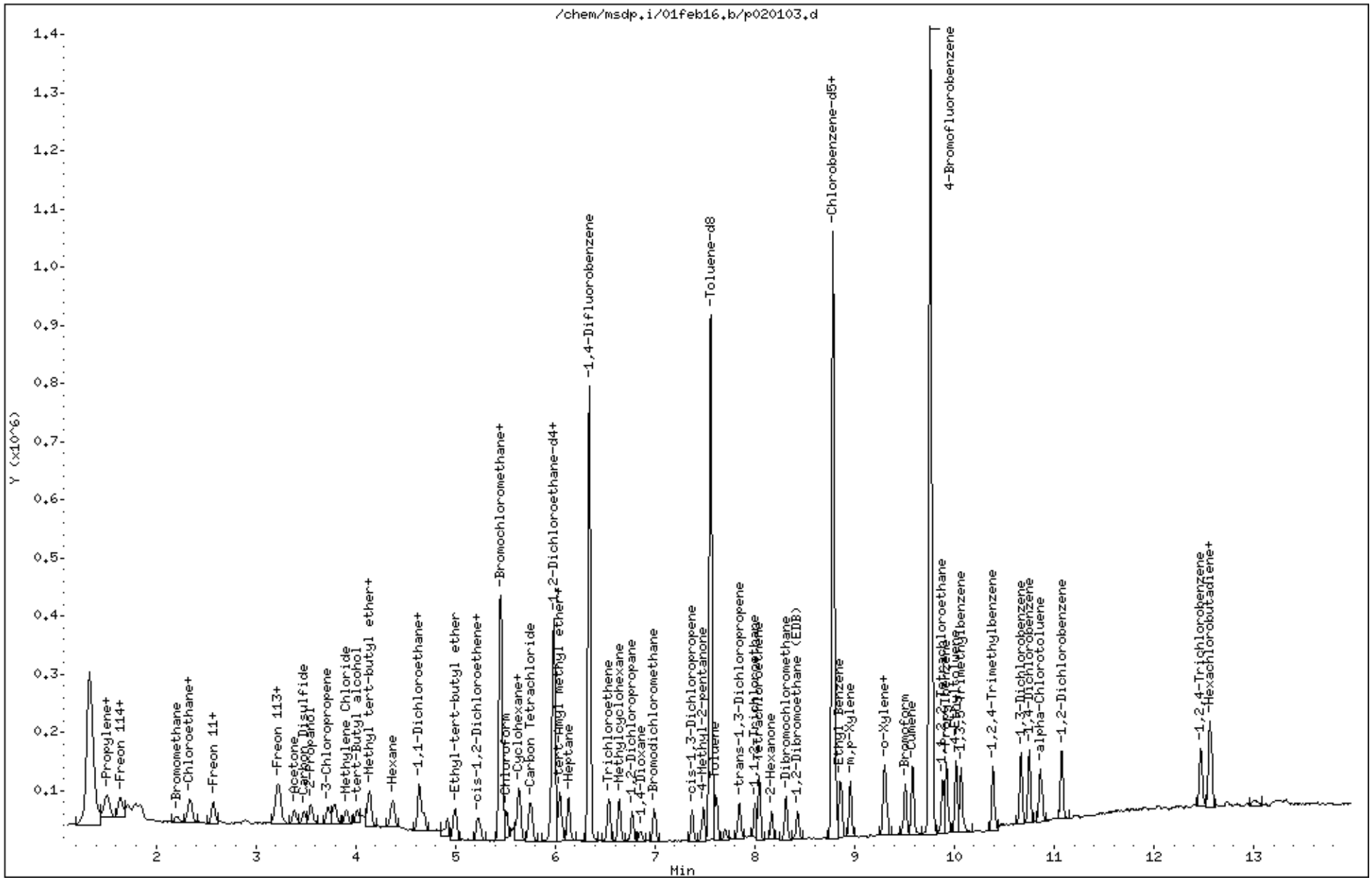
Sample Info: 80ml #2759-187

Instrument: msdp.i

Operator: kl

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020104.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 01-FEB-2016 15:43
Operator : kl Inst ID: msdp.i
Smp Info : 200ml #2759-187
Misc Info : 5.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 15:43 Cal File: p020104.d
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.463 (1.000)	130	157332	25.0000		80.00- 120.00	100.00
5.456	5.463 (1.000)	128	125040			49.06- 109.06	79.48
5.456	5.463 (1.000)	49	243160			124.20- 184.20	154.55
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	658578	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	94655			0.00- 44.57	14.37
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.786	8.787 (1.000)	117	653286	25.0000		80.00- 120.00	100.00
8.786	8.787 (1.000)	82	330309			20.36- 80.36	50.56
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.993	5.993 (1.098)	65	231186	25.0000	25.604	80.00- 120.00	100.00
5.993	5.993 (1.098)	67	115210			26.68- 86.68	49.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.562 (1.192)	98	657774	25.0000	25.148	80.00- 120.00	100.00
7.562	7.562 (1.192)	70	71258			0.00- 40.62	10.83
7.562	7.562 (1.192)	100	430611			36.74- 96.74	65.46
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.768 (1.111)	174	520486	25.0000	25.143	80.00- 120.00	100.00
9.761	9.768 (1.111)	95	512352			65.95- 125.95	98.44
9.761	9.768 (1.111)	176	500458			65.80- 125.80	96.15
9 Propylene					CAS #: 115-07-1		
1.478	1.479 (0.271)	41	36729	5.00000	4.885	80.00- 120.00	100.00
1.478	1.479 (0.271)	42	24520			34.60- 94.60	66.76
1.478	1.479 (0.271)	39	25927			43.23- 103.23	70.59
11 Freon 12					CAS #: 75-71-8		
1.520	1.521 (0.279)	85	100997	5.00000	5.493	80.00- 120.00	100.00
1.520	1.521 (0.279)	87	30672			1.76- 61.76	30.37
15 Freon 114					CAS #: 76-14-2		
1.632	1.646 (0.299)	135	78775	5.00000	5.582	80.00- 120.00	100.00
1.632	1.646 (0.299)	137	25324			2.23- 62.23	32.15
17 Chloromethane					CAS #: 74-87-3		
1.716	1.730 (0.315)	50	21438	5.00000	5.551	80.00- 120.00	100.00
1.716	1.730 (0.315)	52	8225			0.00- 59.98	38.37
23 Butane					CAS #: 106-97-8		
1.800	1.800 (0.330)	58	9902	5.00000	4.593	80.00- 120.00	100.00
1.800	1.800 (0.330)	43	76021			783.10- 843.10	767.73
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	42598	5.00000	5.332	80.00- 120.00	100.00
1.828	1.828 (0.335)	64	15065			5.16- 65.16	35.37
26 1,3-Butadiene					CAS #: 106-99-0		
1.856	1.856 (0.340)	54	32711	5.00000	4.783	80.00- 120.00	100.00
1.856	1.856 (0.340)	39	43749			81.92- 141.92	133.74
29 Bromomethane					CAS #: 74-83-9		
2.211	2.211 (0.405)	94	21536	5.00000	5.518	80.00- 120.00	100.00
2.211	2.211 (0.405)	96	20922			65.10- 125.10	97.15
30 Chloroethane					CAS #: 75-00-3		
2.325	2.325 (0.426)	64	20367	5.00000	5.138	80.00- 120.00	100.00
2.318	2.325 (0.425)	66	5531			0.00- 59.99	27.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.325	2.325 (0.426)	49	7426			5.85- 65.85	36.46
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	53867	5.00000	5.023	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	35301			36.22- 96.22	65.53
35 Freon 11					CAS #: 75-69-4		
2.576	2.576 (0.472)	101	103782	5.00000	5.462	80.00- 120.00	100.00
2.576	2.576 (0.472)	103	65669			34.50- 94.50	63.28
42 Ethanol					CAS #: 64-17-5		
2.891	2.891 (0.530)	45	14054	5.00000	5.068	80.00- 120.00	100.00
2.891	2.891 (0.530)	43	3557			0.00- 50.77	25.31
2.898	2.891 (0.531)	46	6776			8.68- 68.68	48.21
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	79840	5.00000	5.209	80.00- 120.00	100.00
3.221	3.221 (0.590)	153	49090			33.45- 93.45	61.49
3.221	3.221 (0.590)	101	84630			74.36- 134.36	106.00
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.249	3.249 (0.596)	98	22787	5.00000	5.337	80.00- 120.00	100.00
3.249	3.249 (0.596)	96	35609			133.60- 193.60	156.27
3.249	3.249 (0.596)	61	75960			302.57- 362.57	333.35
52 Acetone					CAS #: 67-64-1		
3.393	3.393 (0.622)	58	25561	5.00000	4.778	80.00- 120.00	100.00(a)
3.393	3.393 (0.622)	43	86348			323.05- 383.05	337.81
56 Carbon Disulfide					CAS #: 75-15-0		
3.486	3.486 (0.639)	76	99930	5.00000	5.010	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.557	3.557 (0.652)	45	95173	5.00000	4.049	80.00- 120.00	100.00
3.557	3.557 (0.652)	43	20035			0.00- 49.72	21.05
3.557	3.557 (0.652)	59	3714			0.00- 33.36	3.90
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.729 (0.682)	76	16956	5.00000	4.929	80.00- 120.00	100.00
3.722	3.729 (0.682)	41	62706			339.09- 399.09	369.82
66 Methylene Chloride					CAS #: 75-09-2		
3.908	3.908 (0.716)	49	56353	5.00000	5.619	80.00- 120.00	100.00
3.908	3.908 (0.716)	84	31928			25.63- 85.63	56.66
3.908	3.908 (0.716)	51	18064			0.46- 60.46	32.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.016	4.016 (0.736)	59	99780	5.00000	5.121	80.00- 120.00	100.00
4.016	4.016 (0.736)	41	24246			0.00- 51.45	24.30
4.016	4.016 (0.736)	57	10205			0.00- 41.07	10.23
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.131 (0.757)	73	102126	5.00000	5.036	80.00- 120.00	100.00
4.123	4.131 (0.756)	57	34297			0.00- 59.13	33.58
4.123	4.131 (0.756)	41	31436			0.00- 58.91	30.78
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	23353	5.00000	5.720	80.00- 120.00	100.00
4.152	4.152 (0.761)	61	65782			242.97- 302.97	281.69
4.152	4.152 (0.761)	96	36314			127.33- 187.33	155.50
78 Hexane					CAS #: 110-54-3		
4.374	4.374 (0.802)	57	73348	5.00000	5.177	80.00- 120.00	100.00
4.374	4.374 (0.802)	43	49070			34.30- 94.30	66.90
4.374	4.374 (0.802)	86	8932			0.00- 42.17	12.18
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.646	4.646 (0.852)	63	77819	5.00000	5.597	80.00- 120.00	100.00
4.646	4.646 (0.852)	65	22312			0.09- 60.09	28.67
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	154218	5.00000	5.033	80.00- 120.00	100.00
4.646	4.639 (0.852)	87	33045			0.00- 51.39	21.43
4.639	4.639 (0.850)	59	16021			0.00- 40.68	10.39
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	9061	5.00000	4.869	80.00- 120.00	100.00
4.689	4.689 (0.860)	43	135405			1535.12-1595.12	1494.37
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	143251	5.00000	5.103	80.00- 120.00	100.00
4.997	4.997 (0.916)	87	47478			4.09- 64.09	33.14
4.997	4.997 (0.916)	41	29502			0.00- 49.07	20.59
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.958)	98	25591	5.00000	5.203	80.00- 120.00	100.00
5.226	5.226 (0.958)	96	37678			125.21- 185.21	147.23
5.219	5.226 (0.957)	61	61127			211.41- 271.41	238.86
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	19599	5.00000	5.080	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	94703			452.15- 512.15	483.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	7879			9.54- 69.54	40.20
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.449 (0.999)	42	47965	5.00000	4.925	80.00- 120.00	100.00
5.448	5.449 (0.999)	71	16887			2.09- 62.09	35.21
5.448	5.449 (0.999)	72	16132			3.61- 63.61	33.63
100 Chloroform					CAS #: 67-66-3		
5.513	5.520 (1.010)	83	81308	5.00000	5.475	80.00- 120.00	100.00
5.520	5.520 (1.012)	85	50694			35.60- 95.60	62.35
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	50542	5.00000	4.685	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	81180			115.43- 175.43	160.62
5.628	5.628 (1.032)	41	50396			53.65- 113.65	99.71
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.649 (1.034)	97	87118	5.00000	5.209	80.00- 120.00	100.00
5.642	5.649 (1.034)	99	55506			33.21- 93.21	63.71
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.764 (1.055)	119	89079	5.00000	5.301	80.00- 120.00	100.00
5.756	5.764 (1.055)	117	90627			76.21- 136.21	101.74
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.093)	57	232642	5.00000	5.162	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	72965			1.10- 61.10	31.36
5.964	5.964 (1.093)	41	63022			0.00- 57.08	27.09
116 Benzene					CAS #: 71-43-2		
5.971	5.979 (0.941)	78	109988	5.00000	5.275	80.00- 120.00	100.00
5.979	5.979 (0.942)	77	24586			0.00- 53.91	22.35
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.050	6.043 (0.954)	87	28197	5.00000	4.963	80.00- 120.00	100.00
6.050	6.043 (0.954)	73	116078			386.56- 446.56	411.67
6.043	6.043 (0.953)	55	35565			96.75- 156.75	126.13
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	62185	5.00000	5.594	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	18794			0.29- 60.29	30.22
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	41971	5.00000	4.087	80.00- 120.00	100.00
6.136	6.136 (0.967)	43	82728			172.43- 232.43	197.11

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.136	6.136 (0.967)	57	48116			85.51- 145.51	114.64
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	53274	5.00000	5.325	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	61018			79.80- 139.80	114.54
6.537	6.537 (1.030)	97	34957			33.64- 93.64	65.62
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	72417	5.00000	4.774	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	32435			16.94- 76.94	44.79
6.645	6.645 (1.047)	55	70804			65.75- 125.75	97.77
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	49813	5.00000	5.138	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	34169			39.62- 99.62	68.59
6.774	6.774 (1.068)	41	32156			30.53- 90.53	64.55
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	24432	5.00000	4.913	80.00- 120.00	100.00
6.860	6.860 (1.081)	58	21271			52.00- 112.00	87.06
6.860	6.860 (1.081)	57	7939			0.00- 56.29	32.49
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	85965	5.00000	5.186	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	56295			34.30- 94.30	65.49
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.375 (1.163)	75	73920	5.00000	5.482	80.00- 120.00	100.00
7.375	7.375 (1.163)	77	26177			2.71- 62.71	35.41
7.375	7.375 (1.163)	39	45037			35.07- 95.07	60.93
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	40120	5.00000	4.884	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	101261			230.95- 290.95	252.40
7.490	7.483 (1.181)	85	16145			7.98- 67.98	40.24
147 Toluene					CAS #: 108-88-3		
7.612	7.619 (1.200)	91	154008	5.00000	5.272	80.00- 120.00	100.00
7.619	7.619 (1.201)	92	86817			27.38- 87.38	56.37
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	66137	5.00000	5.109	80.00- 120.00	100.00
7.848	7.848 (0.893)	77	24950			2.10- 62.10	37.72
7.848	7.848 (0.893)	39	42703			30.98- 90.98	64.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	52603	5.00000	5.065	80.00- 120.00	100.00
8.006	8.006 (0.911)	99	33690			31.34- 91.34	64.05
8.006	8.006 (0.911)	83	47434			57.20- 117.20	90.17
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	90861	5.00000	5.073	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	59625			35.33- 95.33	65.62
8.049	8.049 (0.916)	131	59956			35.36- 95.36	65.99
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.930)	58	51535	5.00000	4.988	80.00- 120.00	100.00
8.170	8.170 (0.930)	43	93609			156.39- 216.39	181.64
8.170	8.170 (0.930)	100	8514			0.00- 48.05	16.52
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	105261	5.00000	5.126	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	81437			48.12- 108.12	77.37
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	84704	5.00000	5.135	80.00- 120.00	100.00
8.428	8.428 (0.959)	109	79359			63.87- 123.87	93.69
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	130673	5.00000	5.282	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	42687			2.38- 62.38	32.67
8.808	8.808 (1.002)	77	74270			24.59- 84.59	56.84
167 Ethyl Benzene					CAS #: 100-41-4		
8.865	8.865 (1.009)	106	65252	5.00000	4.921	80.00- 120.00	100.00
8.865	8.865 (1.009)	91	193747			276.53- 336.53	296.92
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	79674	5.00000	5.038	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	156319			166.59- 226.59	196.20
171 o-Xylene					CAS #: 95-47-6		
9.302	9.302 (1.059)	106	71503	5.00000	4.693	80.00- 120.00	100.00
9.295	9.302 (1.058)	91	153837			176.08- 236.08	215.15
172 Styrene					CAS #: 100-42-5		
9.316	9.317 (1.060)	104	96246	5.00000	4.930	80.00- 120.00	100.00
9.316	9.317 (1.060)	78	50125			17.58- 77.58	52.08
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	123773	5.00000	5.044	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.082)	171	64530			21.36- 81.36	52.14
175 Cumene					CAS #: 98-82-8		
9.582	9.589 (1.090)	105	232092	5.00000	4.780	80.00- 120.00	100.00
9.582	9.589 (1.090)	120	65225			0.00- 57.79	28.10
9.582	9.589 (1.090)	51	26082			0.00- 41.33	11.24
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.882	9.897 (1.125)	83	119880	5.00000	4.773	80.00- 120.00	100.00
9.882	9.897 (1.125)	85	75604			34.22- 94.22	63.07
182 Propylbenzene					CAS #: 103-65-1		
9.925	9.940 (1.130)	91	277468	5.00000	4.884	80.00- 120.00	100.00
9.925	9.940 (1.130)	120	69993			0.00- 54.34	25.23
9.925	9.940 (1.130)	105	10715			0.00- 33.54	3.86
188 4-Ethyltoluene					CAS #: 622-96-8		
10.018	10.033 (1.140)	120	75935	5.00000	4.976	80.00- 120.00	100.00
10.018	10.033 (1.140)	105	235923			279.66- 339.66	310.69
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.083 (1.146)	120	92074	5.00000	4.916	80.00- 120.00	100.00
10.069	10.083 (1.146)	105	187306			169.72- 229.72	203.43
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.391	10.405 (1.183)	120	85038	5.00000	4.896	80.00- 120.00	100.00
10.391	10.405 (1.183)	105	186359			185.64- 245.64	219.15
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.692 (1.214)	146	152353	5.00000	4.927	80.00- 120.00	100.00
10.670	10.692 (1.214)	148	101473			34.23- 94.23	66.60
10.670	10.692 (1.214)	111	59917			7.40- 67.40	39.33
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.771 (1.223)	146	156904	5.00000	4.937	80.00- 120.00	100.00
10.749	10.771 (1.223)	148	101013			33.60- 93.60	64.38
10.749	10.771 (1.223)	111	59593			4.87- 64.87	37.98
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.885 (1.236)	91	189685	5.00000	5.019	80.00- 120.00	100.00
10.864	10.885 (1.236)	126	43912			0.00- 53.22	23.15
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.079	11.100 (1.261)	146	152850	5.00000	5.230	80.00- 120.00	100.00
11.079	11.100 (1.261)	148	97480			33.66- 93.66	63.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.079	11.100 (1.261)	111	58377			7.92- 67.92	38.19
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.504 (1.419)	180	148352	5.00000	5.594	80.00- 120.00	100.00
12.468	12.504 (1.419)	182	142032			66.61- 126.61	95.74
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.569	12.597 (1.430)	225	128367	5.00000	5.348	80.00- 120.00	100.00
12.569	12.597 (1.430)	223	79650			32.66- 92.66	62.05
228 Naphthalene					CAS #: 91-20-3		
12.733	12.769 (1.449)	128	20389	0.50000	0.5202	80.00- 120.00	100.00(a)
12.733	12.769 (1.449)	127	5276			0.00- 42.82	25.88

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 02-Feb-2016 16:53

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020104.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 5.0ppbv(5.0ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	157332	-3.77
123 1,4-Difluorobenze	658886	395332	922440	658578	-0.05
163 Chlorobenzene-d5	634233	380540	887926	653286	3.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020104.d

Date : 01-FEB-2016 15:43

Client ID: Level 4

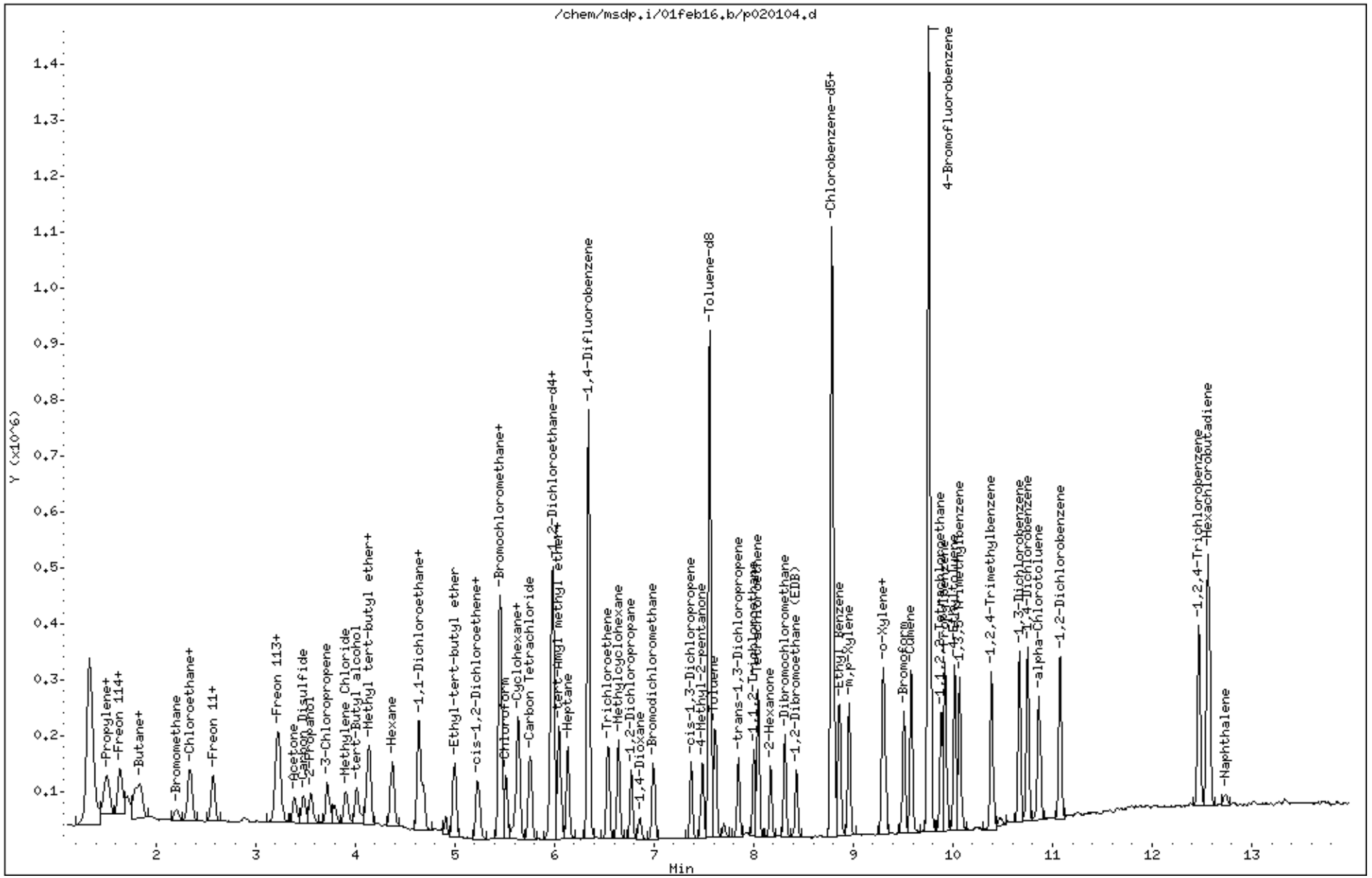
Sample Info: 200ml #2759-187

Column phase: RTX-624

Instrument: msdp.i

Operator: kl

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020105.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 01-FEB-2016 16:07
Operator : kl Inst ID: msdp.i
Smp Info : 20ml #2759-209
Misc Info : 20ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 16:07 Cal File: p020105.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

					AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE					
* 98 Bromochloromethane						CAS #: 74-97-5		
5.456	5.456 (1.000)	130	164445	25.0000			80.00- 120.00	100.00
5.448	5.448 (1.000)	128	127440				49.06- 109.06	77.50
5.448	5.448 (1.000)	49	242217				124.20- 184.20	147.29
* 123 1,4-Difluorobenzene						CAS #: 540-36-3		
6.344	6.344 (1.000)	114	650873	25.0000			80.00- 120.00	100.00
6.344	6.344 (1.000)	88	94072				0.00- 44.57	14.45
* 163 Chlorobenzene-d5						CAS #: 3114-55-4		
8.786	8.786 (1.000)	117	617150	25.0000			80.00- 120.00	100.00
8.786	8.786 (1.000)	82	315180				20.36- 80.36	51.07
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
5.986	5.986 (1.097)	65	233924	25.0000	24.840		80.00- 120.00	100.00
5.986	5.986 (1.097)	67	119253				26.68- 86.68	50.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.562 (1.192)	98	648491	25.0000	25.065	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	69174			0.00- 40.62	10.67
7.562	7.562 (1.192)	100	422321			36.74- 96.74	65.12
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.111)	174	497353	25.0000	25.323	80.00- 120.00	100.00
9.761	9.761 (1.111)	95	488515			65.95- 125.95	98.22
9.761	9.761 (1.111)	176	474200			65.80- 125.80	95.34
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	117684	20.0000	16.344	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	75723			34.60- 94.60	64.34
1.479	1.479 (0.271)	39	85578			43.23- 103.23	72.72
11 Freon 12					CAS #: 75-71-8		
1.506	1.506 (0.276)	85	306662	20.0000	16.807	80.00- 120.00	100.00
1.506	1.506 (0.276)	87	100695			1.76- 61.76	32.84
15 Freon 114					CAS #: 76-14-2		
1.632	1.632 (0.299)	135	246232	20.0000	17.412	80.00- 120.00	100.00
1.632	1.632 (0.299)	137	79149			2.23- 62.23	32.14
17 Chloromethane					CAS #: 74-87-3		
1.716	1.716 (0.315)	50	145631	20.0000	28.453	80.00- 120.00	100.00
1.716	1.716 (0.315)	52	45722			0.00- 59.98	31.40
23 Butane					CAS #: 106-97-8		
1.786	1.786 (0.327)	58	28927	20.0000	14.578	80.00- 120.00	100.00
1.786	1.786 (0.327)	43	231361			783.10- 843.10	799.81
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	129498	20.0000	16.431	80.00- 120.00	100.00
1.828	1.828 (0.335)	64	39500			5.16- 65.16	30.50
26 1,3-Butadiene					CAS #: 106-99-0		
1.842	1.842 (0.338)	54	117575	20.0000	17.212	80.00- 120.00	100.00
1.842	1.842 (0.338)	39	156734			81.92- 141.92	133.31
29 Bromomethane					CAS #: 74-83-9		
2.204	2.204 (0.404)	94	90116	20.0000	21.529	80.00- 120.00	100.00
2.204	2.204 (0.404)	96	85438			65.10- 125.10	94.81
30 Chloroethane					CAS #: 75-00-3		
2.318	2.318 (0.425)	64	56950	20.0000	15.345	80.00- 120.00	100.00
2.318	2.318 (0.425)	66	16603			0.00- 59.99	29.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.318	2.318 (0.425)	49	20197			5.85- 65.85	35.46
31 Isopentane					CAS #: 78-78-4		
2.340	2.340 (0.429)	43	190552	20.0000	17.894	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	128416			36.22- 96.22	67.39
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	339403	20.0000	17.736	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	212675			34.50- 94.50	62.66
42 Ethanol					CAS #: 64-17-5		
2.877	2.877 (0.527)	45	59171	20.0000	20.273	80.00- 120.00	100.00
2.877	2.877 (0.527)	43	11725			0.00- 50.77	19.82
2.877	2.877 (0.527)	46	22113			8.68- 68.68	37.37
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	296096	20.0000	18.840	80.00- 120.00	100.00
3.214	3.214 (0.589)	153	185770			33.45- 93.45	62.74
3.214	3.214 (0.589)	101	302515			74.36- 134.36	102.17
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	71195	20.0000	16.803	80.00- 120.00	100.00
3.242	3.242 (0.594)	96	109819			133.60- 193.60	154.25
3.242	3.242 (0.594)	61	228989			302.57- 362.57	321.64
52 Acetone					CAS #: 67-64-1		
3.386	3.386 (0.621)	58	65937	20.0000	13.661	80.00- 120.00	100.00
3.386	3.386 (0.621)	43	221696			323.05- 383.05	336.22
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.479 (0.638)	76	312835	20.0000	16.368	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.550 (0.651)	45	274309	20.0000	13.092	80.00- 120.00	100.00
3.550	3.550 (0.651)	43	54062			0.00- 49.72	19.71
3.550	3.550 (0.651)	59	10624			0.00- 33.36	3.87
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.682)	76	47138	20.0000	14.810	80.00- 120.00	100.00
3.722	3.722 (0.682)	41	191772			339.09- 399.09	406.83
66 Methylene Chloride					CAS #: 75-09-2		
3.908	3.908 (0.716)	49	168136	20.0000	16.875	80.00- 120.00	100.00
3.908	3.908 (0.716)	84	94651			25.63- 85.63	56.29
3.908	3.908 (0.716)	51	49227			0.46- 60.46	29.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.016	4.016 (0.736)	59	337929	20.0000	17.593	80.00- 120.00	100.00
4.016	4.016 (0.736)	41	73721			0.00- 51.45	21.82
4.016	4.016 (0.736)	57	38792			0.00- 41.07	11.48
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.123 (0.756)	73	396828	20.0000	19.025	80.00- 120.00	100.00
4.123	4.123 (0.756)	57	119550			0.00- 59.13	30.13
4.123	4.123 (0.756)	41	112742			0.00- 58.91	28.41
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.145	4.145 (0.760)	98	68444	20.0000	16.875	80.00- 120.00	100.00
4.145	4.145 (0.760)	61	193661			242.97- 302.97	282.95
4.145	4.145 (0.760)	96	110819			127.33- 187.33	161.91
78 Hexane					CAS #: 110-54-3		
4.374	4.374 (0.802)	57	232830	20.0000	16.610	80.00- 120.00	100.00
4.374	4.374 (0.802)	43	148253			34.30- 94.30	63.67
4.374	4.374 (0.802)	86	28476			0.00- 42.17	12.23
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	233095	20.0000	16.876	80.00- 120.00	100.00
4.639	4.639 (0.850)	65	67982			0.09- 60.09	29.16
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	575983	20.0000	18.609	80.00- 120.00	100.00
4.639	4.639 (0.850)	87	122972			0.00- 51.39	21.35
4.639	4.639 (0.850)	59	62146			0.00- 40.68	10.79
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	30569	20.0000	16.924	80.00- 120.00	100.00
4.682	4.682 (0.858)	43	428292			1535.12-1595.12	1401.07
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	537739	20.0000	18.853	80.00- 120.00	100.00
4.997	4.997 (0.916)	87	183818			4.09- 64.09	34.18
4.997	4.997 (0.916)	41	105856			0.00- 49.07	19.69
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.957)	98	73058	20.0000	15.320	80.00- 120.00	100.00
5.219	5.219 (0.957)	96	114499			125.21- 185.21	156.72
5.219	5.219 (0.957)	61	184114			211.41- 271.41	252.01
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	57178	20.0000	15.703	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	276506			452.15- 512.15	483.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	22866			9.54- 69.54	39.99
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (0.999)	42	150303	20.0000	15.799	80.00- 120.00	100.00
5.448	5.448 (0.999)	71	49937			2.09- 62.09	33.22
5.448	5.448 (0.999)	72	53360			3.61- 63.61	35.50
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.010)	83	235036	20.0000	16.121	80.00- 120.00	100.00
5.513	5.513 (1.010)	85	152874			35.60- 95.60	65.04
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	188418	20.0000	17.426	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	281054			115.43- 175.43	149.17
5.628	5.628 (1.032)	41	161673			53.65- 113.65	85.81
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.034)	97	314013	20.0000	18.432	80.00- 120.00	100.00
5.642	5.642 (1.034)	99	202735			33.21- 93.21	64.56
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.756 (1.055)	119	335322	20.0000	19.312	80.00- 120.00	100.00
5.756	5.756 (1.055)	117	346618			76.21- 136.21	103.37
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.093)	57	837611	20.0000	18.288	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	264733			1.10- 61.10	31.61
5.964	5.964 (1.093)	41	227774			0.00- 57.08	27.19
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	344784	20.0000	17.443	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	79356			0.00- 53.91	23.02
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	102293	20.0000	18.776	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	413308			386.56- 446.56	404.04
6.043	6.043 (0.953)	55	127035			96.75- 156.75	124.19
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	184505	20.0000	17.495	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	55879			0.29- 60.29	30.29
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	142839	20.0000	15.200	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	293701			172.43- 232.43	205.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	165946			85.51- 145.51	116.18
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	161053	20.0000	17.080	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	183713			79.80- 139.80	114.07
6.537	6.537 (1.030)	97	105862			33.64- 93.64	65.73
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	264343	20.0000	18.172	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	122326			16.94- 76.94	46.28
6.645	6.645 (1.047)	55	250187			65.75- 125.75	94.64
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	165522	20.0000	17.884	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	113112			39.62- 99.62	68.34
6.774	6.774 (1.068)	41	100260			30.53- 90.53	60.57
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	89860	20.0000	18.822	80.00- 120.00	100.00
6.860	6.860 (1.081)	58	77406			52.00- 112.00	86.14
6.860	6.860 (1.081)	57	26616			0.00- 56.29	29.62
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	270391	20.0000	17.260	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	175047			34.30- 94.30	64.74
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.375 (1.163)	75	232317	20.0000	18.010	80.00- 120.00	100.00
7.375	7.375 (1.163)	77	70699			2.71- 62.71	30.43
7.375	7.375 (1.163)	39	144677			35.07- 95.07	62.28
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	157790	20.0000	19.575	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	410604			230.95- 290.95	260.22
7.483	7.483 (1.180)	85	60810			7.98- 67.98	38.54
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	507320	20.0000	18.122	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	290088			27.38- 87.38	57.18
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	211366	20.0000	17.891	80.00- 120.00	100.00
7.848	7.848 (0.893)	77	67530			2.10- 62.10	31.95
7.848	7.848 (0.893)	39	131415			30.98- 90.98	62.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	169873	20.0000	17.917	80.00- 120.00	100.00
8.006	8.006 (0.911)	99	102992			31.34- 91.34	60.63
7.999	7.999 (0.910)	83	146489			57.20- 117.20	86.23
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	305952	20.0000	18.527	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	196123			35.33- 95.33	64.10
8.049	8.049 (0.916)	131	195047			35.36- 95.36	63.75
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.930)	58	210173	20.0000	21.130	80.00- 120.00	100.00
8.170	8.170 (0.930)	43	393451			156.39- 216.39	187.20
8.170	8.170 (0.930)	100	38301			0.00- 48.05	18.22
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	354957	20.0000	18.695	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	278136			48.12- 108.12	78.36
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	275205	20.0000	18.193	80.00- 120.00	100.00
8.428	8.428 (0.959)	109	262400			63.87- 123.87	95.35
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	453832	20.0000	19.561	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	143740			2.38- 62.38	31.67
8.808	8.808 (1.002)	77	236738			24.59- 84.59	52.16
167 Ethyl Benzene					CAS #: 100-41-4		
8.865	8.865 (1.009)	106	244301	20.0000	19.625	80.00- 120.00	100.00
8.858	8.858 (1.008)	91	744894			276.53- 336.53	304.91
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	297346	20.0000	19.928	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	587389			166.59- 226.59	197.54
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.058)	106	287339	20.0000	19.972	80.00- 120.00	100.00
9.295	9.295 (1.058)	91	601060			176.08- 236.08	209.18
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.060)	104	474356	20.0000	24.005	80.00- 120.00	100.00
9.317	9.317 (1.060)	78	221447			17.58- 77.58	46.68
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	463450	20.0000	19.994	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.082)	171	233547			21.36- 81.36	50.39
175 Cumene					CAS #: 98-82-8		
9.589	9.589 (1.091)	105	920385	20.0000	20.048	80.00- 120.00	100.00
9.589	9.589 (1.091)	120	256880			0.00- 57.79	27.91
9.582	9.582 (1.090)	51	103694			0.00- 41.33	11.27
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.882	9.882 (1.125)	83	458321	20.0000	19.483	80.00- 120.00	100.00
9.882	9.882 (1.125)	85	298108			34.22- 94.22	65.04
182 Propylbenzene					CAS #: 103-65-1		
9.925	9.925 (1.130)	91	1099795	20.0000	20.367	80.00- 120.00	100.00
9.925	9.925 (1.130)	120	271571			0.00- 54.34	24.69
9.925	9.925 (1.130)	105	40666			0.00- 33.54	3.70
188 4-Ethyltoluene					CAS #: 622-96-8		
10.018	10.018 (1.140)	120	307943	20.0000	21.004	80.00- 120.00	100.00
10.018	10.018 (1.140)	105	977081			279.66- 339.66	317.29
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.069 (1.146)	120	392095	20.0000	21.578	80.00- 120.00	100.00
10.069	10.069 (1.146)	105	781710			169.72- 229.72	199.37
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.391	10.391 (1.183)	120	360257	20.0000	21.430	80.00- 120.00	100.00
10.391	10.391 (1.183)	105	774233			185.64- 245.64	214.91
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.670 (1.214)	146	584892	20.0000	20.018	80.00- 120.00	100.00
10.670	10.670 (1.214)	148	376424			34.23- 94.23	64.36
10.670	10.670 (1.214)	111	219163			7.40- 67.40	37.47
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.749 (1.223)	146	583753	20.0000	19.579	80.00- 120.00	100.00
10.749	10.749 (1.223)	148	369606			33.60- 93.60	63.32
10.749	10.749 (1.223)	111	211540			4.87- 64.87	36.24
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.864 (1.236)	91	766285	20.0000	21.077	80.00- 120.00	100.00
10.871	10.871 (1.237)	126	175304			0.00- 53.22	22.88
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.079	11.079 (1.261)	146	566202	20.0000	20.379	80.00- 120.00	100.00
11.079	11.079 (1.261)	148	358598			33.66- 93.66	63.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.079	11.079 (1.261)	111	216571			7.92- 67.92	38.25
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.419)	180	260247	20.0000	12.369	80.00- 120.00	100.00
12.468	12.468 (1.419)	182	242820			66.61- 126.61	93.30
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.569	12.569 (1.430)	225	215457	20.0000	11.518	80.00- 120.00	100.00
12.569	12.569 (1.430)	223	137430			32.66- 92.66	63.79
228 Naphthalene					CAS #: 91-20-3		
12.733	12.733 (1.449)	128	49927	2.00000	1.513	80.00- 120.00	100.00
12.733	12.733 (1.449)	127	8279			0.00- 42.82	16.58

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020105.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 20ppbv(200ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	164445	0.58
123 1,4-Difluorobenze	658886	395332	922440	650873	-1.22
163 Chlorobenzene-d5	634233	380540	887926	617150	-2.69

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020105.d

Date : 01-FEB-2016 16:07

Client ID: Level 5

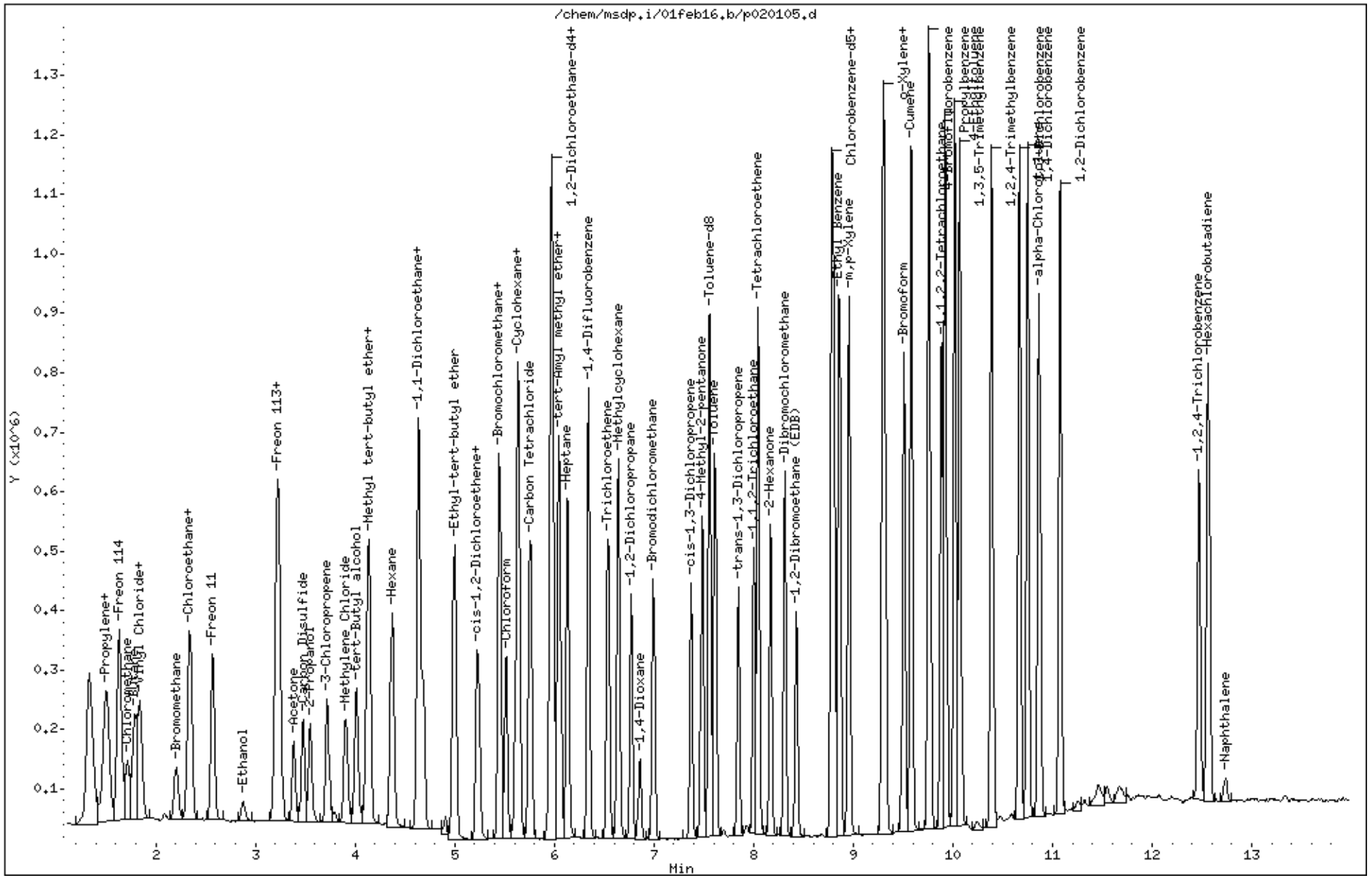
Sample Info: 20ml #2759-209

Column phase: RTX-624

Instrument: msdp.i

Operator: kl

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/18feb16.b/p021806.d
Lab Smp Id: ICAL Level #6
Inj Date : 18-FEB-2016 12:13
Operator : js Inst ID: msdp.i
Smp Info : 50ml 2759-254
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/18feb16.b/p16q0201b.m
Meth Date : 19-Feb-2016 15:31 sblack Quant Type: ISTD
Cal Date : 18-FEB-2016 12:13 Cal File: p021806.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICALmBP.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
32 Vinyl Bromide					CAS #: 593-60-2		
2.526	2.526 (0.464)	106	216153	50.0000	48.058	0.00- 0.00	100.00
2.526	2.526 (0.464)	108	199989			0.00- 0.00	92.52
36 1-Pentene					CAS #: 109-67-1		
2.583	2.583 (0.474)	55	289362	50.0000	45.869	0.00- 0.00	100.00
2.583	2.583 (0.474)	42	392760			0.00- 0.00	135.73
44 Ethyl Ether					CAS #: 60-29-7		
2.949	2.949 (0.541)	74	103003	50.0000	44.915	0.00- 0.00	100.00(T)
2.949	2.949 (0.541)	59	188243			0.00- 0.00	182.75
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
3.450	3.450 (0.633)	142	372359	50.0000	56.348	0.00- 0.00	100.00
3.450	3.450 (0.633)	127	158914			0.00- 0.00	42.68

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
	59 Cyclopentene					CAS #: 142-29-0			
	3.737	3.737 (0.686)	67	416103	50.0000	46.248	0.00-	0.00	100.00
	3.737	3.737 (0.686)	68	156116			0.00-	0.00	37.52
	3.737	3.737 (0.686)	53	112511			0.00-	0.00	27.04
	64 Cyclopentane					CAS #: 287-92-3			
	3.851	3.851 (0.707)	70	125625	50.0000	44.288	0.00-	0.00	100.00
	3.851	3.851 (0.707)	55	221454			0.00-	0.00	176.28
	74 Acrylonitrile					CAS #: 107-13-1			
	4.245	4.245 (0.779)	52	207315	50.0000	45.139	0.00-	0.00	100.00
	4.245	4.245 (0.779)	53	281206			0.00-	0.00	135.64
	76 1-Hexene					CAS #: 592-41-6			
	4.302	4.302 (0.790)	55	212442	50.0000	45.883	0.00-	0.00	100.00
	4.302	4.302 (0.790)	41	320637			0.00-	0.00	150.93
	4.302	4.302 (0.790)	84	62044			0.00-	0.00	29.21
	84 1-Propanol					CAS #: 71-23-8			
	4.761	4.761 (0.874)	59	59291	50.0000	45.030	0.00-	0.00	100.00
	4.761	4.761 (0.874)	42	48868			0.00-	0.00	82.42
	4.761	4.761 (0.874)	41	32892			0.00-	0.00	55.48
	90 2,2-Dichloropropane					CAS #: 594-20-7			
	5.191	5.191 (0.953)	77	456015	50.0000	46.776	0.00-	0.00	100.00
	5.191	5.191 (0.953)	79	146408			0.00-	0.00	32.11
	5.191	5.191 (0.953)	97	93839			0.00-	0.00	20.58
	94 Ethyl Acetate					CAS #: 141-78-6			
	5.269	5.269 (0.967)	70	44633	50.0000	40.974	0.00-	0.00	100.00
	5.269	5.269 (0.967)	61	75832			0.00-	0.00	169.90
	5.269	5.269 (0.967)	45	91180			0.00-	0.00	204.29
	93 Methyl Acrylate					CAS #: 96-33-3			
	5.312	5.312 (0.975)	55	520883	50.0000	45.767	0.00-	0.00	100.00
	5.312	5.312 (0.975)	85	62261			0.00-	0.00	11.95
	5.312	5.312 (0.975)	58	43455			0.00-	0.00	8.34
*	98 Bromochloromethane					CAS #: 74-97-5			
	5.449	5.449 (1.000)	130	128402	25.0000		80.00-	120.00	100.00
	5.449	5.449 (1.000)	128	97832			49.06-	109.06	76.19
	5.449	5.449 (1.000)	49	197224			124.20-	184.20	153.60
	107 1,1-Dichloropropene					CAS #: 563-58-6			
	5.792	5.792 (0.913)	110	136724	50.0000	49.642	0.00-	0.00	100.00
	5.792	5.792 (0.913)	75	379538			0.00-	0.00	277.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
115 Isobutanol					CAS #: 78-83-1		
5.928	5.928 (0.934)	39	67928	50.0000	45.107	0.00- 0.00	100.00
5.928	5.928 (0.934)	43	235651			0.00- 0.00	346.91
5.928	5.928 (0.934)	41	172063			0.00- 0.00	253.30
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	518167	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	74001			0.00- 44.57	14.28
124 n-Butanol					CAS #: 71-36-3		
6.494	6.494 (1.024)	56	396206	50.0000	47.687	0.00- 0.00	100.00
6.494	6.494 (1.024)	41	271487			0.00- 0.00	68.52
6.494	6.494 (1.024)	43	217629			0.00- 0.00	54.93
128 Ethyl acrylate					CAS #: 140-88-5		
6.638	6.638 (0.755)	99	28170	50.0000	50.664	0.00- 0.00	100.00
6.638	6.638 (0.755)	45	47307			0.00- 0.00	167.93
6.638	6.638 (0.755)	55	519731			0.00- 0.00	1844.98
131 2-Pentanone					CAS #: 107-87-9		
6.724	6.724 (0.765)	43	642112	50.0000	48.124	0.00- 0.00	100.00
6.731	6.731 (0.766)	58	52099			0.00- 0.00	8.11
6.731	6.731 (0.766)	86	97896			0.00- 0.00	15.25
134 Methyl Methacrylate					CAS #: 80-62-6		
6.831	6.831 (0.777)	41	315698	50.0000	47.118	0.00- 0.00	100.00
6.831	6.831 (0.777)	69	200539			0.00- 0.00	63.52
6.831	6.831 (0.777)	100	70831			0.00- 0.00	22.44
137 Dibromomethane					CAS #: 74-95-3		
6.881	6.881 (0.783)	174	287178	50.0000	48.667	0.00- 0.00	100.00
6.874	6.874 (0.782)	93	223221			0.00- 0.00	77.73
6.874	6.874 (0.782)	95	182151			0.00- 0.00	63.43
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.149	8.149 (1.285)	76	385819	50.0000	48.274	0.00- 0.00	100.00
8.149	8.149 (1.285)	41	295601			0.00- 0.00	76.62
8.149	8.149 (1.285)	78	121105			0.00- 0.00	31.39
159 Butyl Acetate					CAS #: 123-86-4		
8.235	8.235 (1.298)	56	84355	50.0000	33.681	0.00- 0.00	100.00
8.235	8.235 (1.298)	73	28748			0.00- 0.00	34.08
8.235	8.235 (1.298)	43	194948			0.00- 0.00	231.10
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	476457	25.0000		80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 163 Chlorobenzene-d5 (continued)							
8.779	8.779 (1.000)	82	244653			20.36- 80.36	51.35
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.872	8.872 (1.010)	131	418067	50.0000	51.932	0.00- 0.00	100.00
8.872	8.872 (1.010)	117	275885			0.00- 0.00	65.99
8.872	8.872 (1.010)	95	145633			0.00- 0.00	34.83
173 2-Heptanone					CAS #: 110-43-0		
9.388	9.388 (1.723)	58	476488	50.0000	49.289	0.00- 0.00	100.00
9.388	9.388 (1.723)	43	758609			0.00- 0.00	159.21
176 Cyclohexanone					CAS #: 108-94-1		
9.739	9.739 (1.108)	55	352961	50.0000	49.240	0.00- 0.00	100.00
9.739	9.739 (1.108)	98	129335			0.00- 0.00	36.64
9.739	9.739 (1.108)	42	236174			0.00- 0.00	66.91
180 Bromobenzene					CAS #: 108-86-1		
9.897	9.897 (1.126)	156	433453	50.0000	50.337	0.00- 0.00	100.00
9.897	9.897 (1.126)	158	418745			0.00- 0.00	96.61
9.890	9.890 (1.126)	77	560729			0.00- 0.00	129.36
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.940	9.940 (1.131)	110	169157	50.0000	49.499	0.00- 0.00	100.00
9.940	9.940 (1.131)	75	601466			0.00- 0.00	355.57
9.940	9.940 (1.131)	61	145563			0.00- 0.00	86.05
189 2-Chlorotoluene					CAS #: 95-49-8		
10.033	10.033 (1.142)	126	328823	50.0000	51.944	0.00- 0.00	100.00
10.033	10.033 (1.142)	91	854062			0.00- 0.00	259.73
10.033	10.033 (1.142)	65	83106			0.00- 0.00	25.27
191 4-Chlorotoluene					CAS #: 106-43-4		
10.133	10.133 (1.153)	126	320583	50.0000	51.346	0.00- 0.00	100.00
10.126	10.126 (1.152)	91	851614			0.00- 0.00	265.65
10.126	10.126 (1.152)	63	131089			0.00- 0.00	40.89
195 tert-Butylbenzene					CAS #: 98-06-6		
10.341	10.341 (1.177)	119	963576	50.0000	51.655	0.00- 0.00	100.00
10.341	10.341 (1.177)	134	249261			0.00- 0.00	25.87
10.341	10.341 (1.177)	91	610006			0.00- 0.00	63.31
197 Pentachloroethane					CAS #: 76-01-7		
10.398	10.398 (1.183)	167	346667	50.0000	52.229	0.00- 0.00	100.00
10.398	10.398 (1.183)	117	303178			0.00- 0.00	87.46
10.398	10.398 (1.183)	169	164407			0.00- 0.00	47.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
203 sec-Butylbenzene					CAS #: 135-98-8			
10.520	10.520 (1.197)	134	316956	50.0000	50.351	0.00-	0.00	100.00
10.520	10.520 (1.197)	105	1407925			0.00-	0.00	444.20
10.520	10.520 (1.197)	91	216413			0.00-	0.00	68.28
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
10.592	10.592 (1.205)	93	647701	50.0000	51.992	0.00-	0.00	100.00
10.592	10.592 (1.205)	95	205496			0.00-	0.00	31.73
207 p-Cymene					CAS #: 99-87-6			
10.635	10.635 (1.210)	119	1232590	50.0000	52.094	0.00-	0.00	100.00
10.635	10.635 (1.210)	134	351910			0.00-	0.00	28.55
10.635	10.635 (1.210)	91	278572			0.00-	0.00	22.60
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
10.756	10.756 (1.224)	120	455143	50.0000	52.014	0.00-	0.00	100.00
10.756	10.756 (1.224)	105	1049617			0.00-	0.00	230.61
10.756	10.756 (1.224)	77	118316			0.00-	0.00	26.00
213 Butylbenzene					CAS #: 104-51-8			
10.986	10.986 (1.250)	134	330824	50.0000	52.345	0.00-	0.00	100.00
10.978	10.978 (1.249)	91	1117252			0.00-	0.00	337.72
10.978	10.978 (1.249)	92	594618			0.00-	0.00	179.74
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8			
11.752	11.752 (1.337)	157	449266	50.0000	50.892	0.00-	0.00	100.00
11.745	11.745 (1.337)	75	324655			0.00-	0.00	72.26
11.752	11.752 (1.337)	155	343712			0.00-	0.00	76.51

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 19-Feb-2016 15:31

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p021806.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/18feb16.b/p16q0201b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 18-FEB-2016
Calibration Time: 12:13
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	128402	77041	179763	128402	0.00
123 1,4-Difluorobenze	518167	310900	725434	518167	0.00
163 Chlorobenzene-d5	476457	285874	667040	476457	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

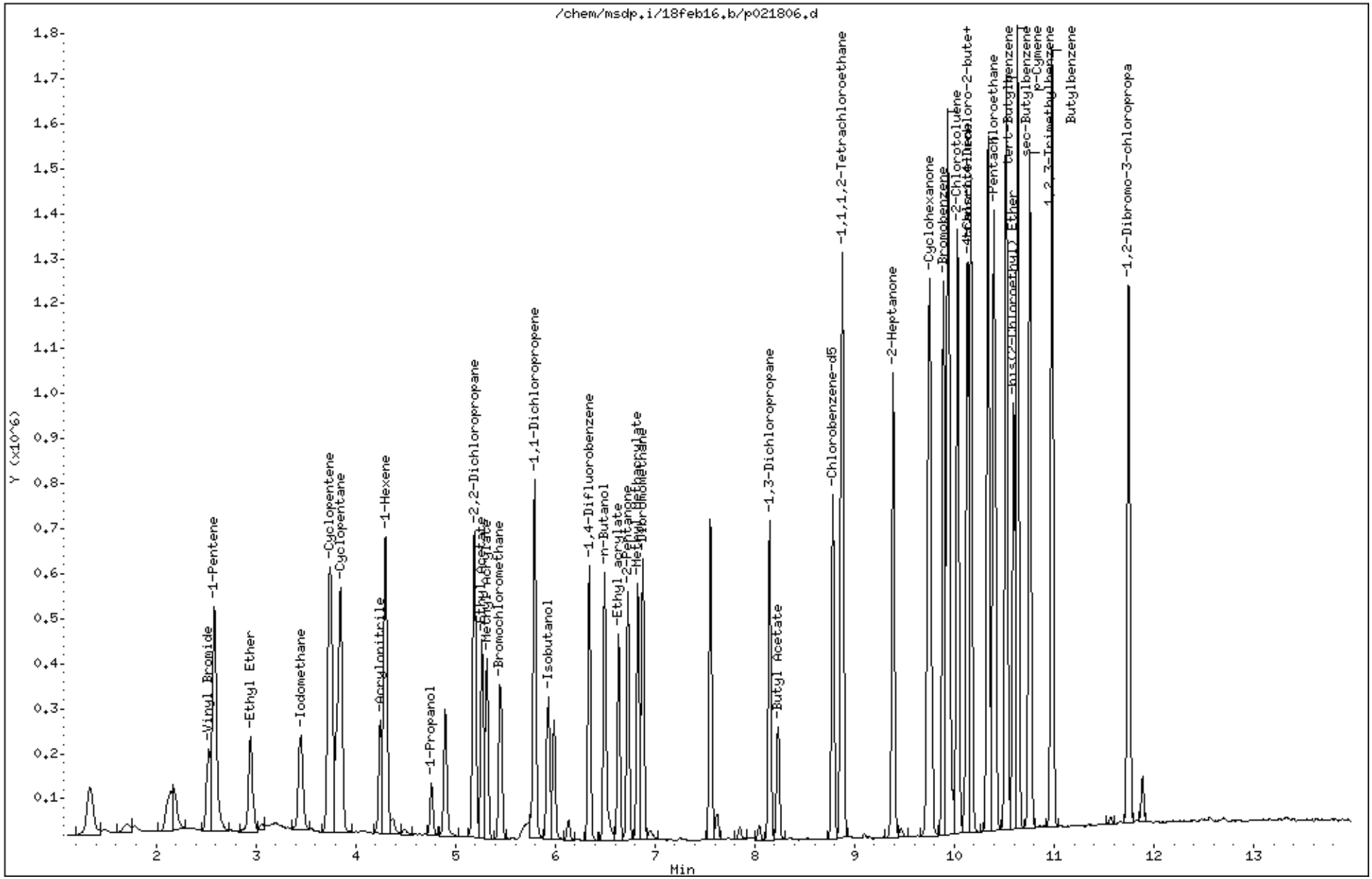
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/18feb16.b/p021806.d
Date : 18-FEB-2016 12:13
Client ID:
Sample Info: 50ml 2759-254

Column phase: RTX-624

Instrument: msdp.i

Operator: js
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020106.d
Lab Smp Id: ICAL Client Smp ID: Level 6
Inj Date : 01-FEB-2016 16:31
Operator : kl Inst ID: msdp.i
Smp Info : 50ml #2759-209
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 16:31 Cal File: p020106.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.463 (1.000)	130	163500	25.0000		80.00- 120.00	100.00
5.456	5.463 (1.000)	128	129269			49.06- 109.06	79.06
5.449	5.463 (1.000)	49	252111			124.20- 184.20	154.20
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	658886	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	96011			0.00- 44.57	14.57
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	634233	25.0000		80.00- 120.00	100.00
8.787	8.787 (1.000)	82	319412			20.36- 80.36	50.36
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.993	5.993 (1.098)	65	242031	25.0000	25.675	80.00- 120.00	100.00
5.993	5.993 (1.098)	67	137192			26.68- 86.68	56.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.562 (1.192)	98	660254	25.0000	25.167	80.00- 120.00	100.00
7.555	7.562 (1.191)	70	70138			0.00- 40.62	10.62
7.562	7.562 (1.192)	100	440655			36.74- 96.74	66.74
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.768 (1.111)	174	520679	25.0000	25.633	80.00- 120.00	100.00
9.761	9.768 (1.111)	95	499590			65.95- 125.95	95.95
9.761	9.768 (1.111)	176	498805			65.80- 125.80	95.80
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	328676	50.0000	46.869	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	212332			34.60- 94.60	64.60
1.479	1.479 (0.271)	39	240704			43.23- 103.23	73.23
11 Freon 12					CAS #: 75-71-8		
1.507	1.521 (0.276)	85	898359	50.0000	49.615	80.00- 120.00	100.00
1.507	1.521 (0.276)	87	285363			1.76- 61.76	31.76
15 Freon 114					CAS #: 76-14-2		
1.633	1.646 (0.299)	135	680991	50.0000	48.739	80.00- 120.00	100.00
1.633	1.646 (0.299)	137	219484			2.23- 62.23	32.23
17 Chloromethane					CAS #: 74-87-3		
1.717	1.730 (0.315)	50	394198	50.0000	68.110	80.00- 120.00	100.00
1.717	1.730 (0.315)	52	118170			0.00- 59.98	29.98
23 Butane					CAS #: 106-97-8		
1.787	1.800 (0.327)	58	75938	50.0000	40.841	80.00- 120.00	100.00
1.787	1.800 (0.327)	43	617452			783.10- 843.10	813.10
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	392645	50.0000	50.087	80.00- 120.00	100.00
1.828	1.828 (0.335)	64	138063			5.16- 65.16	35.16
26 1,3-Butadiene					CAS #: 106-99-0		
1.842	1.856 (0.338)	54	322132	50.0000	47.923	80.00- 120.00	100.00
1.842	1.856 (0.338)	39	360532			81.92- 141.92	111.92
29 Bromomethane					CAS #: 74-83-9		
2.204	2.211 (0.404)	94	263491	50.0000	60.111	80.00- 120.00	100.00
2.204	2.211 (0.404)	96	250589			65.10- 125.10	95.10
30 Chloroethane					CAS #: 75-00-3		
2.326	2.325 (0.426)	64	171387	50.0000	47.287	80.00- 120.00	100.00
2.318	2.325 (0.425)	66	51391			0.00- 59.99	29.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.318	2.325 (0.425)	49	61450			5.85- 65.85	35.85
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	486203	50.0000	46.877	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	321962			36.22- 96.22	66.22
35 Freon 11					CAS #: 75-69-4		
2.569	2.576 (0.471)	101	923332	50.0000	48.816	80.00- 120.00	100.00
2.576	2.576 (0.472)	103	595508			34.50- 94.50	64.50
42 Ethanol					CAS #: 64-17-5		
2.884	2.891 (0.529)	45	162295	50.0000	54.318	80.00- 120.00	100.00
2.884	2.891 (0.529)	43	33701			0.00- 50.77	20.77
2.884	2.891 (0.529)	46	62770			8.68- 68.68	38.68
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	723939	50.0000	47.020	80.00- 120.00	100.00
3.221	3.221 (0.590)	153	459304			33.45- 93.45	63.45
3.221	3.221 (0.590)	101	755488			74.36- 134.36	104.36
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.249 (0.594)	98	199810	50.0000	47.923	80.00- 120.00	100.00
3.242	3.249 (0.594)	96	326888			133.60- 193.60	163.60
3.242	3.249 (0.594)	61	664510			302.57- 362.57	332.57
52 Acetone					CAS #: 67-64-1		
3.386	3.393 (0.621)	58	190065	50.0000	41.778	80.00- 120.00	100.00
3.386	3.393 (0.621)	43	671024			323.05- 383.05	353.05
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.486 (0.638)	76	897946	50.0000	47.912	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.557 (0.651)	45	798763	50.0000	40.717	80.00- 120.00	100.00
3.550	3.557 (0.651)	43	157487			0.00- 49.72	19.72
3.550	3.557 (0.651)	59	26861			0.00- 33.36	3.36
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.729 (0.682)	76	148313	50.0000	47.613	80.00- 120.00	100.00
3.722	3.729 (0.682)	41	547410			339.09- 399.09	369.09
66 Methylene Chloride					CAS #: 75-09-2		
3.909	3.908 (0.716)	49	511861	50.0000	51.327	80.00- 120.00	100.00
3.909	3.908 (0.716)	84	284742			25.63- 85.63	55.63
3.909	3.908 (0.716)	51	155936			0.46- 60.46	30.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.016	4.016 (0.736)	59	896707	50.0000	47.680	80.00- 120.00	100.00
4.016	4.016 (0.736)	41	192329			0.00- 51.45	21.45
4.016	4.016 (0.736)	57	99310			0.00- 41.07	11.07
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.131 (0.756)	73	984332	50.0000	47.950	80.00- 120.00	100.00
4.123	4.131 (0.756)	57	286710			0.00- 59.13	29.13
4.123	4.131 (0.756)	41	284536			0.00- 58.91	28.91
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	213328	50.0000	52.293	80.00- 120.00	100.00
4.145	4.152 (0.760)	61	582320			242.97- 302.97	272.97
4.152	4.152 (0.761)	96	335621			127.33- 187.33	157.33
78 Hexane					CAS #: 110-54-3		
4.374	4.374 (0.802)	57	654678	50.0000	47.549	80.00- 120.00	100.00
4.374	4.374 (0.802)	43	420941			34.30- 94.30	64.30
4.374	4.374 (0.802)	86	79645			0.00- 42.17	12.17
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.646	4.646 (0.852)	63	679436	50.0000	49.579	80.00- 120.00	100.00
4.646	4.646 (0.852)	65	204455			0.09- 60.09	30.09
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	1474953	50.0000	48.430	80.00- 120.00	100.00
4.639	4.639 (0.850)	87	315435			0.00- 51.39	21.39
4.639	4.639 (0.850)	59	157512			0.00- 40.68	10.68
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	89391	50.0000	49.831	80.00- 120.00	100.00
4.689	4.689 (0.860)	43	1399079			1535.12-1595.12	1565.12
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	1380674	50.0000	49.007	80.00- 120.00	100.00
4.997	4.997 (0.916)	87	470648			4.09- 64.09	34.09
4.997	4.997 (0.916)	41	263234			0.00- 49.07	19.07
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.227	5.226 (0.958)	98	224987	50.0000	47.942	80.00- 120.00	100.00
5.219	5.226 (0.957)	96	349205			125.21- 185.21	155.21
5.219	5.226 (0.957)	61	543139			211.41- 271.41	241.41
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	170822	50.0000	47.857	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	823613			452.15- 512.15	482.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	67550			9.54- 69.54	39.54
99 Tetrahydrofuran					CAS #: 109-99-9		
5.449	5.449 (0.999)	42	458446	50.0000	48.767	80.00- 120.00	100.00
5.449	5.449 (0.999)	71	147122			2.09- 62.09	32.09
5.449	5.449 (0.999)	72	154092			3.61- 63.61	33.61
100 Chloroform					CAS #: 67-66-3		
5.513	5.520 (1.010)	83	702393	50.0000	48.756	80.00- 120.00	100.00
5.513	5.520 (1.010)	85	460790			35.60- 95.60	65.60
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	474557	50.0000	45.203	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	690154			115.43- 175.43	145.43
5.628	5.628 (1.032)	41	396977			53.65- 113.65	83.65
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.649 (1.034)	97	812372	50.0000	48.355	80.00- 120.00	100.00
5.642	5.649 (1.034)	99	513532			33.21- 93.21	63.21
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.757	5.764 (1.055)	119	846206	50.0000	49.210	80.00- 120.00	100.00
5.757	5.764 (1.055)	117	898751			76.21- 136.21	106.21
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.093)	57	2210790	50.0000	48.832	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	687666			1.10- 61.10	31.10
5.964	5.964 (1.093)	41	598767			0.00- 57.08	27.08
116 Benzene					CAS #: 71-43-2		
5.972	5.979 (0.941)	78	989541	50.0000	49.562	80.00- 120.00	100.00
5.972	5.979 (0.941)	77	236634			0.00- 53.91	23.91
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	262380	50.0000	48.158	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	1092970			386.56- 446.56	416.56
6.043	6.043 (0.953)	55	332559			96.75- 156.75	126.75
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.058	6.057 (0.955)	62	560839	50.0000	52.006	80.00- 120.00	100.00
6.058	6.057 (0.955)	64	169875			0.29- 60.29	30.29
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	378334	50.0000	41.466	80.00- 120.00	100.00
6.136	6.136 (0.967)	43	765849			172.43- 232.43	202.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.136	6.136 (0.967)	57	437007			85.51- 145.51	115.51
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	483690	50.0000	50.537	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	531091			79.80- 139.80	109.80
6.537	6.537 (1.030)	97	307807			33.64- 93.64	63.64
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	685634	50.0000	47.209	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	321819			16.94- 76.94	46.94
6.645	6.645 (1.047)	55	656469			65.75- 125.75	95.75
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	447972	50.0000	48.235	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	311862			39.62- 99.62	69.62
6.774	6.774 (1.068)	41	271143			30.53- 90.53	60.53
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	255691	50.0000	52.148	80.00- 120.00	100.00
6.860	6.860 (1.081)	58	209665			52.00- 112.00	82.00
6.860	6.860 (1.081)	57	67222			0.00- 56.29	26.29
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	778682	50.0000	49.279	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	500689			34.30- 94.30	64.30
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.376	7.375 (1.163)	75	672836	50.0000	51.213	80.00- 120.00	100.00
7.376	7.375 (1.163)	77	220073			2.71- 62.71	32.71
7.376	7.375 (1.163)	39	437804			35.07- 95.07	65.07
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	409162	50.0000	50.114	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	1067710			230.95- 290.95	260.95
7.483	7.483 (1.180)	85	155392			7.98- 67.98	37.98
147 Toluene					CAS #: 108-88-3		
7.612	7.619 (1.200)	91	1366279	50.0000	48.558	80.00- 120.00	100.00
7.612	7.619 (1.200)	92	784038			27.38- 87.38	57.38
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	609535	50.0000	50.164	80.00- 120.00	100.00
7.848	7.848 (0.893)	77	195675			2.10- 62.10	32.10
7.848	7.848 (0.893)	39	371715			30.98- 90.98	60.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	467818	50.0000	48.397	80.00- 120.00	100.00
8.006	8.006 (0.911)	99	286945			31.34- 91.34	61.34
8.006	8.006 (0.911)	83	407954			57.20- 117.20	87.20
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	818473	50.0000	48.572	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	534683			35.33- 95.33	65.33
8.049	8.049 (0.916)	131	534920			35.36- 95.36	65.36
158 2-Hexanone					CAS #: 591-78-6		
8.171	8.170 (0.930)	58	562580	50.0000	53.949	80.00- 120.00	100.00
8.171	8.170 (0.930)	43	1048607			156.39- 216.39	186.39
8.171	8.170 (0.930)	100	101540			0.00- 48.05	18.05
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	982263	50.0000	50.272	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	767304			48.12- 108.12	78.12
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	778335	50.0000	50.054	80.00- 120.00	100.00
8.428	8.428 (0.959)	109	730644			63.87- 123.87	93.87
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	1177707	50.0000	49.514	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	381352			2.38- 62.38	32.38
8.808	8.808 (1.002)	77	642905			24.59- 84.59	54.59
167 Ethyl Benzene					CAS #: 100-41-4		
8.865	8.865 (1.009)	106	619896	50.0000	48.758	80.00- 120.00	100.00
8.858	8.865 (1.008)	91	1900174			276.53- 336.53	306.53
169 m,p-Xylene					CAS #: 108-38-3		
8.959	8.958 (1.020)	106	766045	50.0000	49.966	80.00- 120.00	100.00
8.959	8.958 (1.020)	91	1505965			166.59- 226.59	196.59
171 o-Xylene					CAS #: 95-47-6		
9.295	9.302 (1.058)	106	732801	50.0000	49.650	80.00- 120.00	100.00
9.295	9.302 (1.058)	91	1510145			176.08- 236.08	206.08
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.060)	104	1198807	50.0000	56.974	80.00- 120.00	100.00
9.317	9.317 (1.060)	78	570351			17.58- 77.58	47.58
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	1207776	50.0000	50.561	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.082)	171	620284			21.36- 81.36	51.36
175 Cumene					CAS #: 98-82-8		
9.582	9.589 (1.090)	105	2311382	50.0000	49.189	80.00- 120.00	100.00
9.582	9.589 (1.090)	120	642264			0.00- 57.79	27.79
9.582	9.589 (1.090)	51	261823			0.00- 41.33	11.33
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.883	9.897 (1.125)	83	1133238	50.0000	47.469	80.00- 120.00	100.00
9.883	9.897 (1.125)	85	727787			34.22- 94.22	64.22
182 Propylbenzene					CAS #: 103-65-1		
9.926	9.940 (1.130)	91	2749345	50.0000	49.634	80.00- 120.00	100.00
9.926	9.940 (1.130)	120	669109			0.00- 54.34	24.34
9.926	9.940 (1.130)	105	97310			0.00- 33.54	3.54
188 4-Ethyltoluene					CAS #: 622-96-8		
10.019	10.033 (1.140)	120	774684	50.0000	51.126	80.00- 120.00	100.00
10.019	10.033 (1.140)	105	2398917			279.66- 339.66	309.66
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.083 (1.146)	120	983928	50.0000	52.129	80.00- 120.00	100.00
10.069	10.083 (1.146)	105	1965092			169.72- 229.72	199.72
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.391	10.405 (1.183)	120	903781	50.0000	51.835	80.00- 120.00	100.00
10.391	10.405 (1.183)	105	1948876			185.64- 245.64	215.64
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.671	10.692 (1.214)	146	1495940	50.0000	49.856	80.00- 120.00	100.00
10.671	10.692 (1.214)	148	960877			34.23- 94.23	64.23
10.671	10.692 (1.214)	111	559502			7.40- 67.40	37.40
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.771 (1.223)	146	1506360	50.0000	49.328	80.00- 120.00	100.00
10.749	10.771 (1.223)	148	958118			33.60- 93.60	63.60
10.749	10.771 (1.223)	111	525323			4.87- 64.87	34.87
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.885 (1.236)	91	1941191	50.0000	51.553	80.00- 120.00	100.00
10.864	10.885 (1.236)	126	450769			0.00- 53.22	23.22
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.079	11.100 (1.261)	146	1439174	50.0000	50.323	80.00- 120.00	100.00
11.079	11.100 (1.261)	148	916142			33.66- 93.66	63.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.072	11.100 (1.260)	111	545704			7.92- 67.92	37.92
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.504 (1.419)	180	1156109	50.0000	52.557	80.00- 120.00	100.00
12.468	12.504 (1.419)	182	1116959			66.61- 126.61	96.61
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.569	12.597 (1.430)	225	962966	50.0000	50.069	80.00- 120.00	100.00
12.562	12.597 (1.430)	223	603417			32.66- 92.66	62.66
228 Naphthalene					CAS #: 91-20-3		
12.733	12.769 (1.449)	128	215169	5.00000	5.944	80.00- 120.00	100.00
12.733	12.769 (1.449)	127	27593			0.00- 42.82	12.82

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020106.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	163500	0.00
123 1,4-Difluorobenze	658886	395332	922440	658886	0.00
163 Chlorobenzene-d5	634233	380540	887926	634233	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020106.d

Date : 01-FEB-2016 16:31

Client ID: Level 6

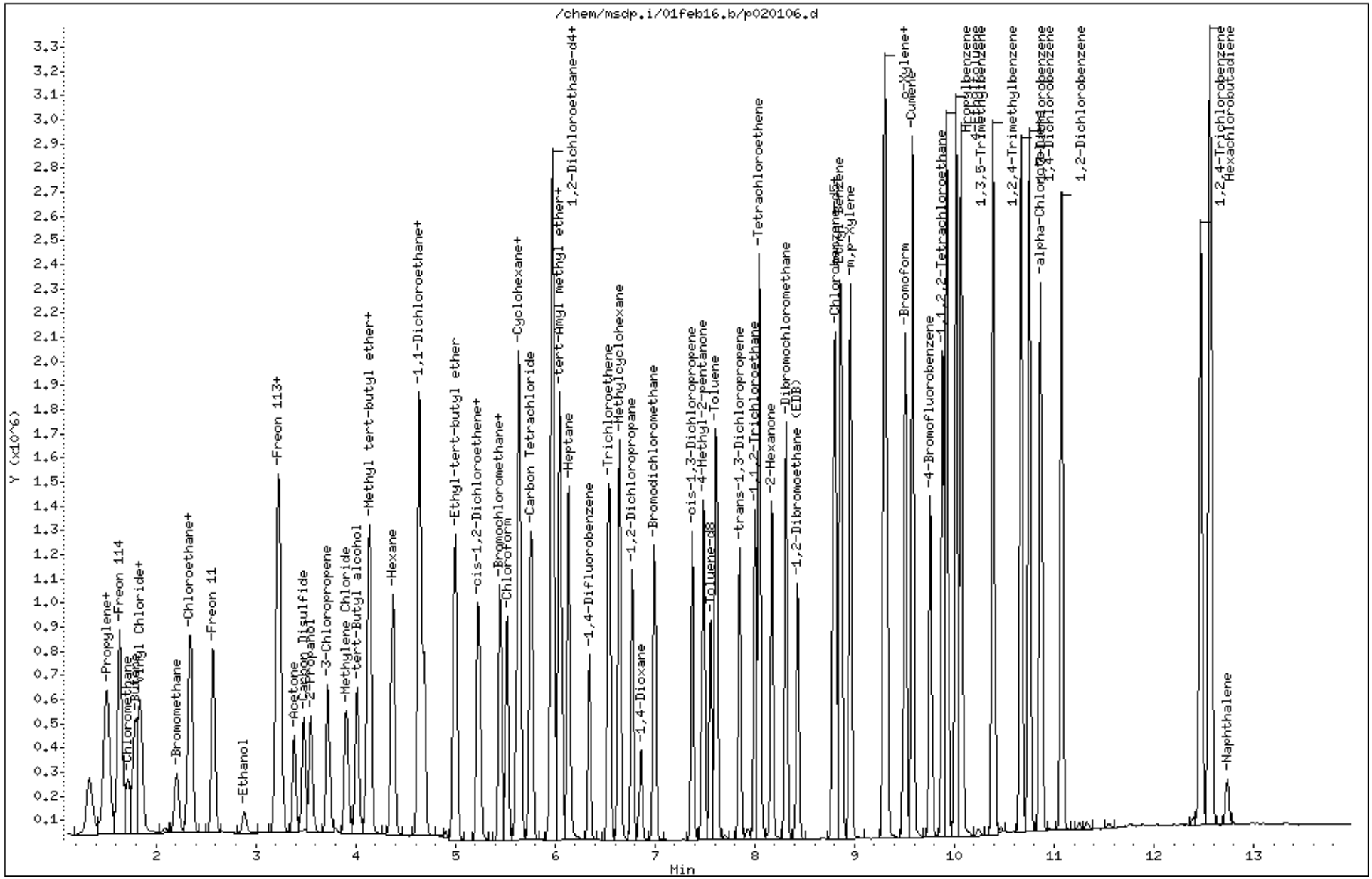
Sample Info: 50ml #2759-209

Column phase: RTX-624

Instrument: msdp.i

Operator: kl

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020107.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 01-FEB-2016 16:56
Operator : kl Inst ID: msdp.i
Smp Info : 100ml #2759-209
Misc Info : 100ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 16:56 Cal File: p020107.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.463 (1.000)	130	169232	25.0000		80.00- 120.00	100.00
5.456	5.463 (1.000)	128	129407			49.06- 109.06	76.47
5.456	5.463 (1.000)	49	244148			124.20- 184.20	144.27
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	672267	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	96911			0.00- 44.57	14.42
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	653697	25.0000		80.00- 120.00	100.00
8.787	8.787 (1.000)	82	333892			20.36- 80.36	51.08
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.993	5.993 (1.098)	65	256765	25.0000	26.086	80.00- 120.00	100.00
5.993	5.993 (1.098)	67	158636			26.68- 86.68	61.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.562 (1.192)	98	672689	25.0000	25.109	80.00- 120.00	100.00
7.562	7.562 (1.192)	70	74546			0.00- 40.62	11.08
7.562	7.562 (1.192)	100	447225			36.74- 96.74	66.48
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.768 (1.111)	174	537450	25.0000	25.557	80.00- 120.00	100.00
9.761	9.768 (1.111)	95	517828			65.95- 125.95	96.35
9.761	9.768 (1.111)	176	531896			65.80- 125.80	98.97
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	680788	100.000	94.970	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	450669			34.60- 94.60	66.20
1.479	1.479 (0.271)	39	507162			43.23- 103.23	74.50
11 Freon 12					CAS #: 75-71-8		
1.507	1.521 (0.276)	85	1870350	100.000	99.832	80.00- 120.00	100.00
1.521	1.521 (0.279)	87	601350			1.76- 61.76	32.15
15 Freon 114					CAS #: 76-14-2		
1.633	1.646 (0.299)	135	1447619	100.000	100.08	80.00- 120.00	100.00
1.633	1.646 (0.299)	137	468002			2.23- 62.23	32.33
17 Chloromethane					CAS #: 74-87-3		
1.730	1.730 (0.317)	50	733248	100.000	117.15	80.00- 120.00	100.00
1.730	1.730 (0.317)	52	234193			0.00- 59.98	31.94
23 Butane					CAS #: 106-97-8		
1.800	1.800 (0.330)	58	188698	100.000	98.432	80.00- 120.00	100.00
1.786	1.800 (0.327)	43	1287186			783.10- 843.10	682.14
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	912675	100.000	110.19	80.00- 120.00	100.00
1.828	1.828 (0.335)	64	274310			5.16- 65.16	30.06
26 1,3-Butadiene					CAS #: 106-99-0		
1.856	1.856 (0.340)	54	682323	100.000	98.387	80.00- 120.00	100.00
1.856	1.856 (0.340)	39	880117			81.92- 141.92	128.99
29 Bromomethane					CAS #: 74-83-9		
2.211	2.211 (0.405)	94	567344	100.000	120.04	80.00- 120.00	100.00
2.211	2.211 (0.405)	96	517215			65.10- 125.10	91.16
30 Chloroethane					CAS #: 75-00-3		
2.325	2.325 (0.426)	64	373538	100.000	99.657	80.00- 120.00	100.00
2.325	2.325 (0.426)	66	109625			0.00- 59.99	29.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.318	2.325 (0.425)	49	131517			5.85- 65.85	35.21
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	999694	100.000	94.420	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	663090			36.22- 96.22	66.33
35 Freon 11					CAS #: 75-69-4		
2.576	2.576 (0.472)	101	1951749	100.000	99.744	80.00- 120.00	100.00
2.576	2.576 (0.472)	103	1260015			34.50- 94.50	64.56
42 Ethanol					CAS #: 64-17-5		
2.884	2.891 (0.529)	45	335930	100.000	106.78	80.00- 120.00	100.00
2.884	2.891 (0.529)	43	71398			0.00- 50.77	21.25
2.891	2.891 (0.530)	46	130123			8.68- 68.68	38.74
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	1470525	100.000	93.479	80.00- 120.00	100.00
3.221	3.221 (0.590)	153	950223			33.45- 93.45	64.62
3.221	3.221 (0.590)	101	1557459			74.36- 134.36	105.91
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.249	3.249 (0.596)	98	429429	100.000	99.589	80.00- 120.00	100.00
3.249	3.249 (0.596)	96	685051			133.60- 193.60	159.53
3.249	3.249 (0.596)	61	1404827			302.57- 362.57	327.14
52 Acetone					CAS #: 67-64-1		
3.386	3.393 (0.621)	58	398163	100.000	87.250	80.00- 120.00	100.00
3.386	3.393 (0.621)	43	1407919			323.05- 383.05	353.60
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.486 (0.638)	76	1881801	100.000	97.591	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.557 (0.651)	45	1669011	100.000	85.232	80.00- 120.00	100.00
3.558	3.557 (0.652)	43	332294			0.00- 49.72	19.91
3.550	3.557 (0.651)	59	59365			0.00- 33.36	3.56
58 3-Chloropropene					CAS #: 107-05-1		
3.729	3.729 (0.684)	76	314475	100.000	98.020	80.00- 120.00	100.00
3.722	3.729 (0.682)	41	1163612			339.09- 399.09	370.02
66 Methylene Chloride					CAS #: 75-09-2		
3.909	3.908 (0.716)	49	1081065	100.000	103.91	80.00- 120.00	100.00
3.909	3.908 (0.716)	84	600690			25.63- 85.63	55.56
3.909	3.908 (0.716)	51	329565			0.46- 60.46	30.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.016	4.016 (0.736)	59	1857353	100.000	96.298	80.00- 120.00	100.00
4.016	4.016 (0.736)	41	393099			0.00- 51.45	21.16
4.016	4.016 (0.736)	57	201087			0.00- 41.07	10.83
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.131 (0.756)	73	2002317	100.000	95.151	80.00- 120.00	100.00
4.123	4.131 (0.756)	57	580367			0.00- 59.13	28.98
4.123	4.131 (0.756)	41	562085			0.00- 58.91	28.07
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	446268	100.000	104.70	80.00- 120.00	100.00
4.152	4.152 (0.761)	61	1244929			242.97- 302.97	278.96
4.152	4.152 (0.761)	96	700406			127.33- 187.33	156.95
78 Hexane					CAS #: 110-54-3		
4.374	4.374 (0.802)	57	1367574	100.000	96.613	80.00- 120.00	100.00
4.374	4.374 (0.802)	43	877480			34.30- 94.30	64.16
4.374	4.374 (0.802)	86	165598			0.00- 42.17	12.11
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.646	4.646 (0.852)	63	1460376	100.000	102.45	80.00- 120.00	100.00
4.646	4.646 (0.852)	65	427312			0.09- 60.09	29.26
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	3040211	100.000	97.134	80.00- 120.00	100.00
4.639	4.639 (0.850)	87	625223			0.00- 51.39	20.57
4.639	4.639 (0.850)	59	320062			0.00- 40.68	10.53
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	195975	100.000	104.39	80.00- 120.00	100.00
4.689	4.689 (0.860)	43	2991207			1535.12-1595.12	1526.32
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	2824733	100.000	97.479	80.00- 120.00	100.00
4.997	4.997 (0.916)	87	946627			4.09- 64.09	33.51
4.997	4.997 (0.916)	41	533556			0.00- 49.07	18.89
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.958)	98	470819	100.000	97.426	80.00- 120.00	100.00
5.226	5.226 (0.958)	96	741630			125.21- 185.21	157.52
5.219	5.226 (0.957)	61	1158767			211.41- 271.41	246.12
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	356963	100.000	97.277	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	1759965			452.15- 512.15	493.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	143205			9.54- 69.54	40.12
99 Tetrahydrofuran					CAS #: 109-99-9		
5.449	5.449 (0.999)	42	973918	100.000	100.08	80.00- 120.00	100.00
5.449	5.449 (0.999)	71	309988			2.09- 62.09	31.83
5.449	5.449 (0.999)	72	327943			3.61- 63.61	33.67
100 Chloroform					CAS #: 67-66-3		
5.520	5.520 (1.012)	83	1502075	100.000	100.61	80.00- 120.00	100.00
5.520	5.520 (1.012)	85	969870			35.60- 95.60	64.57
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	957034	100.000	89.859	80.00- 120.00	100.00
5.628	5.628 (1.032)	56	1407931			115.43- 175.43	147.11
5.628	5.628 (1.032)	41	793532			53.65- 113.65	82.92
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.649 (1.034)	97	1615581	100.000	94.019	80.00- 120.00	100.00
5.642	5.649 (1.034)	99	1026995			33.21- 93.21	63.57
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.757	5.764 (1.055)	119	1737660	100.000	98.015	80.00- 120.00	100.00
5.757	5.764 (1.055)	117	1802038			76.21- 136.21	103.70
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.093)	57	4493334	100.000	96.550	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	1481595			1.10- 61.10	32.97
5.964	5.964 (1.093)	41	1217648			0.00- 57.08	27.10
116 Benzene					CAS #: 71-43-2		
5.971	5.979 (0.941)	78	2054332	100.000	100.70	80.00- 120.00	100.00
5.971	5.979 (0.941)	77	490627			0.00- 53.91	23.88
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	545739	100.000	98.533	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	2249088			386.56- 446.56	412.12
6.043	6.043 (0.953)	55	673813			96.75- 156.75	123.47
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	1191168	100.000	106.79	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	361349			0.29- 60.29	30.34
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	766370	100.000	84.823	80.00- 120.00	100.00
6.136	6.136 (0.967)	43	1566408			172.43- 232.43	204.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.136	6.136 (0.967)	57	868198			85.51- 145.51	113.29
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	1000533	100.000	102.04	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	1117081			79.80- 139.80	111.65
6.537	6.537 (1.030)	97	649561			33.64- 93.64	64.92
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	1362602	100.000	93.204	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	641674			16.94- 76.94	47.09
6.645	6.645 (1.047)	55	1338370			65.75- 125.75	98.22
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	915314	100.000	97.145	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	663396			39.62- 99.62	72.48
6.774	6.774 (1.068)	41	576659			30.53- 90.53	63.00
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	529282	100.000	104.58	80.00- 120.00	100.00
6.860	6.860 (1.081)	58	433536			52.00- 112.00	81.91
6.853	6.860 (1.080)	57	147455			0.00- 56.29	27.86
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	1637903	100.000	101.32	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	1058160			34.30- 94.30	64.60
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.375 (1.163)	75	1410783	100.000	104.33	80.00- 120.00	100.00
7.375	7.375 (1.163)	77	449380			2.71- 62.71	31.85
7.375	7.375 (1.163)	39	921692			35.07- 95.07	65.33
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	835137	100.000	100.21	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	2182344			230.95- 290.95	261.32
7.483	7.483 (1.180)	85	312753			7.98- 67.98	37.45
147 Toluene					CAS #: 108-88-3		
7.612	7.619 (1.200)	91	2823205	100.000	98.613	80.00- 120.00	100.00
7.612	7.619 (1.200)	92	1628441			27.38- 87.38	57.68
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	1284575	100.000	102.13	80.00- 120.00	100.00
7.848	7.848 (0.893)	77	406720			2.10- 62.10	31.66
7.848	7.848 (0.893)	39	785885			30.98- 90.98	61.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	978196	100.000	98.482	80.00- 120.00	100.00
8.006	8.006 (0.911)	99	605339			31.34- 91.34	61.88
8.006	8.006 (0.911)	83	832791			57.20- 117.20	85.14
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	1692251	100.000	97.854	80.00- 120.00	100.00
8.049	8.049 (0.916)	129	1109547			35.33- 95.33	65.57
8.049	8.049 (0.916)	131	1096013			35.36- 95.36	64.77
158 2-Hexanone					CAS #: 591-78-6		
8.171	8.170 (0.930)	58	1162059	100.000	106.67	80.00- 120.00	100.00
8.171	8.170 (0.930)	43	2157297			156.39- 216.39	185.64
8.171	8.170 (0.930)	100	209821			0.00- 48.05	18.06
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	2033377	100.000	100.81	80.00- 120.00	100.00
8.314	8.314 (0.946)	127	1594684			48.12- 108.12	78.43
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	1615770	100.000	100.68	80.00- 120.00	100.00
8.428	8.428 (0.959)	109	1517920			63.87- 123.87	93.94
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	2472661	100.000	100.72	80.00- 120.00	100.00
8.808	8.808 (1.002)	114	783223			2.38- 62.38	31.68
8.808	8.808 (1.002)	77	1294066			24.59- 84.59	52.33
167 Ethyl Benzene					CAS #: 100-41-4		
8.865	8.865 (1.009)	106	1242975	100.000	95.675	80.00- 120.00	100.00
8.865	8.865 (1.009)	91	3840416			276.53- 336.53	308.97
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	1549469	100.000	98.374	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	3069277			166.59- 226.59	198.09
171 o-Xylene					CAS #: 95-47-6		
9.295	9.302 (1.058)	106	1474550	100.000	97.429	80.00- 120.00	100.00
9.295	9.302 (1.058)	91	3060841			176.08- 236.08	207.58
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.060)	104	2460174	100.000	110.95	80.00- 120.00	100.00
9.317	9.317 (1.060)	78	1169013			17.58- 77.58	47.52
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	2505354	100.000	101.46	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.082)	171	1287705			21.36- 81.36	51.40
175 Cumene					CAS #: 98-82-8		
9.582	9.589 (1.090)	105	4636048	100.000	96.410	80.00- 120.00	100.00
9.582	9.589 (1.090)	120	1278524			0.00- 57.79	27.58
9.582	9.589 (1.090)	51	522593			0.00- 41.33	11.27
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.882	9.897 (1.125)	83	2256178	100.000	92.980	80.00- 120.00	100.00
9.882	9.897 (1.125)	85	1443290			34.22- 94.22	63.97
182 Propylbenzene					CAS #: 103-65-1		
9.925	9.940 (1.130)	91	5457514	100.000	96.298	80.00- 120.00	100.00
9.925	9.940 (1.130)	120	1337043			0.00- 54.34	24.50
9.925	9.940 (1.130)	105	200352			0.00- 33.54	3.67
188 4-Ethyltoluene					CAS #: 622-96-8		
10.019	10.033 (1.140)	120	1554239	100.000	99.598	80.00- 120.00	100.00
10.019	10.033 (1.140)	105	4875583			279.66- 339.66	313.70
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.083 (1.146)	120	1974854	100.000	101.26	80.00- 120.00	100.00
10.069	10.083 (1.146)	105	3996630			169.72- 229.72	202.38
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.391	10.405 (1.183)	120	1819618	100.000	101.04	80.00- 120.00	100.00
10.391	10.405 (1.183)	105	3936633			185.64- 245.64	216.34
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.692 (1.214)	146	3018110	100.000	97.985	80.00- 120.00	100.00
10.670	10.692 (1.214)	148	1908608			34.23- 94.23	63.24
10.670	10.692 (1.214)	111	1114228			7.40- 67.40	36.92
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.771 (1.223)	146	3032727	100.000	96.943	80.00- 120.00	100.00
10.749	10.771 (1.223)	148	1927076			33.60- 93.60	63.54
10.749	10.771 (1.223)	111	1072114			4.87- 64.87	35.35
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.885 (1.236)	91	3893916	100.000	100.28	80.00- 120.00	100.00
10.864	10.885 (1.236)	126	909867			0.00- 53.22	23.37
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.079	11.100 (1.261)	146	2873037	100.000	97.882	80.00- 120.00	100.00
11.079	11.100 (1.261)	148	1817072			33.66- 93.66	63.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.072	11.100 (1.260)	111	1107949			7.92- 67.92	38.56
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.504 (1.419)	180	2787705	100.000	117.56	80.00- 120.00	100.00
12.468	12.504 (1.419)	182	2660209			66.61- 126.61	95.43
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.569	12.597 (1.430)	225	2369096	100.000	115.02	80.00- 120.00	100.00
12.561	12.597 (1.430)	223	1504969			32.66- 92.66	63.53
228 Naphthalene					CAS #: 91-20-3		
12.733	12.769 (1.449)	128	508976	10.0000	12.716	80.00- 120.00	100.00
12.733	12.769 (1.449)	127	64220			0.00- 42.82	12.62

Report Date: 02-Feb-2016 16:55

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020107.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 100ppbv(200ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	169232	3.51
123 1,4-Difluorobenze	658886	395332	922440	672267	2.03
163 Chlorobenzene-d5	634233	380540	887926	653697	3.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

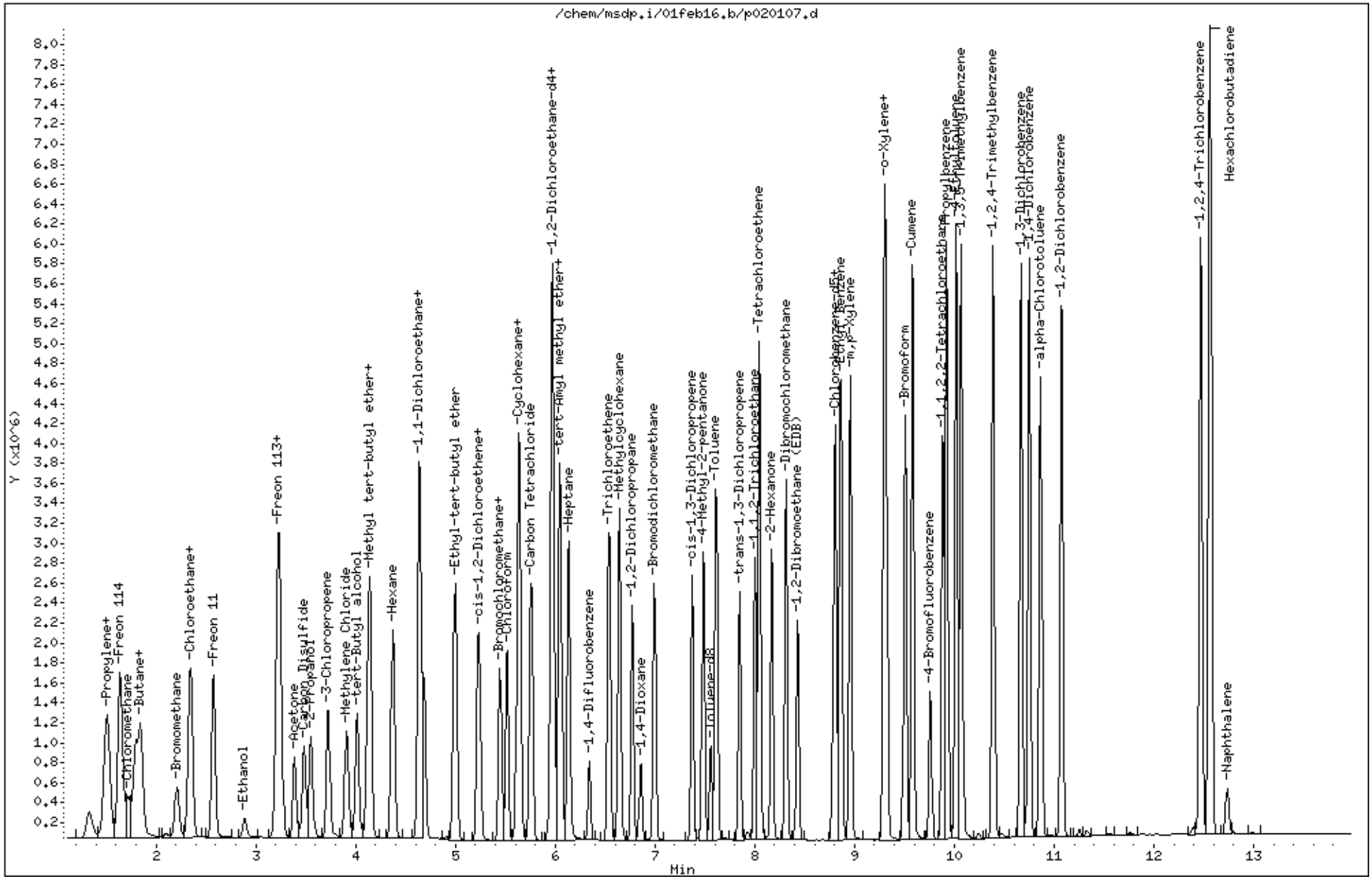
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020107.d
Date : 01-FEB-2016 16:56
Client ID: Level 7
Sample Info: 100ml #2759-209

Instrument: msdp.i

Operator: kl

Column phase: RTX-624
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/18feb16.b/p021807.d
Lab Smp Id: ICAL Level #8
Inj Date : 18-FEB-2016 12:39
Operator : js Inst ID: msdp.i
Smp Info : 200ml 2759-254
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/18feb16.b/p16q0201b.m
Meth Date : 19-Feb-2016 15:31 sblack Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboICALmBP.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
32 Vinyl Bromide					CAS #: 593-60-2			
2.533	2.533 (0.464)	106	924080	200.000	224.54	0.00-	0.00	100.00(A)
2.533	2.533 (0.464)	108	867822			0.00-	0.00	93.91
36 1-Pentene					CAS #: 109-67-1			
2.591	2.591 (0.475)	55	1205037	200.000	208.76	0.00-	0.00	100.00(A)
2.591	2.591 (0.475)	42	1658320			0.00-	0.00	137.62
44 Ethyl Ether					CAS #: 60-29-7			
2.956	2.956 (0.542)	74	449284	200.000	214.11	0.00-	0.00	100.00(TA)
2.956	2.956 (0.542)	59	791868			0.00-	0.00	176.25
0.000	1.000 (0.000)	31	0			0.00-	0.00	0.00
53 Iodomethane					CAS #: 74-88-4			
3.450	3.450 (0.632)	142	2175281	200.000	359.76	0.00-	0.00	100.00(A)
3.450	3.450 (0.632)	127	911454			0.00-	0.00	41.90

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
	59 Cyclopentene					CAS #: 142-29-0		
	3.744	3.744 (0.686)	67	1797218	200.000	218.31	0.00- 0.00	100.00(A)
	3.737	3.737 (0.685)	68	681537			0.00- 0.00	37.92
	3.737	3.737 (0.685)	53	492148			0.00- 0.00	27.38
	64 Cyclopentane					CAS #: 287-92-3		
	3.858	3.858 (0.707)	70	539608	200.000	207.91	0.00- 0.00	100.00(A)
	3.851	3.851 (0.706)	55	982866			0.00- 0.00	182.14
	74 Acrylonitrile					CAS #: 107-13-1		
	4.252	4.252 (0.779)	52	907466	200.000	215.94	0.00- 0.00	100.00(A)
	4.252	4.252 (0.779)	53	1202937			0.00- 0.00	132.56
	76 1-Hexene					CAS #: 592-41-6		
	4.303	4.303 (0.789)	55	936719	200.000	221.11	0.00- 0.00	100.00(A)
	4.303	4.303 (0.789)	41	1431933			0.00- 0.00	152.87
	4.303	4.303 (0.789)	84	269241			0.00- 0.00	28.74
	84 1-Propanol					CAS #: 71-23-8		
	4.768	4.768 (0.874)	59	247763	200.000	205.65	0.00- 0.00	100.00(A)
	4.768	4.768 (0.874)	42	207682			0.00- 0.00	83.82
	4.768	4.768 (0.874)	41	140093			0.00- 0.00	56.54
	90 2,2-Dichloropropane					CAS #: 594-20-7		
	5.191	5.191 (0.951)	77	1892985	200.000	212.21	0.00- 0.00	100.00(A)
	5.191	5.191 (0.951)	79	601308			0.00- 0.00	31.77
	5.191	5.191 (0.951)	97	389774			0.00- 0.00	20.59
	94 Ethyl Acetate					CAS #: 141-78-6		
	5.270	5.270 (0.966)	70	198812	200.000	199.47	0.00- 0.00	100.00
	5.270	5.270 (0.966)	61	331141			0.00- 0.00	166.56
	5.270	5.270 (0.966)	45	391441			0.00- 0.00	196.89
	93 Methyl Acrylate					CAS #: 96-33-3		
	5.313	5.313 (0.974)	55	2283015	200.000	219.23	0.00- 0.00	100.00(A)
	5.313	5.313 (0.974)	85	279702			0.00- 0.00	12.25
	5.313	5.313 (0.974)	58	183218			0.00- 0.00	8.03
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.456	5.456 (1.000)	130	117488	25.0000		80.00- 120.00	100.00
	5.456	5.456 (1.000)	128	93885			49.06- 109.06	79.91
	5.456	5.456 (1.000)	49	184376			124.20- 184.20	156.93
	107 1,1-Dichloropropene					CAS #: 563-58-6		
	5.792	5.792 (0.913)	110	596175	200.000	210.62	0.00- 0.00	100.00(A)
	5.792	5.792 (0.913)	75	1551352			0.00- 0.00	260.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
115 Isobutanol					CAS #: 78-83-1		
5.929	5.929 (0.934)	39	283635	200.000	183.26	0.00- 0.00	100.00
5.929	5.929 (0.934)	43	1044604			0.00- 0.00	368.29
5.929	5.929 (0.934)	41	768211			0.00- 0.00	270.84
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	532545	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	76257			0.00- 44.57	14.32
124 n-Butanol					CAS #: 71-36-3		
6.494	6.494 (1.024)	56	1782018	200.000	208.69	0.00- 0.00	100.00(A)
6.494	6.494 (1.024)	41	1233574			0.00- 0.00	69.22
6.494	6.494 (1.024)	43	984260			0.00- 0.00	55.23
128 Ethyl acrylate					CAS #: 140-88-5		
6.638	6.638 (0.755)	99	126672	200.000	213.29	0.00- 0.00	100.00(A)
6.638	6.638 (0.755)	45	200968			0.00- 0.00	158.65
6.638	6.638 (0.755)	55	2259420			0.00- 0.00	1783.68
131 2-Pentanone					CAS #: 107-87-9		
6.731	6.731 (0.766)	43	2848893	200.000	199.89	0.00- 0.00	100.00
6.731	6.731 (0.766)	58	224023			0.00- 0.00	7.86
6.731	6.731 (0.766)	86	420057			0.00- 0.00	14.74
134 Methyl Methacrylate					CAS #: 80-62-6		
6.831	6.831 (0.777)	41	1396416	200.000	195.12	0.00- 0.00	100.00
6.831	6.831 (0.777)	69	846139			0.00- 0.00	60.59
6.831	6.831 (0.777)	100	322555			0.00- 0.00	23.10
137 Dibromomethane					CAS #: 74-95-3		
6.881	6.881 (0.783)	174	1279212	200.000	202.95	0.00- 0.00	100.00(A)
6.881	6.881 (0.783)	93	959278			0.00- 0.00	74.99
6.881	6.881 (0.783)	95	793038			0.00- 0.00	61.99
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.149	8.149 (1.285)	76	1624942	200.000	197.82	0.00- 0.00	100.00
8.149	8.149 (1.285)	41	1287768			0.00- 0.00	79.25
8.149	8.149 (1.285)	78	521370			0.00- 0.00	32.09
159 Butyl Acetate					CAS #: 123-86-4		
8.235	8.235 (1.298)	56	350146	200.000	136.03	0.00- 0.00	100.00
8.235	8.235 (1.298)	73	115678			0.00- 0.00	33.04
8.235	8.235 (1.298)	43	845068			0.00- 0.00	241.35
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	508928	25.0000		80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 163 Chlorobenzene-d5 (continued)							
8.787	8.787 (1.000)	82	254799			20.36- 80.36	50.07
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.873	8.873 (1.010)	131	1731172	200.000	201.32	0.00- 0.00	100.00(A)
8.873	8.873 (1.010)	117	1124169			0.00- 0.00	64.94
8.873	8.873 (1.010)	95	593696			0.00- 0.00	34.29
173 2-Heptanone					CAS #: 110-43-0		
9.395	9.395 (1.722)	58	1981876	200.000	224.06	0.00- 0.00	100.00(A)
9.388	9.388 (1.721)	43	3188800			0.00- 0.00	160.90
176 Cyclohexanone					CAS #: 108-94-1		
9.746	9.746 (1.109)	55	1421317	200.000	185.63	0.00- 0.00	100.00
9.746	9.746 (1.109)	98	521409			0.00- 0.00	36.68
9.746	9.746 (1.109)	42	968132			0.00- 0.00	68.12
180 Bromobenzene					CAS #: 108-86-1		
9.904	9.904 (1.127)	156	1853299	200.000	201.49	0.00- 0.00	100.00(A)
9.904	9.904 (1.127)	158	1794844			0.00- 0.00	96.85
9.904	9.904 (1.127)	77	2373764			0.00- 0.00	128.08
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.954	9.954 (1.133)	110	702223	200.000	192.38	0.00- 0.00	100.00
9.947	9.947 (1.132)	75	2533000			0.00- 0.00	360.71
9.947	9.947 (1.132)	61	596794			0.00- 0.00	84.99
189 2-Chlorotoluene					CAS #: 95-49-8		
10.047	10.047 (1.143)	126	1350031	200.000	199.66	0.00- 0.00	100.00
10.047	10.047 (1.143)	91	3546322			0.00- 0.00	262.68
10.047	10.047 (1.143)	65	344099			0.00- 0.00	25.49
191 4-Chlorotoluene					CAS #: 106-43-4		
10.140	10.140 (1.154)	126	1332102	200.000	199.74	0.00- 0.00	100.00
10.140	10.140 (1.154)	91	3562220			0.00- 0.00	267.41
10.140	10.140 (1.154)	63	522309			0.00- 0.00	39.21
195 tert-Butylbenzene					CAS #: 98-06-6		
10.355	10.355 (1.179)	119	3921652	200.000	196.82	0.00- 0.00	100.00
10.355	10.355 (1.179)	134	1056675			0.00- 0.00	26.94
10.355	10.355 (1.179)	91	2529244			0.00- 0.00	64.49
197 Pentachloroethane					CAS #: 76-01-7		
10.420	10.420 (1.186)	167	1475765	200.000	208.16	0.00- 0.00	100.00(A)
10.420	10.420 (1.186)	117	1254290			0.00- 0.00	84.99
10.420	10.420 (1.186)	169	712172			0.00- 0.00	48.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
203 sec-Butylbenzene					CAS #: 135-98-8			
10.542	10.542 (1.200)	134	1317572	200.000	195.95	0.00-	0.00	100.00
10.542	10.542 (1.200)	105	5920588			0.00-	0.00	449.36
10.542	10.542 (1.200)	91	890104			0.00-	0.00	67.56
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
10.613	10.613 (1.208)	93	2683745	200.000	201.68	0.00-	0.00	100.00(A)
10.613	10.613 (1.208)	95	821882			0.00-	0.00	30.62
207 p-Cymene					CAS #: 99-87-6			
10.656	10.656 (1.213)	119	5038493	200.000	199.36	0.00-	0.00	100.00
10.656	10.656 (1.213)	134	1452422			0.00-	0.00	28.83
10.656	10.656 (1.213)	91	1152072			0.00-	0.00	22.87
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
10.778	10.778 (1.227)	120	1896904	200.000	202.95	0.00-	0.00	100.00(A)
10.778	10.778 (1.227)	105	4389029			0.00-	0.00	231.38
10.778	10.778 (1.227)	77	494199			0.00-	0.00	26.05
213 Butylbenzene					CAS #: 104-51-8			
11.007	11.007 (1.253)	134	1382898	200.000	204.85	0.00-	0.00	100.00(A)
11.007	11.007 (1.253)	91	4649035			0.00-	0.00	336.18
11.007	11.007 (1.253)	92	2450580			0.00-	0.00	177.21
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8			
11.774	11.774 (1.340)	157	1925657	200.000	204.22	0.00-	0.00	100.00(A)
11.774	11.774 (1.340)	75	1367828			0.00-	0.00	71.03
11.774	11.774 (1.340)	155	1501792			0.00-	0.00	77.99

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Report Date: 19-Feb-2016 15:31

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p021807.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/18feb16.b/p16q0201b.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 18-FEB-2016
Calibration Time: 10:16
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	123808	74285	173331	117488	-5.10
123 1,4-Difluorobenze	495497	297298	693696	532545	7.48
163 Chlorobenzene-d5	461299	276779	645819	508928	10.32

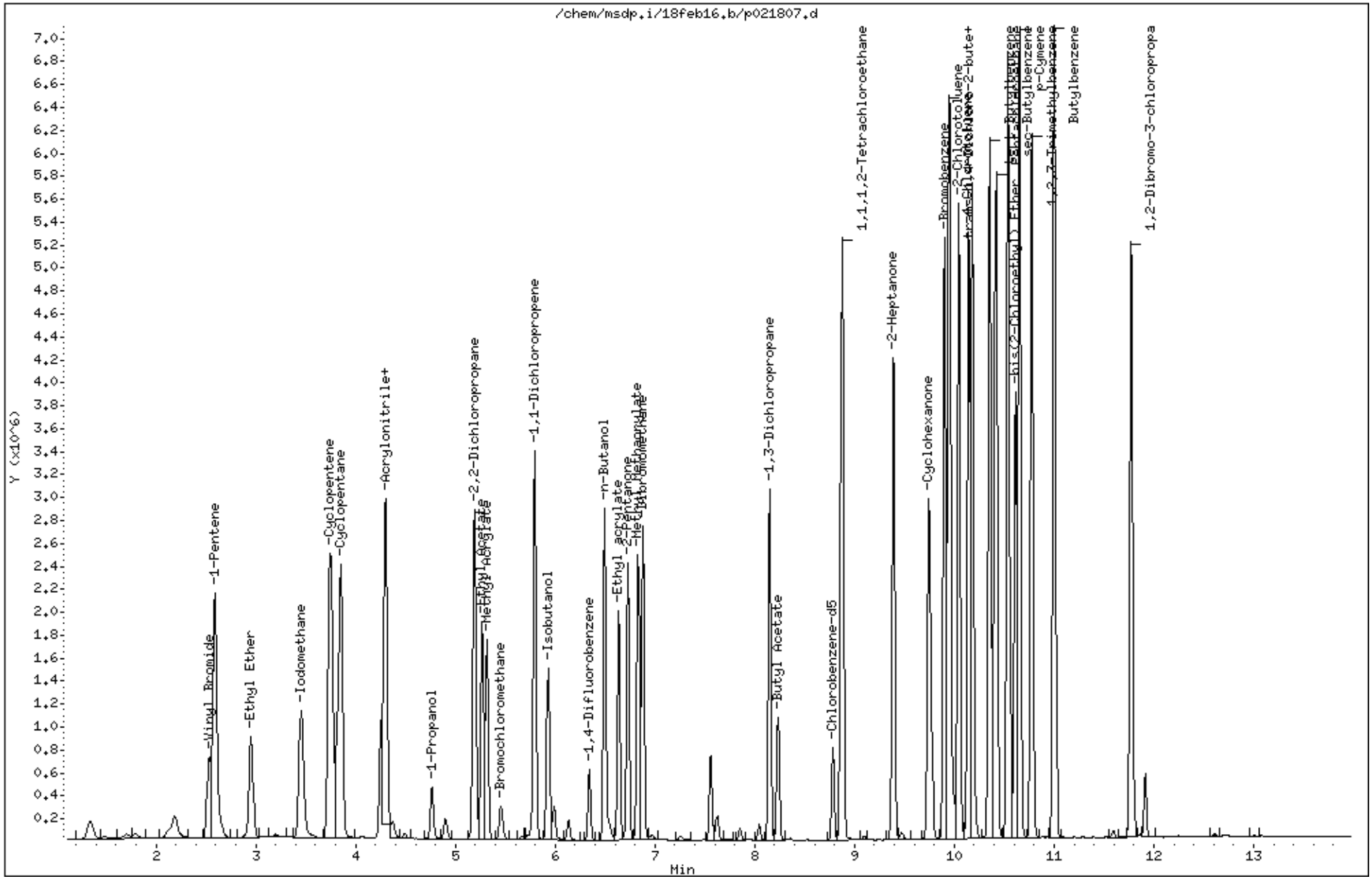
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/18feb16.b/p021807.d
Date : 18-FEB-2016 12:39
Client ID:
Sample Info: 200ml 2759-254

Instrument: msdp.i
Operator: js
Column diameter: 0.25

Column phase: RTX-624



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/01feb16.b/p020108.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 01-FEB-2016 17:22
Operator : kl Inst ID: msdp.i
Smp Info : 200ml #2759-209
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/01feb16.b/p16q0201a.m
Meth Date : 02-Feb-2016 12:36 sblack Quant Type: ISTD
Cal Date : 01-FEB-2016 17:22 Cal File: p020108.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.463	5.463 (1.000)	130	172028	25.0000		80.00- 120.00	100.00
5.463	5.463 (1.000)	128	132537			49.06- 109.06	77.04
5.456	5.463 (1.000)	49	239539			124.20- 184.20	139.24
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	684037	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	103701			0.00- 44.57	15.16
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.787	8.787 (1.000)	117	665852	25.0000		80.00- 120.00	100.00
8.787	8.787 (1.000)	82	343886			20.36- 80.36	51.65
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.993	5.993 (1.097)	65	275752	25.0000	27.163	80.00- 120.00	100.00
5.993	5.993 (1.097)	67	204367			26.68- 86.68	74.11

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.562	7.562 (1.192)	98	693676	25.0000	25.382	80.00- 120.00	100.00
7.562	7.562 (1.192)	70	74149			0.00- 40.62	10.69
7.562	7.562 (1.192)	100	463213			36.74- 96.74	66.78
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.768 (1.112)	174	544892	25.0000	25.374	80.00- 120.00	100.00
9.768	9.768 (1.112)	95	528761			65.95- 125.95	97.04
9.768	9.768 (1.112)	176	537230			65.80- 125.80	98.59
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	1420471	200.000	195.76	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	957539			34.60- 94.60	67.41
1.479	1.479 (0.271)	39	1059486			43.23- 103.23	74.59
11 Freon 12					CAS #: 75-71-8		
1.521	1.521 (0.278)	85	3938910	200.000	205.82	80.00- 120.00	100.00(A)
1.521	1.521 (0.278)	87	1272762			1.76- 61.76	32.31
15 Freon 114					CAS #: 76-14-2		
1.646	1.646 (0.301)	135	3056275	200.000	206.70	80.00- 120.00	100.00(A)
1.646	1.646 (0.301)	137	971153			2.23- 62.23	31.78
17 Chloromethane					CAS #: 74-87-3		
1.730	1.730 (0.317)	50	1286001	200.000	201.77	80.00- 120.00	100.00(A)
1.730	1.730 (0.317)	52	425946			0.00- 59.98	33.12
23 Butane					CAS #: 106-97-8		
1.800	1.800 (0.330)	58	403332	200.000	205.78	80.00- 120.00	100.00(A)
1.800	1.800 (0.330)	43	2987808			783.10- 843.10	740.78
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	1826052	200.000	214.29	80.00- 120.00	100.00(A)
1.828	1.828 (0.335)	64	604978			5.16- 65.16	33.13
26 1,3-Butadiene					CAS #: 106-99-0		
1.856	1.856 (0.340)	54	1379469	200.000	196.28	80.00- 120.00	100.00
1.856	1.856 (0.340)	39	1819564			81.92- 141.92	131.90
29 Bromomethane					CAS #: 74-83-9		
2.211	2.211 (0.405)	94	1167195	200.000	235.71	80.00- 120.00	100.00(A)
2.211	2.211 (0.405)	96	1106076			65.10- 125.10	94.76
30 Chloroethane					CAS #: 75-00-3		
2.325	2.325 (0.426)	64	785432	200.000	205.09	80.00- 120.00	100.00(A)
2.325	2.325 (0.426)	66	239488			0.00- 59.99	30.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.325	2.325 (0.426)	49	271749			5.85- 65.85	34.60
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	2145751	200.000	199.48	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	1420239			36.22- 96.22	66.19
35 Freon 11					CAS #: 75-69-4		
2.576	2.576 (0.472)	101	4052230	200.000	203.18	80.00- 120.00	100.00(A)
2.576	2.576 (0.472)	103	2598188			34.50- 94.50	64.12
42 Ethanol					CAS #: 64-17-5		
2.891	2.891 (0.529)	45	729017	200.000	222.77	80.00- 120.00	100.00(A)
2.891	2.891 (0.529)	43	147887			0.00- 50.77	20.29
2.891	2.891 (0.529)	46	280975			8.68- 68.68	38.54
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	3077875	200.000	193.52	80.00- 120.00	100.00
3.221	3.221 (0.590)	153	1982551			33.45- 93.45	64.41
3.221	3.221 (0.590)	101	3274720			74.36- 134.36	106.40
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.249	3.249 (0.595)	98	894674	200.000	203.51	80.00- 120.00	100.00(A)
3.249	3.249 (0.595)	96	1418027			133.60- 193.60	158.50
3.249	3.249 (0.595)	61	2921935			302.57- 362.57	326.59
52 Acetone					CAS #: 67-64-1		
3.393	3.393 (0.621)	58	803392	200.000	177.15	80.00- 120.00	100.00
3.393	3.393 (0.621)	43	2847990			323.05- 383.05	354.50
56 Carbon Disulfide					CAS #: 75-15-0		
3.486	3.486 (0.638)	76	3932321	200.000	200.51	80.00- 120.00	100.00(A)
57 2-Propanol					CAS #: 67-63-0		
3.557	3.557 (0.651)	45	3313300	200.000	171.24	80.00- 120.00	100.00
3.557	3.557 (0.651)	43	687063			0.00- 49.72	20.74
3.557	3.557 (0.651)	59	121752			0.00- 33.36	3.67
58 3-Chloropropene					CAS #: 107-05-1		
3.729	3.729 (0.683)	76	665568	200.000	203.39	80.00- 120.00	100.00(A)
3.729	3.729 (0.683)	41	2415933			339.09- 399.09	362.99
66 Methylene Chloride					CAS #: 75-09-2		
3.908	3.908 (0.715)	49	2270733	200.000	212.48	80.00- 120.00	100.00(A)
3.908	3.908 (0.715)	84	1262932			25.63- 85.63	55.62
3.908	3.908 (0.715)	51	678034			0.46- 60.46	29.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.016	4.016 (0.735)	59	3925817	200.000	200.19	80.00- 120.00	100.00(A)
4.016	4.016 (0.735)	41	823364			0.00- 51.45	20.97
4.023	4.016 (0.736)	57	437411			0.00- 41.07	11.14
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.131	4.131 (0.756)	73	4174670	200.000	195.83	80.00- 120.00	100.00
4.131	4.131 (0.756)	57	1220850			0.00- 59.13	29.24
4.131	4.131 (0.756)	41	1182477			0.00- 58.91	28.33
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.760)	98	944350	200.000	215.19	80.00- 120.00	100.00(A)
4.152	4.152 (0.760)	61	2618135			242.97- 302.97	277.24
4.152	4.152 (0.760)	96	1479061			127.33- 187.33	156.62
78 Hexane					CAS #: 110-54-3		
4.374	4.374 (0.801)	57	2903091	200.000	201.50	80.00- 120.00	100.00(A)
4.374	4.374 (0.801)	43	1887209			34.30- 94.30	65.01
4.374	4.374 (0.801)	86	359921			0.00- 42.17	12.40
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.646	4.646 (0.851)	63	3081279	200.000	210.74	80.00- 120.00	100.00(A)
4.646	4.646 (0.851)	65	911545			0.09- 60.09	29.58
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.849)	45	6358388	200.000	199.87	80.00- 120.00	100.00
4.639	4.639 (0.849)	87	1294742			0.00- 51.39	20.36
4.639	4.639 (0.849)	59	671476			0.00- 40.68	10.56
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.858)	86	398975	200.000	207.50	80.00- 120.00	100.00(A)
4.689	4.689 (0.858)	43	5969731			1535.12-1595.12	1496.27
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.915)	59	5951714	200.000	201.70	80.00- 120.00	100.00(A)
4.997	4.997 (0.915)	87	1959482			4.09- 64.09	32.92
4.997	4.997 (0.915)	41	1113847			0.00- 49.07	18.71
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.957)	98	981005	200.000	199.74	80.00- 120.00	100.00
5.226	5.226 (0.957)	96	1535969			125.21- 185.21	156.57
5.226	5.226 (0.957)	61	2442032			211.41- 271.41	248.93
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.961)	72	734870	200.000	197.50	80.00- 120.00	100.00
5.248	5.248 (0.961)	43	3755497			452.15- 512.15	511.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.961)	57	296608			9.54- 69.54	40.36
99 Tetrahydrofuran					CAS #: 109-99-9		
5.449	5.449 (0.997)	42	2061224	200.000	207.12	80.00- 120.00	100.00(A)
5.449	5.449 (0.997)	71	659658			2.09- 62.09	32.00
5.449	5.449 (0.997)	72	687852			3.61- 63.61	33.37
100 Chloroform					CAS #: 67-66-3		
5.520	5.520 (1.010)	83	3098995	200.000	203.59	80.00- 120.00	100.00(A)
5.520	5.520 (1.010)	85	2016375			35.60- 95.60	65.07
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.030)	84	1981341	200.000	185.26	80.00- 120.00	100.00
5.628	5.628 (1.030)	56	2936433			115.43- 175.43	148.20
5.628	5.628 (1.030)	41	1654887			53.65- 113.65	83.52
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.649	5.649 (1.034)	97	3351977	200.000	193.02	80.00- 120.00	100.00
5.649	5.649 (1.034)	99	2158179			33.21- 93.21	64.39
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.764	5.764 (1.055)	119	3605251	200.000	200.05	80.00- 120.00	100.00(A)
5.764	5.764 (1.055)	117	3744352			76.21- 136.21	103.86
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.964 (1.092)	57	9361522	200.000	198.18	80.00- 120.00	100.00
5.964	5.964 (1.092)	56	2935903			1.10- 61.10	31.36
5.964	5.964 (1.092)	41	2548439			0.00- 57.08	27.22
116 Benzene					CAS #: 71-43-2		
5.979	5.979 (0.942)	78	4277871	200.000	205.20	80.00- 120.00	100.00(A)
5.979	5.979 (0.942)	77	1020444			0.00- 53.91	23.85
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	1125825	200.000	199.81	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	4622948			386.56- 446.56	410.63
6.043	6.043 (0.953)	55	1419067			96.75- 156.75	126.05
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	2489418	200.000	216.35	80.00- 120.00	100.00(A)
6.057	6.057 (0.955)	64	763005			0.29- 60.29	30.65
121 Heptane					CAS #: 142-82-5		
6.136	6.136 (0.967)	71	1584678	200.000	175.84	80.00- 120.00	100.00
6.136	6.136 (0.967)	43	3276026			172.43- 232.43	206.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.136	6.136 (0.967)	57	1833657			85.51- 145.51	115.71
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	2082485	200.000	207.44	80.00- 120.00	100.00(A)
6.537	6.537 (1.030)	130	2317894			79.80- 139.80	111.30
6.537	6.537 (1.030)	97	1352626			33.64- 93.64	64.95
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	2800681	200.000	189.86	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	1312712			16.94- 76.94	46.87
6.645	6.645 (1.047)	55	2789452			65.75- 125.75	99.60
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.774 (1.068)	63	1904759	200.000	198.87	80.00- 120.00	100.00
6.774	6.774 (1.068)	62	1341078			39.62- 99.62	70.41
6.774	6.774 (1.068)	41	1194682			30.53- 90.53	62.72
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	1080093	200.000	208.06	80.00- 120.00	100.00(A)
6.860	6.860 (1.081)	58	892152			52.00- 112.00	82.60
6.860	6.860 (1.081)	57	296786			0.00- 56.29	27.48
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	3429541	200.000	207.25	80.00- 120.00	100.00(A)
6.996	6.996 (1.103)	85	2191722			34.30- 94.30	63.91
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.375	7.375 (1.163)	75	2945894	200.000	211.98	80.00- 120.00	100.00(A)
7.375	7.375 (1.163)	77	925058			2.71- 62.71	31.40
7.375	7.375 (1.163)	39	1945237			35.07- 95.07	66.03
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	1736206	200.000	204.05	80.00- 120.00	100.00(A)
7.483	7.483 (1.180)	43	4568958			230.95- 290.95	263.16
7.483	7.483 (1.180)	85	649757			7.98- 67.98	37.42
147 Toluene					CAS #: 108-88-3		
7.619	7.619 (1.201)	91	5849954	200.000	200.70	80.00- 120.00	100.00(A)
7.619	7.619 (1.201)	92	3361034			27.38- 87.38	57.45
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.893)	75	2673257	200.000	207.38	80.00- 120.00	100.00(A)
7.848	7.848 (0.893)	77	838621			2.10- 62.10	31.37
7.848	7.848 (0.893)	39	1677291			30.98- 90.98	62.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.006	8.006 (0.911)	97	1991104	200.000	197.25	80.00- 120.00	100.00
8.006	8.006 (0.911)	99	1230202			31.34- 91.34	61.78
8.006	8.006 (0.911)	83	1704689			57.20- 117.20	85.62
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.916)	166	3524879	200.000	200.09	80.00- 120.00	100.00(A)
8.049	8.049 (0.916)	129	2280156			35.33- 95.33	64.69
8.049	8.049 (0.916)	131	2281342			35.36- 95.36	64.72
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.930)	58	2411549	200.000	214.68	80.00- 120.00	100.00(A)
8.170	8.170 (0.930)	43	4490249			156.39- 216.39	186.20
8.170	8.170 (0.930)	100	426950			0.00- 48.05	17.70
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.946)	129	4206293	200.000	204.04	80.00- 120.00	100.00(A)
8.314	8.314 (0.946)	127	3292227			48.12- 108.12	78.27
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.959)	107	3301008	200.000	201.65	80.00- 120.00	100.00(A)
8.428	8.428 (0.959)	109	3112835			63.87- 123.87	94.30
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.002)	112	5068588	200.000	202.30	80.00- 120.00	100.00(A)
8.808	8.808 (1.002)	114	1619579			2.38- 62.38	31.95
8.808	8.808 (1.002)	77	2706061			24.59- 84.59	53.39
167 Ethyl Benzene					CAS #: 100-41-4		
8.865	8.865 (1.009)	106	2567344	200.000	194.84	80.00- 120.00	100.00
8.865	8.865 (1.009)	91	7940717			276.53- 336.53	309.30
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	3184176	200.000	198.69	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	6313772			166.59- 226.59	198.29
171 o-Xylene					CAS #: 95-47-6		
9.302	9.302 (1.059)	106	3038864	200.000	197.53	80.00- 120.00	100.00
9.302	9.302 (1.059)	91	6361386			176.08- 236.08	209.33
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.060)	104	5162741	200.000	224.02	80.00- 120.00	100.00(A)
9.317	9.317 (1.060)	78	2485558			17.58- 77.58	48.14
174 Bromoform					CAS #: 75-25-2		
9.510	9.510 (1.082)	173	5265079	200.000	207.94	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.082)	171	2701387			21.36- 81.36	51.31
175 Cumene					CAS #: 98-82-8		
9.589	9.589 (1.091)	105	9462437	200.000	194.13	80.00- 120.00	100.00
9.589	9.589 (1.091)	120	2606633			0.00- 57.79	27.55
9.589	9.589 (1.091)	51	1081514			0.00- 41.33	11.43
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.897	9.897 (1.126)	83	4585438	200.000	187.46	80.00- 120.00	100.00
9.897	9.897 (1.126)	85	2956612			34.22- 94.22	64.48
182 Propylbenzene					CAS #: 103-65-1		
9.940	9.940 (1.131)	91	10967466	200.000	191.36	80.00- 120.00	100.00
9.940	9.940 (1.131)	120	2672585			0.00- 54.34	24.37
9.940	9.940 (1.131)	105	401264			0.00- 33.54	3.66
188 4-Ethyltoluene					CAS #: 622-96-8		
10.033	10.033 (1.142)	120	2960056	200.000	188.07	80.00- 120.00	100.00
10.033	10.033 (1.142)	105	9462506			279.66- 339.66	319.67
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.083	10.083 (1.148)	120	4103390	200.000	205.59	80.00- 120.00	100.00(A)
10.083	10.083 (1.148)	105	8471296			169.72- 229.72	206.45
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.405	10.405 (1.184)	120	3704298	200.000	201.66	80.00- 120.00	100.00(A)
10.405	10.405 (1.184)	105	7970917			185.64- 245.64	215.18
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.692	10.692 (1.217)	146	6179899	200.000	197.40	80.00- 120.00	100.00
10.692	10.692 (1.217)	148	3944062			34.23- 94.23	63.82
10.692	10.692 (1.217)	111	2254665			7.40- 67.40	36.48
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.771	10.771 (1.226)	146	6214967	200.000	195.73	80.00- 120.00	100.00
10.771	10.771 (1.226)	148	3965414			33.60- 93.60	63.80
10.771	10.771 (1.226)	111	2199116			4.87- 64.87	35.38
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.885	10.885 (1.239)	91	8023624	200.000	202.44	80.00- 120.00	100.00(A)
10.885	10.885 (1.239)	126	1849305			0.00- 53.22	23.05
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.100	11.100 (1.263)	146	5902795	200.000	197.80	80.00- 120.00	100.00
11.100	11.100 (1.263)	148	3735008			33.66- 93.66	63.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.100	11.100 (1.263)	111	2248424			7.92- 67.92	38.09
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.504	12.504 (1.423)	180	6175552	200.000	244.34	80.00- 120.00	100.00(A)
12.504	12.504 (1.423)	182	5928142			66.61- 126.61	95.99
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.597	12.597 (1.434)	225	5420698	200.000	246.39	80.00- 120.00	100.00(A)
12.597	12.597 (1.434)	223	3410317			32.66- 92.66	62.91
228 Naphthalene					CAS #: 91-20-3		
12.769	12.769 (1.453)	128	1125202	20.0000	25.955	80.00- 120.00	100.00(A)
12.769	12.769 (1.453)	127	144265			0.00- 42.82	12.82

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p020108.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: kl
Method File: /chem/msdp.i/01feb16.b/p16q0201a.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 01-FEB-2016
Calibration Time: 16:31
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	163500	98100	228900	172028	5.22
123 1,4-Difluorobenze	658886	395332	922440	684037	3.82
163 Chlorobenzene-d5	634233	380540	887926	665852	4.99

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.79	8.46	9.12	8.79	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/01feb16.b/p020108.d

Date : 01-FEB-2016 17:22

Client ID: Level 8

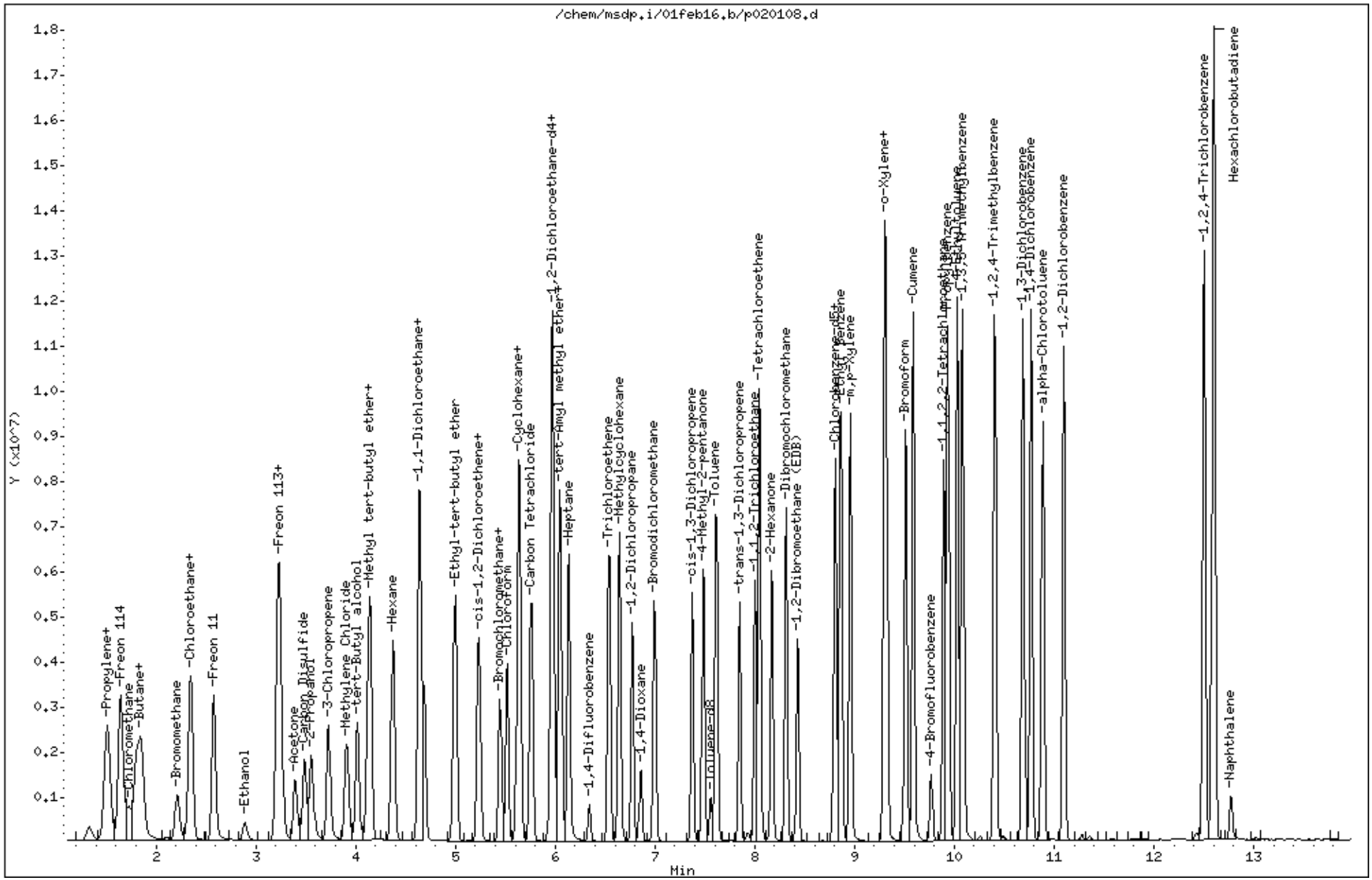
Sample Info: 200ml #2759-209

Column phase: RTX-624

Instrument: msdp.i

Operator: kl

Column diameter: 0.25



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Client Sample ID: CCV

Lab ID#: 1603115-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/16/16 10:10 AM**	

Compound	%Recovery
Vinyl Chloride	111
Acetone	98
trans-1,2-Dichloroethene	108
cis-1,2-Dichloroethene	102
Methylene Chloride	125
Chloroform	105
Cyclohexane	92
Benzene	100
Trichloroethene	102
Toluene	98
Ethyl Benzene	98
m,p-Xylene	98
o-Xylene	97
Cumene	97
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	100
1,2,3-Trimethylbenzene	99
Naphthalene	104
Methylcyclohexane	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 16-MAR-2016 10:10
Lab File ID: p031602.d Init. Cal. Date(s): 01-FEB-2016 18-FEB-2016
Analysis Type: AIR Init. Cal. Times: 14:10 12:39
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/16mar16.b/p16q0201b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 117 1,2-Dichloroethane-d4	1.47532	1.58141	0.010	-7.19108	30.00000	Averaged	
$ 146 Toluene-d8	0.99883	1.01994	0.010	-2.11328	30.00000	Averaged	
$ 177 4-Bromofluorobenzene	0.80627	0.80730	0.010	-0.12773	30.00000	Averaged	
9 Propylene	1.05449	1.19881	0.010	-13.68623	30.00000	Averaged	
11 Freon 12	2.78114	2.86859	0.010	-3.14434	30.00000	Averaged	
15 Freon 114	2.14877	2.27262	0.010	-5.76391	30.00000	Averaged	
17 Chloromethane	0.92625	1.37224	0.010	-48.15114	30.00000	Averaged	<-
23 Butane	0.28484	0.26614	0.010	6.56614	30.00000	Averaged	
25 Vinyl Chloride	1.23835	1.37037	0.010	-10.66129	30.00000	Averaged	
26 1,3-Butadiene	1.02133	1.14955	0.010	-12.55411	30.00000	Averaged	
29 Bromomethane	0.71963	0.84351	0.010	-17.21441	30.00000	Averaged	
30 Chloroethane	0.55654	0.59030	0.010	-6.06459	30.00000	Averaged	
31 Isopentane	1.56326	1.80618	0.010	-15.53930	40.00000	Averaged	
35 Freon 11	2.89832	3.06091	0.010	-5.60966	30.00000	Averaged	
42 Ethanol	0.47557	0.62120	0.010	-30.62117	30.00000	Averaged	<-
49 Freon 113	2.31140	2.31211	0.010	-0.03071	30.00000	Averaged	
50 1,1-Dichloroethene	0.63887	0.64785	0.010	-1.40558	30.00000	Averaged	
52 Acetone	0.65908	0.64784	0.010	1.70514	30.00000	Averaged	
56 Carbon Disulfide	2.85001	2.84029	0.010	0.34100	30.00000	Averaged	
57 2-Propanol	2.81191	2.87498	0.010	-2.24299	30.00000	Averaged	
58 3-Chloropropene	0.47556	0.46892	0.010	1.39567	30.00000	Averaged	
66 Methylene Chloride	1.55304	1.94774	0.010	-25.41468	30.00000	Averaged	
71 tert-Butyl alcohol	2.84984	2.91494	0.010	-2.28451	30.00000	Averaged	
72 Methyl tert-butyl ether	3.09794	2.90799	0.010	6.13142	30.00000	Averaged	
73 trans-1,2-Dichloroethene	0.63775	0.68609	0.010	-7.57872	30.00000	Averaged	
78 Hexane	2.09372	2.22641	0.010	-6.33793	30.00000	Averaged	
82 1,1-Dichloroethane	2.12479	2.32516	0.010	-9.43051	30.00000	Averaged	
83 Isopropyl ether	4.62310	5.39713	0.010	-16.74271	30.00000	Averaged	
86 Vinyl Acetate	0.27943	0.27519	0.010	1.51822	40.00000	Averaged	
88 Ethyl-tert-butyl ether	4.28811	4.47222	0.010	-4.29348	40.00000	Averaged	
91 cis-1,2-Dichloroethene	0.71375	0.72991	0.010	-2.26521	30.00000	Averaged	
92 2-Butanone	0.54074	0.51566	0.010	4.63669	30.00000	Averaged	
99 Tetrahydrofuran	1.44623	1.80425	0.010	-24.75585	30.00000	Averaged	
100 Chloroform	2.21211	2.32733	0.010	-5.20870	30.00000	Averaged	
102 Cyclohexane	1.55425	1.42785	0.010	8.13264	30.00000	Averaged	
103 1,1,1-Trichloroethane	2.52377	2.50945	0.010	0.56754	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 16-MAR-2016 10:10
Lab File ID: p031602.d Init. Cal. Date(s): 01-FEB-2016 18-FEB-2016
Analysis Type: AIR Init. Cal. Times: 14:10 12:39
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/16mar16.b/p16q0201b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
106 Carbon Tetrachloride	2.61905	2.73882	0.010	-4.57287	30.00000	Averaged
113 2,2,4-Trimethylpentane	6.86465	7.55541	0.010	-10.06248	30.00000	Averaged
116 Benzene	0.76192	0.75871	0.010	0.42183	30.00000	Averaged
119 tert-Amyl methyl ether	0.20593	0.19832	0.010	3.69539	30.00000	Averaged
120 1,2-Dichloroethane	0.42054	0.47240	0.010	-12.33295	30.00000	Averaged
121 Heptane	0.32936	0.27229	0.010	17.32856	30.00000	Averaged
125 Trichloroethene	0.36691	0.37639	0.010	-2.58334	30.00000	Averaged
127 Methylcyclohexane	0.53911	0.49056	0.010	9.00518	30.00000	Averaged
132 1,2-Dichloropropane	0.35006	0.36871	0.010	-5.32943	30.00000	Averaged
136 1,4-Dioxane	0.18973	0.18268	0.010	3.71400	30.00000	Averaged
138 Bromodichloromethane	0.60480	0.61927	0.010	-2.39224	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.50792	0.51057	0.010	-0.52349	30.00000	Averaged
145 4-Methyl-2-pentanone	0.31097	0.34100	0.010	-9.65892	30.00000	Averaged
147 Toluene	1.06527	1.05016	0.010	1.41836	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.48399	0.50950	0.010	-5.27007	30.00000	Averaged
155 1,1,2-Trichloroethane	0.37900	0.38459	0.010	-1.47527	30.00000	Averaged
156 Tetrachloroethene	0.66143	0.67603	0.010	-2.20731	30.00000	Averaged
158 2-Hexanone	0.42177	0.48393	0.010	-14.73794	30.00000	Averaged
160 Dibromochloromethane	0.77402	0.81155	0.010	-4.84827	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.61462	0.63430	0.010	-3.20241	30.00000	Averaged
165 Chlorobenzene	0.94071	0.96296	0.010	-2.36474	30.00000	Averaged
167 Ethyl Benzene	0.49472	0.48540	0.010	1.88416	30.00000	Averaged
169 m,p-Xylene	0.60171	0.59283	0.010	1.47555	30.00000	Averaged
171 o-Xylene	0.57762	0.55977	0.010	3.08924	30.00000	Averaged
172 Styrene	0.86529	0.89194	0.010	-3.07899	30.00000	Averaged
174 Bromoform	0.95064	0.96824	0.010	-1.85068	30.00000	Averaged
175 Cumene	1.83008	1.78428	0.010	2.50247	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	0.91840	0.89422	0.010	2.63351	30.00000	Averaged
182 Propylbenzene	2.15190	2.12878	0.010	1.07433	30.00000	Averaged
188 4-Ethyltoluene	0.59093	0.55572	0.010	5.95768	30.00000	Averaged
190 1,3,5-Trimethylbenzene	0.74937	0.76393	0.010	-1.94293	30.00000	Averaged
196 1,2,4-Trimethylbenzene	0.68967	0.68906	0.010	0.08873	30.00000	Averaged
208 1,3-Dichlorobenzene	1.17544	1.17628	0.010	-0.07157	30.00000	Averaged
209 1,4-Dichlorobenzene	1.19217	1.18086	0.010	0.94864	30.00000	Averaged
212 alpha-Chlorotoluene	1.48810	1.46928	0.010	1.26479	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 16-MAR-2016 10:10
Lab File ID: p031602.d Init. Cal. Date(s): 01-FEB-2016 18-FEB-2016
Analysis Type: AIR Init. Cal. Times: 14:10 12:39
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/16mar16.b/p16q0201b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
214 1,2-Dichlorobenzene	1.12048	1.12388	0.010	-0.30349	30.00000	Averaged
226 1,2,4-Trichlorobenzene	0.94896	1.02493	0.010	-8.00477	30.00000	Averaged
227 Hexachlorobutadiene	0.82602	0.90091	0.010	-9.06615	30.00000	Averaged
228 Naphthalene	1.62768	1.69788	0.010	-4.31326	40.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031602.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 16-MAR-2016 10:10
Operator : js Inst ID: msdp.i
Smp Info : 100mL #2759-209A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 13:01 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.449	5.449 (1.000)	130	119129	25.0000		80.00- 120.00	100.00
5.449	5.449 (1.000)	128	94596			49.06- 109.06	79.41
5.449	5.449 (1.000)	49	222228			124.20- 184.20	186.54
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	491164	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	69051			0.00- 44.57	14.06
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	462293	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	236975			20.36- 80.36	51.26
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.099)	65	188392	25.0000	26.798	80.00- 120.00	100.00
5.986	5.986 (1.099)	67	99979			26.68- 86.68	53.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	500959	25.0000	25.528	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	56090			0.00- 40.62	11.20
7.554	7.554 (1.191)	100	338261			36.74- 96.74	67.52
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	373211	25.0000	25.032	80.00- 120.00	100.00
9.761	9.761 (1.112)	95	350035			65.95- 125.95	93.79
9.761	9.761 (1.112)	176	363575			65.80- 125.80	97.42
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	285627	50.0000	56.843	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	190820			34.60- 94.60	66.81
1.479	1.479 (0.271)	39	209393			43.23- 103.23	73.31
11 Freon 12					CAS #: 75-71-8		
1.507	1.507 (0.276)	85	683464	50.0000	51.572	80.00- 120.00	100.00
1.507	1.507 (0.276)	87	215099			1.76- 61.76	31.47
15 Freon 114					CAS #: 76-14-2		
1.632	1.632 (0.300)	135	541471	50.0000	52.882	80.00- 120.00	100.00
1.632	1.632 (0.300)	137	169896			2.23- 62.23	31.38
17 Chloromethane					CAS #: 74-87-3		
1.730	1.730 (0.318)	50	326948	50.0000	74.076	80.00- 120.00	100.00
1.730	1.730 (0.318)	52	102879			0.00- 59.98	31.47
23 Butane					CAS #: 106-97-8		
1.786	1.786 (0.328)	58	63410	50.0000	46.717	80.00- 120.00	100.00
1.786	1.786 (0.328)	43	551451			783.10- 843.10	869.66
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.336)	62	326502	50.0000	55.331	80.00- 120.00	100.00
1.828	1.828 (0.336)	64	111562			5.16- 65.16	34.17
26 1,3-Butadiene					CAS #: 106-99-0		
1.842	1.842 (0.338)	54	273890	50.0000	56.277	80.00- 120.00	100.00
1.842	1.842 (0.338)	39	364108			81.92- 141.92	132.94
29 Bromomethane					CAS #: 74-83-9		
2.204	2.204 (0.404)	94	200974	50.0000	58.607	80.00- 120.00	100.00
2.204	2.204 (0.404)	96	185703			65.10- 125.10	92.40
30 Chloroethane					CAS #: 75-00-3		
2.318	2.318 (0.425)	64	140643	50.0000	53.032	80.00- 120.00	100.00
2.318	2.318 (0.425)	66	40194			0.00- 59.99	28.58

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.318	2.318 (0.425)	49	55895			5.85- 65.85	39.74
31 Isopentane					CAS #: 78-78-4		
2.340	2.340 (0.429)	43	430337	50.0000	57.770	80.00- 120.00	100.00
2.340	2.340 (0.429)	57	261835			36.22- 96.22	60.84
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	729286	50.0000	52.805	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	461922			34.50- 94.50	63.34
42 Ethanol					CAS #: 64-17-5		
2.884	2.884 (0.529)	45	148005	50.0000	65.310	80.00- 120.00	100.00
2.877	2.877 (0.528)	43	30673			0.00- 50.77	20.72
2.884	2.884 (0.529)	46	54630			8.68- 68.68	36.91
49 Freon 113					CAS #: 76-13-1		
3.214	3.214 (0.590)	151	550878	50.0000	50.015	80.00- 120.00	100.00
3.214	3.214 (0.590)	153	350201			33.45- 93.45	63.57
3.214	3.214 (0.590)	101	574964			74.36- 134.36	104.37
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.595)	98	154355	50.0000	50.703	80.00- 120.00	100.00
3.242	3.242 (0.595)	96	244107			133.60- 193.60	158.15
3.242	3.242 (0.595)	61	529637			302.57- 362.57	343.13
52 Acetone					CAS #: 67-64-1		
3.386	3.386 (0.621)	58	154353	50.0000	49.147	80.00- 120.00	100.00
3.378	3.378 (0.620)	43	615871			323.05- 383.05	399.00
56 Carbon Disulfide					CAS #: 75-15-0		
3.471	3.471 (0.637)	76	676721	50.0000	49.829	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.550 (0.652)	45	684986	50.0000	51.121	80.00- 120.00	100.00
3.550	3.550 (0.652)	43	141576			0.00- 49.72	20.67
3.550	3.550 (0.652)	59	24542			0.00- 33.36	3.58
58 3-Chloropropene					CAS #: 107-05-1		
3.715	3.715 (0.682)	76	111724	50.0000	49.302	80.00- 120.00	100.00
3.715	3.715 (0.682)	41	498773			339.09- 399.09	446.43
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.716)	49	464065	50.0000	62.707	80.00- 120.00	100.00
3.901	3.901 (0.716)	84	218537			25.63- 85.63	47.09
3.901	3.901 (0.716)	51	143756			0.46- 60.46	30.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.009	4.009 (0.736)	59	694508	50.0000	51.142	80.00- 120.00	100.00
4.009	4.009 (0.736)	41	165508			0.00- 51.45	23.83
4.009	4.009 (0.736)	57	78452			0.00- 41.07	11.30
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.123 (0.757)	73	692853	50.0000	46.934	80.00- 120.00	100.00
4.116	4.116 (0.755)	57	231526			0.00- 59.13	33.42
4.116	4.116 (0.755)	41	241533			0.00- 58.91	34.86
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.145	4.145 (0.761)	98	163466	50.0000	53.789	80.00- 120.00	100.00
4.145	4.145 (0.761)	61	470003			242.97- 302.97	287.52
4.145	4.145 (0.761)	96	255246			127.33- 187.33	156.15
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.801)	57	530461	50.0000	53.169	80.00- 120.00	100.00
4.367	4.367 (0.801)	43	378124			34.30- 94.30	71.28
4.367	4.367 (0.801)	86	61339			0.00- 42.17	11.56
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.851)	63	553989	50.0000	54.715	80.00- 120.00	100.00
4.639	4.639 (0.851)	65	161272			0.09- 60.09	29.11
83 Isopropyl ether					CAS #: 108-20-3		
4.632	4.632 (0.850)	45	1285910	50.0000	58.371	80.00- 120.00	100.00
4.639	4.639 (0.851)	87	220441			0.00- 51.39	17.14
4.632	4.632 (0.850)	59	126432			0.00- 40.68	9.83
86 Vinyl Acetate					CAS #: 108-05-4		
4.682	4.682 (0.859)	86	65566	50.0000	49.241	80.00- 120.00	100.00
4.682	4.682 (0.859)	43	1163810			1535.12-1595.12	1775.02
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.990	4.990 (0.916)	59	1065542	50.0000	52.147	80.00- 120.00	100.00
4.990	4.990 (0.916)	87	337113			4.09- 64.09	31.64
4.990	4.990 (0.916)	41	229481			0.00- 49.07	21.54
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.958)	98	173908	50.0000	51.133	80.00- 120.00	100.00
5.219	5.219 (0.958)	96	269822			125.21- 185.21	155.15
5.219	5.219 (0.958)	61	452643			211.41- 271.41	260.28
92 2-Butanone					CAS #: 78-93-3		
5.241	5.241 (0.962)	72	122861	50.0000	47.682	80.00- 120.00	100.00
5.241	5.241 (0.962)	43	760889			452.15- 512.15	619.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.241	5.241 (0.962)	57	57933			9.54- 69.54	47.15
99 Tetrahydrofuran					CAS #: 109-99-9		
5.441	5.441 (0.999)	42	429878	50.0000	62.378	80.00- 120.00	100.00
5.441	5.441 (0.999)	71	110887			2.09- 62.09	25.79
5.441	5.441 (0.999)	72	113573			3.61- 63.61	26.42
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.012)	83	554505	50.0000	52.604	80.00- 120.00	100.00
5.513	5.513 (1.012)	85	355040			35.60- 95.60	64.03
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.033)	84	340197	50.0000	45.934	80.00- 120.00	100.00
5.620	5.620 (1.032)	56	569327			115.43- 175.43	167.35
5.620	5.620 (1.032)	41	348968			53.65- 113.65	102.58
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.035)	97	597896	50.0000	49.716	80.00- 120.00	100.00
5.642	5.642 (1.035)	99	388211			33.21- 93.21	64.93
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.757	5.757 (1.057)	119	652546	50.0000	52.286	80.00- 120.00	100.00
5.757	5.757 (1.057)	117	678933			76.21- 136.21	104.04
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.957	5.957 (1.093)	57	1800136	50.0000	55.031	80.00- 120.00	100.00
5.964	5.964 (1.095)	56	606570			1.10- 61.10	33.70
5.957	5.957 (1.093)	41	524832			0.00- 57.08	29.16
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	745300	50.0000	49.789	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	176431			0.00- 53.91	23.67
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	194814	50.0000	48.152	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	786279			386.56- 446.56	403.60
6.043	6.043 (0.953)	55	275219			96.75- 156.75	141.27
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.050	6.050 (0.954)	62	464056	50.0000	56.166	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	138537			0.29- 60.29	29.85
121 Heptane					CAS #: 142-82-5		
6.129	6.129 (0.966)	71	267474	50.0000	41.336	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	689264			172.43- 232.43	257.69

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	350407			85.51- 145.51	131.01
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	369737	50.0000	51.292	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	414188			79.80- 139.80	112.02
6.537	6.537 (1.030)	97	237332			33.64- 93.64	64.19
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	481895	50.0000	45.497	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	225949			16.94- 76.94	46.89
6.645	6.645 (1.047)	55	542307			65.75- 125.75	112.54
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.766 (1.067)	63	362196	50.0000	52.665	80.00- 120.00	100.00
6.766	6.766 (1.067)	62	258343			39.62- 99.62	71.33
6.766	6.766 (1.067)	41	251333			30.53- 90.53	69.39
136 1,4-Dioxane					CAS #: 123-91-1		
6.852	6.852 (1.080)	88	179452	50.0000	48.143	80.00- 120.00	100.00
6.852	6.852 (1.080)	58	174406			52.00- 112.00	97.19
6.852	6.852 (1.080)	57	59512			0.00- 56.29	33.16
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	608322	50.0000	51.196	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	388001			34.30- 94.30	63.78
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	501552	50.0000	50.262	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	157721			2.71- 62.71	31.45
7.368	7.368 (1.161)	39	388788			35.07- 95.07	77.52
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	334978	50.0000	54.829	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	944813			230.95- 290.95	282.05
7.483	7.483 (1.180)	85	108827			7.98- 67.98	32.49
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	1031602	50.0000	49.291	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	595291			27.38- 87.38	57.71
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	471074	50.0000	52.635	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	147540			2.10- 62.10	31.32
7.848	7.848 (0.894)	39	328850			30.98- 90.98	69.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.999	7.999 (0.911)	97	355587	50.0000	50.738	80.00- 120.00	100.00
7.999	7.999 (0.911)	99	215568			31.34- 91.34	60.62
7.999	7.999 (0.911)	83	304378			57.20- 117.20	85.60
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.917)	166	625045	50.0000	51.104	80.00- 120.00	100.00
8.049	8.049 (0.917)	129	402916			35.33- 95.33	64.46
8.049	8.049 (0.917)	131	397699			35.36- 95.36	63.63
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.931)	58	447435	50.0000	57.369	80.00- 120.00	100.00
8.170	8.170 (0.931)	43	921905			156.39- 216.39	206.04
8.170	8.170 (0.931)	100	72854			0.00- 48.05	16.28
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.947)	129	750346	50.0000	52.424	80.00- 120.00	100.00
8.314	8.314 (0.947)	127	583611			48.12- 108.12	77.78
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.960)	107	586468	50.0000	51.601	80.00- 120.00	100.00
8.428	8.428 (0.960)	109	549861			63.87- 123.87	93.76
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.003)	112	890339	50.0000	51.182	80.00- 120.00	100.00
8.808	8.808 (1.003)	114	283213			2.38- 62.38	31.81
8.808	8.808 (1.003)	77	459870			24.59- 84.59	51.65
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.858 (1.009)	106	448797	50.0000	49.058	80.00- 120.00	100.00
8.858	8.858 (1.009)	91	1381736			276.53- 336.53	307.88
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	548126	50.0000	49.262	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	1079452			166.59- 226.59	196.94
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	517558	50.0000	48.455	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	1076198			176.08- 236.08	207.94
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.061)	104	824671	50.0000	51.539	80.00- 120.00	100.00
9.309	9.309 (1.060)	78	391680			17.58- 77.58	47.50
174 Bromoform					CAS #: 75-25-2		
9.503	9.503 (1.082)	173	895218	50.0000	50.925	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.503	9.503 (1.082)	171	460867			21.36- 81.36	51.48
175 Cumene					CAS #: 98-82-8		
9.582	9.582 (1.091)	105	1649720	50.0000	48.749	80.00- 120.00	100.00
9.582	9.582 (1.091)	120	454488			0.00- 57.79	27.55
9.582	9.582 (1.091)	51	225331			0.00- 41.33	13.66
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.882	9.882 (1.126)	83	826780	50.0000	48.683	80.00- 120.00	100.00
9.882	9.882 (1.126)	85	529341			34.22- 94.22	64.02
182 Propylbenzene					CAS #: 103-65-1		
9.925	9.925 (1.131)	91	1968242	50.0000	49.463	80.00- 120.00	100.00
9.925	9.925 (1.131)	120	471047			0.00- 54.34	23.93
9.925	9.925 (1.131)	105	72935			0.00- 33.54	3.71
188 4-Ethyltoluene					CAS #: 622-96-8		
10.019	10.019 (1.141)	120	513812	50.0000	47.021	80.00- 120.00	100.00
10.019	10.019 (1.141)	105	1734845			279.66- 339.66	337.64
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.069 (1.147)	120	706317	50.0000	50.971	80.00- 120.00	100.00
10.069	10.069 (1.147)	105	1379525			169.72- 229.72	195.31
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.398	10.398 (1.184)	120	637095	50.0000	49.956	80.00- 120.00	100.00
10.398	10.398 (1.184)	105	1341708			185.64- 245.64	210.60
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.678	10.678 (1.216)	146	1087570	50.0000	50.036	80.00- 120.00	100.00
10.678	10.678 (1.216)	148	691337			34.23- 94.23	63.57
10.678	10.678 (1.216)	111	394084			7.40- 67.40	36.24
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.756	10.756 (1.225)	146	1091811	50.0000	49.526	80.00- 120.00	100.00
10.756	10.756 (1.225)	148	686566			33.60- 93.60	62.88
10.756	10.756 (1.225)	111	380623			4.87- 64.87	34.86
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.871	10.871 (1.238)	91	1358478	50.0000	49.368	80.00- 120.00	100.00
10.878	10.878 (1.239)	126	308590			0.00- 53.22	22.72
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.086	11.086 (1.263)	146	1039121	50.0000	50.152	80.00- 120.00	100.00
11.086	11.086 (1.263)	148	651057			33.66- 93.66	62.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.086	11.086 (1.263)	111	388528			7.92- 67.92	37.39
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.483	12.483 (1.422)	180	947632	50.0000	54.002	80.00- 120.00	100.00
12.483	12.483 (1.422)	182	915993			66.61- 126.61	96.66
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.583	12.583 (1.433)	225	832965	50.0000	54.533	80.00- 120.00	100.00
12.583	12.583 (1.433)	223	525120			32.66- 92.66	63.04
228 Naphthalene					CAS #: 91-20-3		
12.748	12.748 (1.452)	128	156984	5.00000	5.216	80.00- 120.00	100.00
12.748	12.748 (1.452)	127	22773			0.00- 42.82	14.51

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031602.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 16-MAR-2016
Calibration Time: 11:45
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129998	77999	181997	119129	-8.36
123 1,4-Difluorobenze	521396	312838	729954	491164	-5.80
163 Chlorobenzene-d5	475714	285428	666000	462293	-2.82

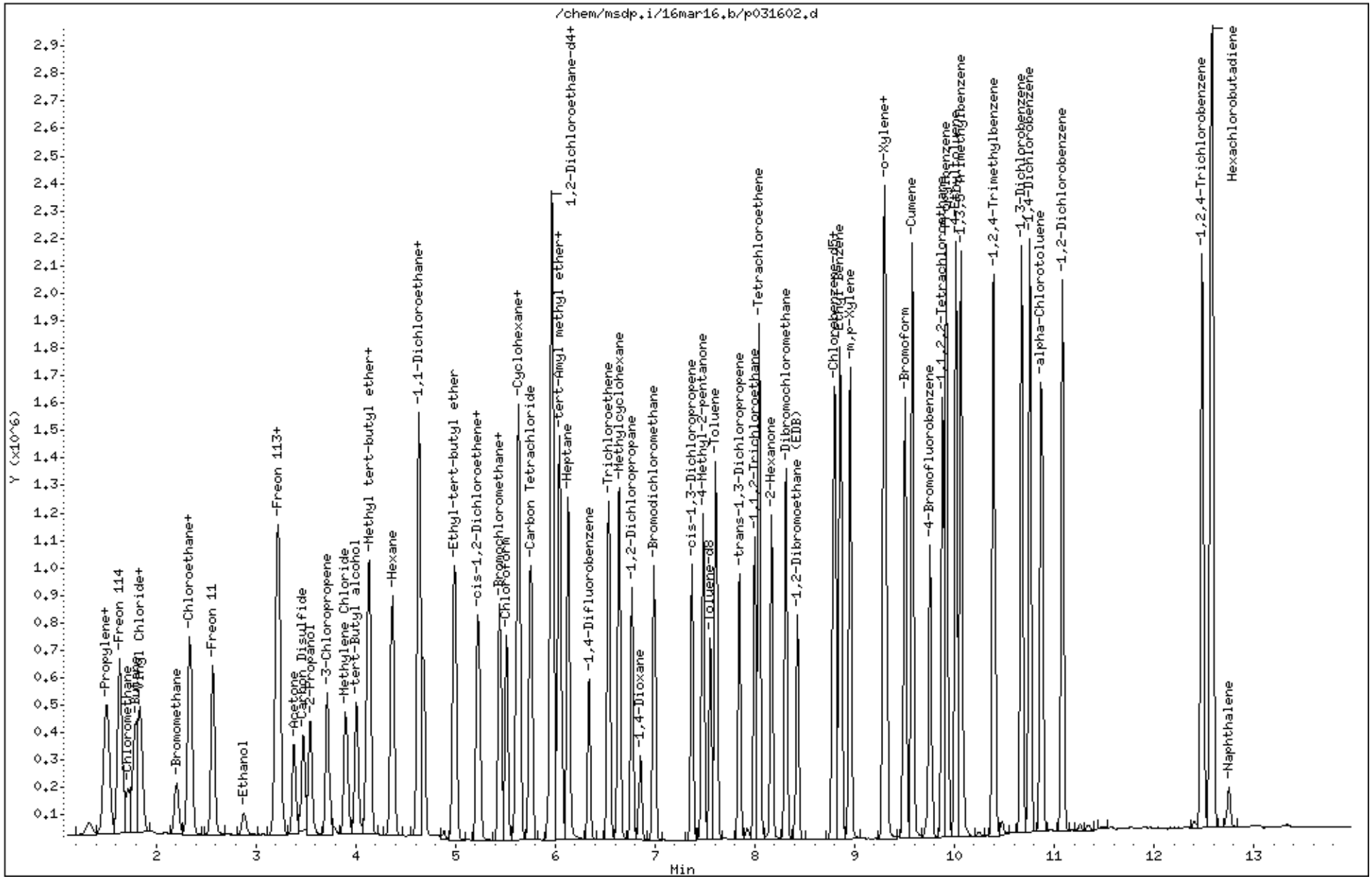
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/16mar16.b/p031602.d
Date : 16-MAR-2016 10:10
Client ID: CCV
Sample Info: 100mL #2759-209A

Instrument: msdp.i
Operator: js
Column diameter: 0.25

Column phase: RTX-624



Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 16-MAR-2016 11:45
Lab File ID: p031605.d Init. Cal. Date(s): 01-FEB-2016 18-FEB-2016
Analysis Type: AIR Init. Cal. Times: 14:10 12:39
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/16mar16.b/p16q0201b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
32 Vinyl Bromide	0.87573	0.80253	0.010	8.35853	30.00000	Averaged	
36 1-Pentene	1.22827	1.14870	0.010	6.47790	30.00000	Averaged	
44 Ethyl Ether	0.44650	0.37604	0.010	15.78130	30.00000	Averaged	
53 Iodomethane	1.28663	1.36509	0.010	-6.09810	30.00000	Averaged	
59 Cyclopentene	1.75176	1.59511	0.010	8.94205	30.00000	Averaged	
64 Cyclopentane	0.55228	0.48665	0.010	11.88201	30.00000	Averaged	
74 Acrylonitrile	0.89422	0.88528	0.010	0.99928	30.00000	Averaged	
76 1-Hexene	0.90147	0.86755	0.010	3.76273	30.00000	Averaged	
84 1-Propanol	0.25636	0.23180	0.010	9.58028	30.00000	Averaged	
90 2,2-Dichloropropane	1.89814	1.68878	0.010	11.02964	30.00000	Averaged	
94 Ethyl Acetate	0.21209	0.16533	0.010	22.04785	30.00000	Averaged	
93 Methyl Acrylate	2.21594	2.11605	0.010	4.50769	30.00000	Averaged	
107 1,1-Dichloropropene	0.13288	0.12361	0.010	6.97825	30.00000	Averaged	
115 Isobutanol	0.07266	0.07439	0.010	-2.38874	30.00000	Averaged	
$ 117 1,2-Dichloroethane-d4	1.47532	1.50219	0.010	-1.82144	30.00000	Averaged	
124 n-Butanol	0.40086	0.40946	0.010	-2.14510	30.00000	Averaged	
128 Ethyl acrylate	0.02917	0.02875	0.010	1.46726	30.00000	Averaged	
131 2-Pentanone	0.70011	0.77272	0.010	-10.37058	30.00000	Averaged	
134 Methyl Methacrylate	0.35156	0.36328	0.010	-3.33237	30.00000	Averaged	
137 Dibromomethane	0.30962	0.30107	0.010	2.76131	30.00000	Averaged	
$ 146 Toluene-d8	0.99883	0.99606	0.010	0.27807	30.00000	Averaged	
157 1,3-Dichloropropane	0.38561	0.35893	0.010	6.91808	30.00000	Averaged	
159 Butyl Acetate	0.12083	0.07854	0.010	35.00496	30.00000	Averaged	<-
168 1,1,1,2-Tetrachloroethane	0.42240	0.42053	0.010	0.44352	30.00000	Averaged	
173 2-Heptanone	1.88220	1.78314	0.010	5.26298	30.00000	Averaged	
176 Cyclohexanone	0.37612	0.39980	0.010	-6.29667	30.00000	Averaged	
$ 177 4-Bromofluorobenzene	0.80627	0.81333	0.010	-0.87499	30.00000	Averaged	
180 Bromobenzene	0.45183	0.44109	0.010	2.37715	30.00000	Averaged	
185 1,2,3-Trichloropropane	0.17931	0.17218	0.010	3.97713	30.00000	Averaged	
189 2-Chlorotoluene	0.33216	0.32565	0.010	1.95791	30.00000	Averaged	
191 4-Chlorotoluene	0.32761	0.32129	0.010	1.92674	30.00000	Averaged	
195 tert-Butylbenzene	0.97879	0.93158	0.010	4.82283	30.00000	Averaged	
197 Pentachloroethane	0.34827	0.33795	0.010	2.96197	30.00000	Averaged	
203 sec-Butylbenzene	0.33030	0.31943	0.010	3.28910	30.00000	Averaged	
206 bis(2-Chloroethyl) Ether	0.65366	0.64445	0.010	1.40823	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 16-MAR-2016 11:45
Lab File ID: p031605.d Init. Cal. Date(s): 01-FEB-2016 18-FEB-2016
Analysis Type: AIR Init. Cal. Times: 14:10 12:39
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdp.i/16mar16.b/p16q0201b.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
207 p-Cymene	1.24151	1.21312	0.010	2.28666	30.00000	Averaged
210 1,2,3-Trimethylbenzene	0.45914	0.45683	0.010	0.50284	30.00000	Averaged
213 Butylbenzene	0.33162	0.32574	0.010	1.77217	30.00000	Averaged
221 1,2-Dibromo-3-chloropropane	0.46320	0.44764	0.010	3.36068	40.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031605.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 16-MAR-2016 11:45
Operator : js Inst ID: msdp.i
Smp Info : 50ml #2759-254
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 13:01 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ComboCCVmBP.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
32 Vinyl Bromide					CAS #: 593-60-2		
2.519	2.519 (0.462)	106	208654	50.0000	45.821	0.00- 0.00	100.00
2.519	2.519 (0.462)	108	199046			0.00- 0.00	95.40
36 1-Pentene					CAS #: 109-67-1		
2.583	2.583 (0.474)	55	298658	50.0000	46.761	0.00- 0.00	100.00
2.583	2.583 (0.474)	42	436081			0.00- 0.00	146.01
44 Ethyl Ether					CAS #: 60-29-7		
2.942	2.942 (0.540)	74	97769	50.0000	42.109	0.00- 0.00	100.00(T)
2.942	2.942 (0.540)	59	187609			0.00- 0.00	191.89
0.000	1.000 (0.000)	31	0			0.00- 0.00	0.00
53 Iodomethane					CAS #: 74-88-4		
3.443	3.443 (0.632)	142	354917	50.0000	53.049	0.00- 0.00	100.00
3.443	3.443 (0.632)	127	152143			0.00- 0.00	42.87

	RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
	59 Cyclopentene					CAS #: 142-29-0			
	3.730	3.730 (0.684)	67	414723	50.0000	45.529	0.00-	0.00	100.00
	3.730	3.730 (0.684)	68	154301			0.00-	0.00	37.21
	3.730	3.730 (0.684)	53	121878			0.00-	0.00	29.39
	64 Cyclopentane					CAS #: 287-92-3			
	3.844	3.844 (0.706)	70	126528	50.0000	44.059	0.00-	0.00	100.00
	3.844	3.844 (0.706)	55	236660			0.00-	0.00	187.04
	74 Acrylonitrile					CAS #: 107-13-1			
	4.238	4.238 (0.778)	52	230170	50.0000	49.500	0.00-	0.00	100.00
	4.238	4.238 (0.778)	53	301124			0.00-	0.00	130.83
	76 1-Hexene					CAS #: 592-41-6			
	4.295	4.295 (0.788)	55	225560	50.0000	48.119	0.00-	0.00	100.00
	4.295	4.295 (0.788)	41	353369			0.00-	0.00	156.66
	4.295	4.295 (0.788)	84	57476			0.00-	0.00	25.48
	84 1-Propanol					CAS #: 71-23-8			
	4.761	4.761 (0.874)	59	60267	50.0000	45.210	0.00-	0.00	100.00
	4.761	4.761 (0.874)	42	60031			0.00-	0.00	99.61
	4.761	4.761 (0.874)	41	39541			0.00-	0.00	65.61
	90 2,2-Dichloropropane					CAS #: 594-20-7			
	5.184	5.184 (0.951)	77	439076	50.0000	44.485	0.00-	0.00	100.00
	5.184	5.184 (0.951)	79	137886			0.00-	0.00	31.40
	5.184	5.184 (0.951)	97	93187			0.00-	0.00	21.22
	94 Ethyl Acetate					CAS #: 141-78-6			
	5.262	5.262 (0.966)	70	42984	50.0000	38.976	0.00-	0.00	100.00
	5.262	5.262 (0.966)	61	79697			0.00-	0.00	185.41
	5.262	5.262 (0.966)	45	101020			0.00-	0.00	235.02
	93 Methyl Acrylate					CAS #: 96-33-3			
	5.313	5.313 (0.975)	55	550164	50.0000	47.746	0.00-	0.00	100.00
	5.313	5.313 (0.975)	85	61927			0.00-	0.00	11.26
	5.313	5.313 (0.975)	58	41801			0.00-	0.00	7.60
*	98 Bromochloromethane					CAS #: 74-97-5			
	5.449	5.449 (1.000)	130	129998	25.0000		80.00-	120.00	100.00
	5.449	5.449 (1.000)	128	101076			49.06-	109.06	77.75
	5.449	5.449 (1.000)	49	229211			124.20-	184.20	176.32
	107 1,1-Dichloropropene					CAS #: 563-58-6			
	5.792	5.792 (0.913)	110	128898	50.0000	46.511	0.00-	0.00	100.00
	5.785	5.785 (0.912)	75	340393			0.00-	0.00	264.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
115 Isobutanol					CAS #: 78-83-1		
5.929	5.929 (0.934)	39	77576	50.0000	51.194	0.00- 0.00	100.00
5.921	5.921 (0.933)	43	275581			0.00- 0.00	355.24
5.921	5.921 (0.933)	41	200487			0.00- 0.00	258.44
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.099)	65	195282	25.0000	25.455	80.00- 120.00	100.00(A)
5.986	5.986 (1.099)	67	92825			26.68- 86.68	47.53
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	521396	25.0000		80.00- 120.00	100.00
6.337	6.337 (1.000)	88	73908			0.00- 44.57	14.18
124 n-Butanol					CAS #: 71-36-3		
6.494	6.494 (1.024)	56	426977	50.0000	51.072	0.00- 0.00	100.00
6.494	6.494 (1.024)	41	310731			0.00- 0.00	72.77
6.494	6.494 (1.024)	43	255443			0.00- 0.00	59.83
128 Ethyl acrylate					CAS #: 140-88-5		
6.638	6.638 (0.756)	99	27350	50.0000	49.266	0.00- 0.00	100.00
6.638	6.638 (0.756)	45	50728			0.00- 0.00	185.48
6.638	6.638 (0.756)	55	552500			0.00- 0.00	2020.11
131 2-Pentanone					CAS #: 107-87-9		
6.724	6.724 (0.766)	43	735183	50.0000	55.185	0.00- 0.00	100.00
6.724	6.724 (0.766)	58	52692			0.00- 0.00	7.17
6.724	6.724 (0.766)	86	90950			0.00- 0.00	12.37
134 Methyl Methacrylate					CAS #: 80-62-6		
6.831	6.831 (0.778)	41	345633	50.0000	51.666	0.00- 0.00	100.00
6.831	6.831 (0.778)	69	184249			0.00- 0.00	53.31
6.831	6.831 (0.778)	100	73151			0.00- 0.00	21.16
137 Dibromomethane					CAS #: 74-95-3		
6.874	6.874 (0.783)	174	286448	50.0000	48.619	0.00- 0.00	100.00
6.874	6.874 (0.783)	93	217064			0.00- 0.00	75.78
6.874	6.874 (0.783)	95	178542			0.00- 0.00	62.33
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.555	7.555 (1.191)	98	519340	25.0000	24.930	80.00- 120.00	100.00
7.555	7.555 (1.191)	70	54848			0.00- 40.62	10.56
7.555	7.555 (1.191)	100	345961			36.74- 96.74	66.62
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.149	8.149 (1.285)	76	374289	50.0000	46.541	0.00- 0.00	100.00
8.149	8.149 (1.285)	41	331855			0.00- 0.00	88.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
157 1,3-Dichloropropane (continued)							
8.149	8.149 (1.285)	78	117380			0.00- 0.00	31.36
159 Butyl Acetate					CAS #: 123-86-4		
8.235	8.235 (1.298)	56	81897	50.0000	32.498	0.00- 0.00	100.00
8.235	8.235 (1.298)	73	25123			0.00- 0.00	30.68
8.235	8.235 (1.298)	43	216458			0.00- 0.00	264.31
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	475714	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	237572			20.36- 80.36	49.94
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.873	8.873 (1.011)	131	400101	50.0000	49.778	0.00- 0.00	100.00
8.873	8.873 (1.011)	117	262294			0.00- 0.00	65.56
8.873	8.873 (1.011)	95	136606			0.00- 0.00	34.14
173 2-Heptanone					CAS #: 110-43-0		
9.388	9.388 (1.723)	58	463610	50.0000	47.368	0.00- 0.00	100.00
9.388	9.388 (1.723)	43	805509			0.00- 0.00	173.75
176 Cyclohexanone					CAS #: 108-94-1		
9.739	9.739 (1.109)	55	380379	50.0000	53.148	0.00- 0.00	100.00
9.739	9.739 (1.109)	98	123932			0.00- 0.00	32.58
9.739	9.739 (1.109)	42	267939			0.00- 0.00	70.44
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	386912	25.0000	25.219	80.00- 120.00	100.00(A)
9.761	9.761 (1.112)	95	357889			65.95- 125.95	92.50
9.761	9.761 (1.112)	176	372161			65.80- 125.80	96.19
180 Bromobenzene					CAS #: 108-86-1		
9.890	9.890 (1.126)	156	419661	50.0000	48.811	0.00- 0.00	100.00
9.890	9.890 (1.126)	158	411109			0.00- 0.00	97.96
9.890	9.890 (1.126)	77	532600			0.00- 0.00	126.91
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.940	9.940 (1.132)	110	163816	50.0000	48.011	0.00- 0.00	100.00
9.940	9.940 (1.132)	75	563614			0.00- 0.00	344.05
9.940	9.940 (1.132)	61	147596			0.00- 0.00	90.10
189 2-Chlorotoluene					CAS #: 95-49-8		
10.033	10.033 (1.143)	126	309836	50.0000	49.021	0.00- 0.00	100.00
10.033	10.033 (1.143)	91	824332			0.00- 0.00	266.05
10.033	10.033 (1.143)	65	83292			0.00- 0.00	26.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
191 4-Chlorotoluene					CAS #: 106-43-4			
10.133	10.133 (1.154)	126	305689	50.0000	49.037	0.00-	0.00	100.00
10.126	10.126 (1.153)	91	824097			0.00-	0.00	269.59
10.126	10.126 (1.153)	63	122231			0.00-	0.00	39.99
195 tert-Butylbenzene					CAS #: 98-06-6			
10.348	10.348 (1.179)	119	886335	50.0000	47.588	0.00-	0.00	100.00
10.348	10.348 (1.179)	134	238308			0.00-	0.00	26.89
10.341	10.341 (1.178)	91	587828			0.00-	0.00	66.32
197 Pentachloroethane					CAS #: 76-01-7			
10.405	10.405 (1.185)	167	321537	50.0000	48.519	0.00-	0.00	100.00
10.405	10.405 (1.185)	117	272946			0.00-	0.00	84.89
10.405	10.405 (1.185)	169	154719			0.00-	0.00	48.12
203 sec-Butylbenzene					CAS #: 135-98-8			
10.527	10.527 (1.199)	134	303917	50.0000	48.355	0.00-	0.00	100.00
10.527	10.527 (1.199)	105	1357181			0.00-	0.00	446.56
10.527	10.527 (1.199)	91	207297			0.00-	0.00	68.21
206 bis(2-Chloroethyl) Ether					CAS #: 111-44-4			
10.606	10.606 (1.208)	93	613150	50.0000	49.296	0.00-	0.00	100.00
10.606	10.606 (1.208)	95	190903			0.00-	0.00	31.13
207 p-Cymene					CAS #: 99-87-6			
10.642	10.642 (1.212)	119	1154194	50.0000	48.857	0.00-	0.00	100.00
10.642	10.642 (1.212)	134	328303			0.00-	0.00	28.44
10.642	10.642 (1.212)	91	267996			0.00-	0.00	23.22
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
10.764	10.764 (1.226)	120	434640	50.0000	49.748	0.00-	0.00	100.00
10.764	10.764 (1.226)	105	984798			0.00-	0.00	226.58
10.764	10.764 (1.226)	77	115497			0.00-	0.00	26.57
213 Butylbenzene					CAS #: 104-51-8			
10.993	10.993 (1.252)	134	309917	50.0000	49.114	0.00-	0.00	100.00
10.993	10.993 (1.252)	91	1057434			0.00-	0.00	341.20
10.993	10.993 (1.252)	92	551517			0.00-	0.00	177.96
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8			
11.766	11.766 (1.340)	157	425894	50.0000	48.320	0.00-	0.00	100.00
11.759	11.759 (1.339)	75	306266			0.00-	0.00	71.91
11.766	11.766 (1.340)	155	333091			0.00-	0.00	78.21

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031605.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	129998	9.12
123 1,4-Difluorobenze	491164	294698	687630	521396	6.16
163 Chlorobenzene-d5	462293	277376	647210	475714	2.90

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/16mar16.b/p031605.d

Date : 16-MAR-2016 11:45

Client ID: CCV

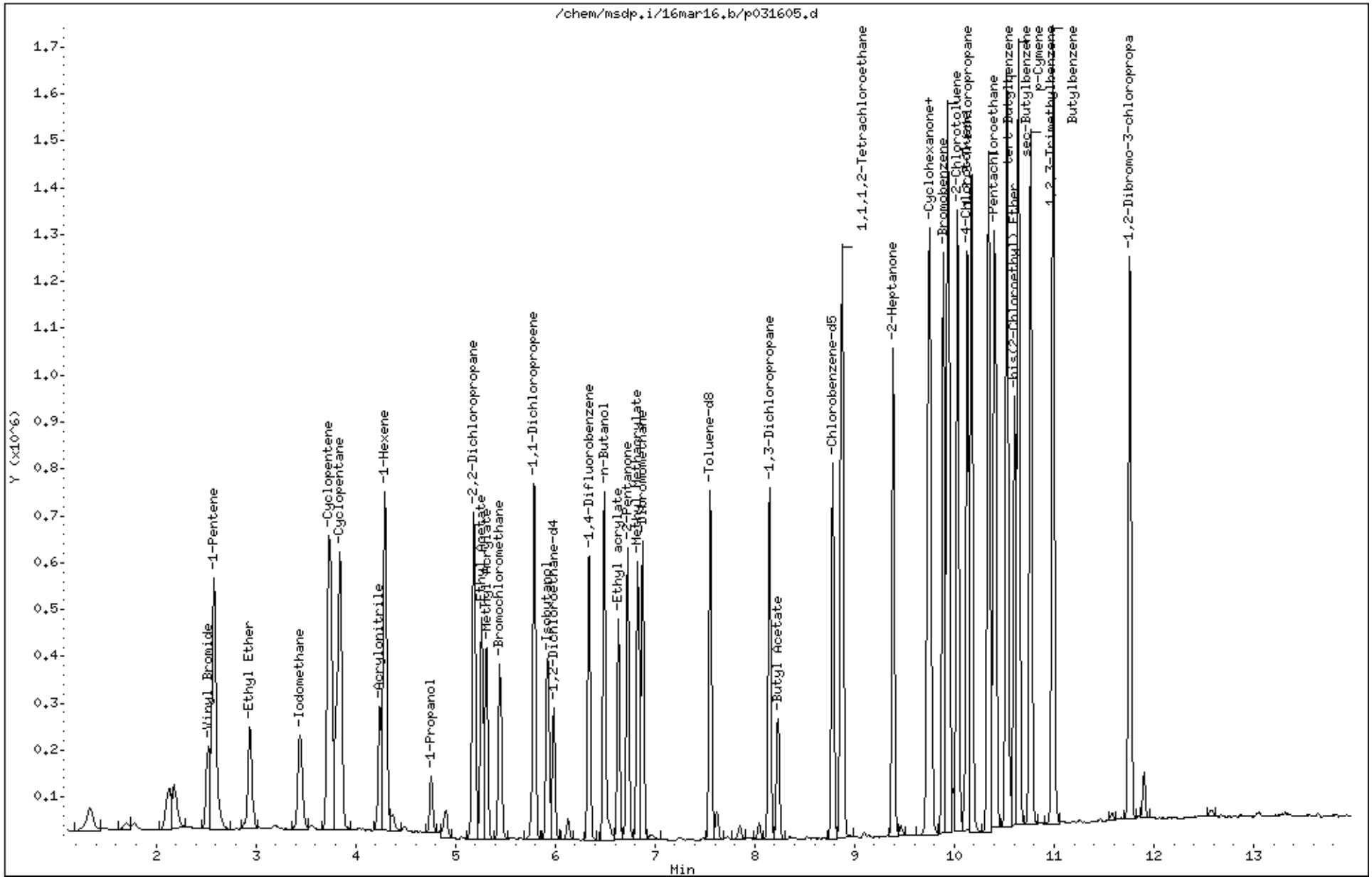
Sample Info: 50ml #2759-254

Column phase: RTX-624

Instrument: msdp.i

Operator: js

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 1603115-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/16/16 10:34 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	127	70-130
Acetone	93	70-130
trans-1,2-Dichloroethene	106	70-130
cis-1,2-Dichloroethene	96	70-130
Methylene Chloride	124	70-130
Chloroform	101	70-130
Cyclohexane	87	70-130
Benzene	98	70-130
Trichloroethene	104	70-130
Toluene	96	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	102	70-130
o-Xylene	103	70-130
Cumene	100	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	104	70-130
1,2,3-Trimethylbenzene	Not Spiked	
Naphthalene	142 Q	60-140
Methylcyclohexane	90	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	102	70-130

Report Date: 16-Mar-2016 13:01

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: js
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 50ppbv (100ppbv)

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9	Propylene	50.000	54.054	108.11	60-140
11	Freon 12	50.000	51.978	103.96	70-130
15	Freon 114	50.000	54.207	108.41	70-130
17	Chloromethane	50.000	72.520	145.04*	70-130
23	Butane	50.000	48.800	97.60	60-140
25	Vinyl Chloride	50.000	63.352	126.70	70-130
26	1,3-Butadiene	50.000	54.487	108.97	70-130
29	Bromomethane	50.000	56.436	112.87	70-130
30	Chloroethane	50.000	50.655	101.31	70-130
31	Isopentane	50.000	55.510	111.02	60-140
35	Freon 11	50.000	52.679	105.36	70-130
42	Ethanol	50.000	58.499	117.00	70-130
49	Freon 113	50.000	47.326	94.65	70-130
50	1,1-Dichloroethene	50.000	48.464	96.93	70-130
52	Acetone	50.000	46.626	93.25	70-130
56	Carbon Disulfide	50.000	42.547	85.09	70-130
57	2-Propanol	50.000	51.234	102.47	70-130
58	3-Chloropropene	50.000	43.696	87.39	70-130
66	Methylene Chloride	50.000	61.895	123.79	70-130
72	Methyl tert-butyl	50.000	45.501	91.00	70-130
73	trans-1,2-Dichloro	42.500	44.846	105.52	70-130
78	Hexane	50.000	51.792	103.58	70-130
82	1,1-Dichloroethane	50.000	53.234	106.47	70-130
86	Vinyl Acetate	50.000	48.487	96.97	70-130
91	cis-1,2-Dichloroet	56.500	54.259	96.03	70-130
92	2-Butanone	50.000	45.565	91.13	70-130
99	Tetrahydrofuran	50.000	59.334	118.67	70-130
100	Chloroform	50.000	50.350	100.70	70-130
103	1,1,1-Trichloroeth	50.000	48.194	96.39	70-130
106	Carbon Tetrachlori	50.000	50.436	100.87	70-130
102	Cyclohexane	50.000	43.708	87.42	70-130
113	2,2,4-Trimethylpen	50.000	53.136	106.27	70-130
116	Benzene	50.000	49.288	98.58	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	55.369	110.74	70-130
121 Heptane	50.000	42.637	85.27	70-130
125 Trichloroethene	50.000	52.202	104.41	70-130
127 Methylcyclohexane	50.000	45.058	90.12	60-140
132 1,2-Dichloropropan	50.000	52.907	105.81	70-130
136 1,4-Dioxane	50.000	48.632	97.26	70-130
138 Bromodichlorometha	50.000	52.982	105.96	70-130
144 cis-1,3-Dichloropr	50.000	47.159	94.32	70-130
145 4-Methyl-2-pentano	50.000	53.200	106.40	70-130
147 Toluene	50.000	48.289	96.58	70-130
150 trans-1,3-Dichloro	50.000	52.714	105.43	70-130
155 1,1,2-Trichloroeth	50.000	51.445	102.89	70-130
156 Tetrachloroethene	50.000	51.678	103.36	70-130
158 2-Hexanone	50.000	58.864	117.73	70-130
160 Dibromochlorometha	50.000	53.115	106.23	70-130
161 1,2-Dibromoethane	50.000	52.668	105.34	70-130
165 Chlorobenzene	50.000	51.484	102.97	70-130
167 Ethyl Benzene	50.000	50.529	101.06	70-130
169 m,p-Xylene	50.000	50.796	101.59	70-130
171 o-Xylene	50.000	51.322	102.64	70-130
172 Styrene	50.000	55.045	110.09	70-130
174 Bromoform	65.000	70.403	108.31	70-130
175 Cumene	50.000	50.121	100.24	70-130
181 1,1,2,2-Tetrachlor	50.000	49.110	98.22	70-130
182 Propylbenzene	50.000	51.063	102.13	70-130
188 4-Ethyltoluene	50.000	49.658	99.32	70-130
190 1,3,5-Trimethylben	50.000	53.020	106.04	70-130
196 1,2,4-Trimethylben	50.000	52.158	104.32	70-130
208 1,3-Dichlorobenzen	50.000	51.946	103.89	70-130
209 1,4-Dichlorobenzen	50.000	51.218	102.44	70-130
212 alpha-Chlorotoluen	50.000	53.495	106.99	70-130
214 1,2-Dichlorobenzen	50.000	51.399	102.80	70-130
226 1,2,4-Trichloroben	50.000	62.294	124.59	70-130
227 Hexachlorobutadien	50.000	63.687	127.37	70-130
228 Naphthalene	5.000	7.084	141.69*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.637	106.55	70-130
$ 146 Toluene-d8	25.000	25.549	102.20	70-130
$ 177 4-Bromofluorobenze	25.000	25.504	102.02	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031603.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 16-MAR-2016 10:34
Operator : js Inst ID: msdp.i
Smp Info : 100mL #2759-247A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 13:00 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.449	5.449 (1.000)	130	121338	25.0000		80.00- 120.00	100.00
5.449	5.449 (1.000)	128	95158			49.06- 109.06	78.42
5.449	5.449 (1.000)	49	211512			124.20- 184.20	174.32
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	488439	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	68878			0.00- 44.57	14.10
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	451524	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	233365			20.36- 80.36	51.68
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.099)	65	190733	26.6368	26.637	80.00- 120.00	100.00
5.986	5.986 (1.099)	67	101985			26.68- 86.68	53.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.555	7.554 (1.191)	98	498587	25.5492	25.549	80.00- 120.00	100.00
7.555	7.554 (1.191)	70	52993			0.00- 40.62	10.63
7.555	7.554 (1.191)	100	332969			36.74- 96.74	66.78
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	371395	25.5042	25.504	80.00- 120.00	100.00
9.761	9.761 (1.112)	95	342818			65.95- 125.95	92.31
9.761	9.761 (1.112)	176	356183			65.80- 125.80	95.90
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	276648	54.0539	54.054	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	183565			34.60- 94.60	66.35
1.479	1.479 (0.271)	39	205032			43.23- 103.23	74.11
11 Freon 12					CAS #: 75-71-8		
1.507	1.507 (0.277)	85	701613	51.9778	51.978	80.00- 120.00	100.00
1.507	1.507 (0.277)	87	220852			1.76- 61.76	31.48
15 Freon 114					CAS #: 76-14-2		
1.633	1.632 (0.300)	135	565330	54.2070	54.207	80.00- 120.00	100.00
1.633	1.632 (0.300)	137	179059			2.23- 62.23	31.67
17 Chloromethane					CAS #: 74-87-3		
1.717	1.730 (0.315)	50	326018	72.5201	72.520	80.00- 120.00	100.00(R)
1.731	1.730 (0.318)	52	101541			0.00- 59.98	31.15
23 Butane					CAS #: 106-97-8		
1.787	1.786 (0.328)	58	67466	48.8003	48.800	80.00- 120.00	100.00
1.787	1.786 (0.328)	43	556238			783.10- 843.10	824.47
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.336)	62	380769	63.3523	63.352	80.00- 120.00	100.00
1.828	1.828 (0.336)	64	113257			5.16- 65.16	29.74
26 1,3-Butadiene					CAS #: 106-99-0		
1.842	1.842 (0.338)	54	270096	54.4871	54.487	80.00- 120.00	100.00
1.842	1.842 (0.338)	39	360329			81.92- 141.92	133.41
29 Bromomethane					CAS #: 74-83-9		
2.204	2.204 (0.404)	94	197116	56.4357	56.436	80.00- 120.00	100.00
2.204	2.204 (0.404)	96	188857			65.10- 125.10	95.81
30 Chloroethane					CAS #: 75-00-3		
2.318	2.318 (0.426)	64	136829	50.6549	50.655	80.00- 120.00	100.00
2.326	2.318 (0.427)	66	39239			0.00- 59.99	28.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.318	2.318 (0.426)	49	56169			5.85- 65.85	41.05
31 Isopentane					CAS #: 78-78-4		
2.340	2.340 (0.429)	43	421174	55.5103	55.510	80.00- 120.00	100.00
2.340	2.340 (0.429)	57	255097			36.22- 96.22	60.57
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.472)	101	741040	52.6791	52.679	80.00- 120.00	100.00
2.569	2.569 (0.472)	103	472630			34.50- 94.50	63.78
42 Ethanol					CAS #: 64-17-5		
2.884	2.884 (0.529)	45	135027	58.4990	58.499	80.00- 120.00	100.00
2.884	2.877 (0.529)	43	27494			0.00- 50.77	20.36
2.884	2.884 (0.529)	46	51404			8.68- 68.68	38.07
49 Freon 113					CAS #: 76-13-1		
3.214	3.214 (0.590)	151	530925	47.3262	47.326	80.00- 120.00	100.00
3.214	3.214 (0.590)	153	345030			33.45- 93.45	64.99
3.214	3.214 (0.590)	101	568424			74.36- 134.36	107.06
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.595)	98	150277	48.4646	48.464	80.00- 120.00	100.00
3.242	3.242 (0.595)	96	239130			133.60- 193.60	159.13
3.242	3.242 (0.595)	61	528377			302.57- 362.57	351.60
52 Acetone					CAS #: 67-64-1		
3.386	3.386 (0.621)	58	149150	46.6262	46.626	80.00- 120.00	100.00
3.386	3.378 (0.621)	43	556374			323.05- 383.05	373.03
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.471 (0.638)	76	588537	42.5472	42.547	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.550 (0.652)	45	699217	51.2336	51.234	80.00- 120.00	100.00
3.550	3.550 (0.652)	43	143536			0.00- 49.72	20.53
3.550	3.550 (0.652)	59	22367			0.00- 33.36	3.20
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.715 (0.683)	76	100857	43.6965	43.696	80.00- 120.00	100.00
3.722	3.715 (0.683)	41	454920			339.09- 399.09	451.05
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.716)	49	466549	61.8953	61.895	80.00- 120.00	100.00
3.901	3.901 (0.716)	84	218321			25.63- 85.63	46.79
3.901	3.901 (0.716)	51	137377			0.46- 60.46	29.45

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.123 (0.757)	73	684155	45.5014	45.501	80.00- 120.00	100.00
4.123	4.116 (0.757)	57	222200			0.00- 59.13	32.48
4.123	4.116 (0.757)	41	230079			0.00- 58.91	33.63
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.145	4.145 (0.761)	98	138815	44.8462	44.846	80.00- 120.00	100.00
4.145	4.145 (0.761)	61	397057			242.97- 302.97	286.03
4.145	4.145 (0.761)	96	218559			127.33- 187.33	157.45
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.801)	57	526309	51.7924	51.792	80.00- 120.00	100.00
4.367	4.367 (0.801)	43	374803			34.30- 94.30	71.21
4.367	4.367 (0.801)	86	60725			0.00- 42.17	11.54
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.851)	63	548989	53.2343	53.234	80.00- 120.00	100.00
4.639	4.639 (0.851)	65	159028			0.09- 60.09	28.97
86 Vinyl Acetate					CAS #: 108-05-4		
4.682	4.682 (0.859)	86	65760	48.4875	48.487	80.00- 120.00	100.00
4.682	4.682 (0.859)	43	1078490			1535.12-1595.12	1640.04
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.958)	98	187964	54.2592	54.259	80.00- 120.00	100.00
5.219	5.219 (0.958)	96	292168			125.21- 185.21	155.44
5.219	5.219 (0.958)	61	482830			211.41- 271.41	256.87
92 2-Butanone					CAS #: 78-93-3		
5.241	5.241 (0.962)	72	119584	45.5650	45.565	80.00- 120.00	100.00
5.241	5.241 (0.962)	43	751391			452.15- 512.15	628.34
5.241	5.241 (0.962)	57	56351			9.54- 69.54	47.12
99 Tetrahydrofuran					CAS #: 109-99-9		
5.441	5.441 (0.999)	42	416482	59.3339	59.334	80.00- 120.00	100.00
5.441	5.441 (0.999)	71	104624			2.09- 62.09	25.12
5.441	5.441 (0.999)	72	108880			3.61- 63.61	26.14
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.012)	83	540584	50.3501	50.350	80.00- 120.00	100.00
5.513	5.513 (1.012)	85	353957			35.60- 95.60	65.48
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.033)	84	329714	43.7078	43.708	80.00- 120.00	100.00
5.628	5.620 (1.033)	56	563264			115.43- 175.43	170.83
5.628	5.620 (1.033)	41	348774			53.65- 113.65	105.78

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.035)	97	590344	48.1946	48.194	80.00- 120.00	100.00
5.642	5.642 (1.035)	99	378101			33.21- 93.21	64.05
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.757	5.757 (1.057)	119	641122	50.4358	50.436	80.00- 120.00	100.00
5.757	5.757 (1.057)	117	673175			76.21- 136.21	105.00
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.957 (1.095)	57	1770355	53.1355	53.136	80.00- 120.00	100.00
5.964	5.964 (1.095)	56	586067			1.10- 61.10	33.10
5.957	5.957 (1.093)	41	528485			0.00- 57.08	29.85
116 Benzene					CAS #: 71-43-2		
5.972	5.971 (0.941)	78	733713	49.2885	49.288	80.00- 120.00	100.00
5.972	5.971 (0.941)	77	175795			0.00- 53.91	23.96
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.050	6.050 (0.954)	62	454928	55.3689	55.369	80.00- 120.00	100.00
6.058	6.057 (0.955)	64	137768			0.29- 60.29	30.28
121 Heptane					CAS #: 142-82-5		
6.129	6.129 (0.966)	71	274363	42.6369	42.637	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	687236			172.43- 232.43	250.48
6.129	6.129 (0.966)	57	351767			85.51- 145.51	128.21
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	374215	52.2025	52.202	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	420810			79.80- 139.80	112.45
6.537	6.537 (1.030)	97	239054			33.64- 93.64	63.88
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	474598	45.0585	45.058	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	225911			16.94- 76.94	47.60
6.645	6.645 (1.047)	55	545413			65.75- 125.75	114.92
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.767	6.766 (1.067)	63	361845	52.9072	52.907	80.00- 120.00	100.00
6.767	6.766 (1.067)	62	258522			39.62- 99.62	71.45
6.767	6.766 (1.067)	41	251817			30.53- 90.53	69.59
136 1,4-Dioxane					CAS #: 123-91-1		
6.853	6.852 (1.080)	88	180270	48.6323	48.632	80.00- 120.00	100.00
6.853	6.852 (1.080)	58	168538			52.00- 112.00	93.49
6.853	6.852 (1.080)	57	56711			0.00- 56.29	31.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	626048	52.9819	52.982	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	391553			34.30- 94.30	62.54
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	467984	47.1595	47.159	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	151240			2.71- 62.71	32.32
7.368	7.368 (1.161)	39	359790			35.07- 95.07	76.88
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	323220	53.2001	53.200	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	946887			230.95- 290.95	292.95
7.483	7.483 (1.180)	85	108774			7.98- 67.98	33.65
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	1005032	48.2892	48.289	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	577076			27.38- 87.38	57.42
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	460791	52.7140	52.714	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	147227			2.10- 62.10	31.95
7.848	7.848 (0.894)	39	329684			30.98- 90.98	71.55
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.999	7.999 (0.911)	97	352143	51.4446	51.445	80.00- 120.00	100.00
7.999	7.999 (0.911)	99	212807			31.34- 91.34	60.43
7.999	7.999 (0.911)	83	307757			57.20- 117.20	87.40
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.917)	166	617353	51.6786	51.678	80.00- 120.00	100.00
8.049	8.049 (0.917)	129	401277			35.33- 95.33	65.00
8.049	8.049 (0.917)	131	402221			35.36- 95.36	65.15
158 2-Hexanone					CAS #: 591-78-6		
8.171	8.170 (0.931)	58	448399	58.8638	58.864	80.00- 120.00	100.00
8.171	8.170 (0.931)	43	919236			156.39- 216.39	205.00
8.171	8.170 (0.931)	100	74506			0.00- 48.05	16.62
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.947)	129	742531	53.1154	53.115	80.00- 120.00	100.00
8.314	8.314 (0.947)	127	574343			48.12- 108.12	77.35
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.960)	107	584653	52.6684	52.668	80.00- 120.00	100.00
8.428	8.428 (0.960)	109	549491			63.87- 123.87	93.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.003)	112	874718	51.4837	51.484	80.00- 120.00	100.00
8.808	8.808 (1.003)	114	280561			2.38- 62.38	32.07
8.808	8.808 (1.003)	77	458341			24.59- 84.59	52.40
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.858 (1.009)	106	451489	50.5292	50.529	80.00- 120.00	100.00
8.858	8.858 (1.009)	91	1381793			276.53- 336.53	306.05
169 m,p-Xylene					CAS #: 108-38-3		
8.959	8.958 (1.020)	106	552031	50.7965	50.796	80.00- 120.00	100.00
8.959	8.958 (1.020)	91	1091639			166.59- 226.59	197.75
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	535410	51.3223	51.322	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	1113751			176.08- 236.08	208.02
172 Styrene					CAS #: 100-42-5		
9.317	9.317 (1.061)	104	860240	55.0447	55.045	80.00- 120.00	100.00
9.310	9.309 (1.060)	78	412655			17.58- 77.58	47.97
174 Bromoform					CAS #: 75-25-2		
9.503	9.503 (1.082)	173	1208780	70.4026	70.403	80.00- 120.00	100.00
9.503	9.503 (1.082)	171	620531			21.36- 81.36	51.34
175 Cumene					CAS #: 98-82-8		
9.582	9.582 (1.091)	105	1656643	50.1209	50.121	80.00- 120.00	100.00
9.582	9.582 (1.091)	120	455521			0.00- 57.79	27.50
9.582	9.582 (1.091)	51	224240			0.00- 41.33	13.54
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.883	9.882 (1.126)	83	814606	49.1104	49.110	80.00- 120.00	100.00
9.883	9.882 (1.126)	85	525897			34.22- 94.22	64.56
182 Propylbenzene					CAS #: 103-65-1		
9.918	9.925 (1.130)	91	1984600	51.0634	51.063	80.00- 120.00	100.00
9.926	9.925 (1.131)	120	479849			0.00- 54.34	24.18
9.926	9.925 (1.131)	105	73598			0.00- 33.54	3.71
188 4-Ethyltoluene					CAS #: 622-96-8		
10.019	10.019 (1.141)	120	529989	49.6584	49.658	80.00- 120.00	100.00
10.019	10.019 (1.141)	105	1665477			279.66- 339.66	314.25
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.069	10.069 (1.147)	120	717586	53.0198	53.020	80.00- 120.00	100.00
10.069	10.069 (1.147)	105	1485277			169.72- 229.72	206.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.398	10.398 (1.184)	120	649689	52.1582	52.158	80.00- 120.00	100.00
10.398	10.398 (1.184)	105	1398688			185.64- 245.64	215.29
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.678	10.678 (1.216)	146	1102798	51.9465	51.946	80.00- 120.00	100.00
10.678	10.678 (1.216)	148	703569			34.23- 94.23	63.80
10.678	10.678 (1.216)	111	404030			7.40- 67.40	36.64
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.756	10.756 (1.225)	146	1102814	51.2179	51.218	80.00- 120.00	100.00
10.756	10.756 (1.225)	148	709032			33.60- 93.60	64.29
10.756	10.756 (1.225)	111	387890			4.87- 64.87	35.17
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.871	10.871 (1.238)	91	1437761	53.4949	53.495	80.00- 120.00	100.00
10.871	10.878 (1.238)	126	331040			0.00- 53.22	23.02
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.086	11.086 (1.263)	146	1040160	51.3992	51.399	80.00- 120.00	100.00
11.086	11.086 (1.263)	148	665332			33.66- 93.66	63.96
11.079	11.086 (1.262)	111	398336			7.92- 67.92	38.30
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.483	12.483 (1.422)	180	1067664	62.2937	62.294	80.00- 120.00	100.00
12.483	12.483 (1.422)	182	1025120			66.61- 126.61	96.02
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.576	12.583 (1.432)	225	950124	63.6869	63.687	80.00- 120.00	100.00
12.576	12.583 (1.432)	223	604983			32.66- 92.66	63.67
228 Naphthalene					CAS #: 91-20-3		
12.748	12.748 (1.452)	128	208261	7.08433	7.084	80.00- 120.00	100.00(R)
12.748	12.748 (1.452)	127	29246			0.00- 42.82	14.04

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031603.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 16-MAR-2016 10:34
Operator : js Inst ID: msdp.i
Smp Info : 100mL #2759-247A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 13:00 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031603.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	121338	1.85
123 1,4-Difluorobenze	491164	294698	687630	488439	-0.55
163 Chlorobenzene-d5	462293	277376	647210	451524	-2.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

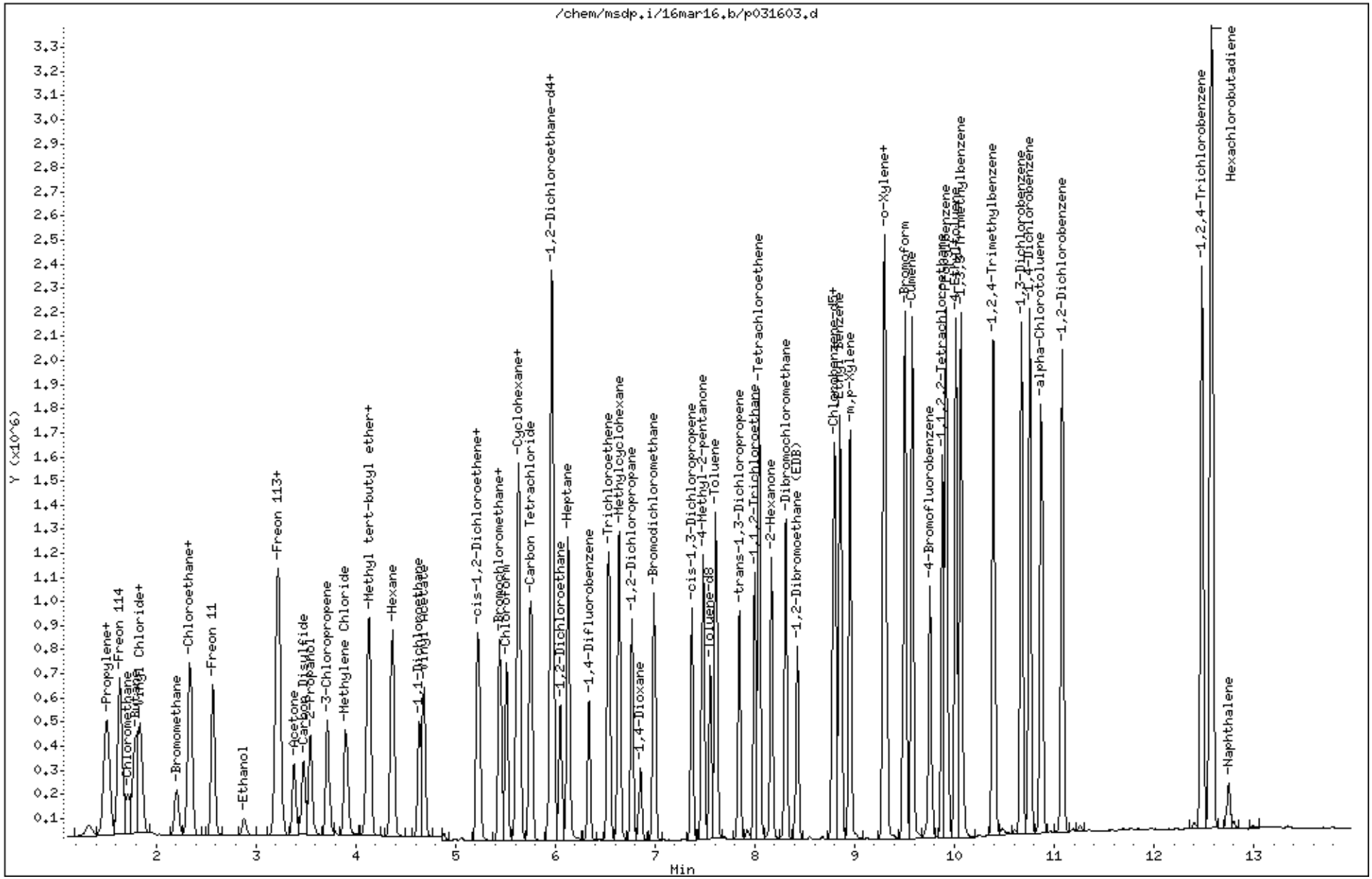
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/16mar16.b/p031603.d
Date : 16-MAR-2016 10:34
Client ID: LCS
Sample Info: 100mL #2759-247A

Instrument: msdp.i

Operator: js
Column diameter: 0.25

Column phase: RTX-624



eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1603115-07AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p031604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/16/16 10:59 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	131 Q	70-130
Acetone	94	70-130
trans-1,2-Dichloroethene	107	70-130
cis-1,2-Dichloroethene	95	70-130
Methylene Chloride	122	70-130
Chloroform	101	70-130
Cyclohexane	90	70-130
Benzene	100	70-130
Trichloroethene	105	70-130
Toluene	98	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	101	70-130
o-Xylene	102	70-130
Cumene	100	70-130
1,3,5-Trimethylbenzene	104	70-130
1,2,4-Trimethylbenzene	103	70-130
1,2,3-Trimethylbenzene	Not Spiked	
Naphthalene	149 Q	60-140
Methylcyclohexane	93	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	100	70-130

Report Date: 16-Mar-2016 13:01

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16mar16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: js
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT12Bromoform.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 50ppbv (100ppbv)

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9	Propylene	50.000	54.478	108.96	60-140
11	Freon 12	50.000	52.289	104.58	70-130
15	Freon 114	50.000	54.569	109.14	70-130
17	Chloromethane	50.000	69.737	139.47*	70-130
23	Butane	50.000	49.821	99.64	60-140
25	Vinyl Chloride	50.000	65.565	131.13*	70-130
26	1,3-Butadiene	50.000	55.118	110.24	70-130
29	Bromomethane	50.000	58.215	116.43	70-130
30	Chloroethane	50.000	53.016	106.03	70-130
31	Isopentane	50.000	56.390	112.78	60-140
35	Freon 11	50.000	52.902	105.80	70-130
42	Ethanol	50.000	59.688	119.38	70-130
49	Freon 113	50.000	49.262	98.52	70-130
50	1,1-Dichloroethene	50.000	49.524	99.05	70-130
52	Acetone	50.000	46.832	93.67	70-130
56	Carbon Disulfide	50.000	43.508	87.02	70-130
57	2-Propanol	50.000	51.532	103.06	70-130
58	3-Chloropropene	50.000	44.383	88.77	70-130
66	Methylene Chloride	50.000	61.046	122.09	70-130
72	Methyl tert-butyl	50.000	45.335	90.67	70-130
73	trans-1,2-Dichloro	42.500	45.655	107.42	70-130
78	Hexane	50.000	52.370	104.74	70-130
82	1,1-Dichloroethane	50.000	54.029	108.06	70-130
86	Vinyl Acetate	50.000	47.450	94.90	70-130
91	cis-1,2-Dichloroet	56.500	53.842	95.30	70-130
92	2-Butanone	50.000	46.952	93.90	70-130
99	Tetrahydrofuran	50.000	59.789	119.58	70-130
100	Chloroform	50.000	50.496	100.99	70-130
103	1,1,1-Trichloroeth	50.000	48.910	97.82	70-130
106	Carbon Tetrachlori	50.000	51.728	103.46	70-130
102	Cyclohexane	50.000	45.034	90.07	70-130
113	2,2,4-Trimethylpen	50.000	53.920	107.84	70-130
116	Benzene	50.000	50.045	100.09	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	55.203	110.41	70-130
121 Heptane	50.000	41.652	83.30	70-130
125 Trichloroethene	50.000	52.684	105.37	70-130
127 Methylcyclohexane	50.000	46.332	92.67	60-140
132 1,2-Dichloropropan	50.000	52.236	104.47	70-130
136 1,4-Dioxane	50.000	49.007	98.01	70-130
138 Bromodichlorometha	50.000	53.129	106.26	70-130
144 cis-1,3-Dichloropr	50.000	47.402	94.80	70-130
145 4-Methyl-2-pentano	50.000	53.415	106.83	70-130
147 Toluene	50.000	49.290	98.58	70-130
150 trans-1,3-Dichloro	50.000	52.030	104.06	70-130
155 1,1,2-Trichloroeth	50.000	51.108	102.22	70-130
156 Tetrachloroethene	50.000	51.360	102.72	70-130
158 2-Hexanone	50.000	58.095	116.19	70-130
160 Dibromochlorometha	50.000	52.959	105.92	70-130
161 1,2-Dibromoethane	50.000	52.284	104.57	70-130
165 Chlorobenzene	50.000	51.312	102.62	70-130
167 Ethyl Benzene	50.000	49.184	98.37	70-130
169 m,p-Xylene	50.000	50.469	100.94	70-130
171 o-Xylene	50.000	50.845	101.69	70-130
172 Styrene	50.000	54.740	109.48	70-130
174 Bromoform	65.000	69.792	107.37	70-130
175 Cumene	50.000	49.883	99.77	70-130
181 1,1,2,2-Tetrachlor	50.000	48.949	97.90	70-130
182 Propylbenzene	50.000	51.148	102.30	70-130
188 4-Ethyltoluene	50.000	49.592	99.18	70-130
190 1,3,5-Trimethylben	50.000	52.200	104.40	70-130
196 1,2,4-Trimethylben	50.000	51.611	103.22	70-130
208 1,3-Dichlorobenzen	50.000	51.506	103.01	70-130
209 1,4-Dichlorobenzen	50.000	50.837	101.67	70-130
212 alpha-Chlorotoluen	50.000	53.524	107.05	70-130
214 1,2-Dichlorobenzen	50.000	51.787	103.57	70-130
226 1,2,4-Trichloroben	50.000	65.936	131.87*	70-130
227 Hexachlorobutadien	50.000	66.396	132.79*	70-130
228 Naphthalene	5.000	7.455	149.10*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.062	104.25	70-130
$ 146 Toluene-d8	25.000	25.752	103.01	70-130
$ 177 4-Bromofluorobenze	25.000	25.140	100.56	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031604.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 16-MAR-2016 10:59
Operator : js Inst ID: msdp.i
Smp Info : 100mL #2759-247A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 13:00 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.456	5.449 (1.000)	130	120352	25.0000		80.00- 120.00	100.00
5.456	5.449 (1.000)	128	94259			49.06- 109.06	78.32
5.448	5.449 (1.000)	49	212372			124.20- 184.20	176.46
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.344	6.344 (1.000)	114	485534	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	63921			0.00- 44.57	13.17
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.779	8.779 (1.000)	117	458163	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	234233			20.36- 80.36	51.12
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.986	5.986 (1.097)	65	185101	26.0621	26.062	80.00- 120.00	100.00
5.986	5.986 (1.097)	67	98898			26.68- 86.68	53.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	499567	25.7526	25.752	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	51211			0.00- 40.62	10.25
7.554	7.554 (1.191)	100	336102			36.74- 96.74	67.28
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.761 (1.113)	174	371467	25.1395	25.140	80.00- 120.00	100.00
9.768	9.761 (1.113)	95	341163			65.95- 125.95	91.84
9.768	9.761 (1.113)	176	368881			65.80- 125.80	99.30
9 Propylene					CAS #: 115-07-1		
1.479	1.479 (0.271)	41	276554	54.4782	54.478	80.00- 120.00	100.00
1.479	1.479 (0.271)	42	187510			34.60- 94.60	67.80
1.479	1.479 (0.271)	39	209592			43.23- 103.23	75.79
11 Freon 12					CAS #: 75-71-8		
1.506	1.507 (0.276)	85	700078	52.2890	52.289	80.00- 120.00	100.00
1.506	1.507 (0.276)	87	224604			1.76- 61.76	32.08
15 Freon 114					CAS #: 76-14-2		
1.632	1.632 (0.299)	135	564478	54.5687	54.569	80.00- 120.00	100.00
1.632	1.632 (0.299)	137	184021			2.23- 62.23	32.60
17 Chloromethane					CAS #: 74-87-3		
1.730	1.730 (0.317)	50	310957	69.7366	69.737	80.00- 120.00	100.00(R)
1.730	1.730 (0.317)	52	100310			0.00- 59.98	32.26
23 Butane					CAS #: 106-97-8		
1.786	1.786 (0.327)	58	68317	49.8207	49.821	80.00- 120.00	100.00
1.786	1.786 (0.327)	43	570361			783.10- 843.10	834.87
25 Vinyl Chloride					CAS #: 75-01-4		
1.828	1.828 (0.335)	62	390864	65.5646	65.565	80.00- 120.00	100.00(R)
1.828	1.828 (0.335)	64	113073			5.16- 65.16	28.93
26 1,3-Butadiene					CAS #: 106-99-0		
1.856	1.842 (0.340)	54	271005	55.1184	55.118	80.00- 120.00	100.00
1.842	1.842 (0.338)	39	369973			81.92- 141.92	136.52
29 Bromomethane					CAS #: 74-83-9		
2.204	2.204 (0.404)	94	201680	58.2154	58.215	80.00- 120.00	100.00
2.204	2.204 (0.404)	96	185643			65.10- 125.10	92.05
30 Chloroethane					CAS #: 75-00-3		
2.318	2.318 (0.425)	64	142043	53.0159	53.016	80.00- 120.00	100.00
2.318	2.318 (0.425)	66	39034			0.00- 59.99	27.48

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.318	2.318 (0.425)	49	55563			5.85- 65.85	39.12
31 Isopentane					CAS #: 78-78-4		
2.340	2.340 (0.429)	43	424371	56.3899	56.390	80.00- 120.00	100.00
2.347	2.340 (0.430)	57	259435			36.22- 96.22	61.13
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	738125	52.9017	52.902	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	473866			34.50- 94.50	64.20
42 Ethanol					CAS #: 64-17-5		
2.884	2.884 (0.529)	45	136653	59.6885	59.688	80.00- 120.00	100.00
2.884	2.877 (0.529)	43	25948			0.00- 50.77	18.99
2.884	2.884 (0.529)	46	50283			8.68- 68.68	36.80
49 Freon 113					CAS #: 76-13-1		
3.214	3.214 (0.589)	151	548151	49.2620	49.262	80.00- 120.00	100.00
3.214	3.214 (0.589)	153	338795			33.45- 93.45	61.81
3.214	3.214 (0.589)	101	556148			74.36- 134.36	101.46
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	152315	49.5243	49.524	80.00- 120.00	100.00
3.242	3.242 (0.594)	96	241215			133.60- 193.60	158.37
3.242	3.242 (0.594)	61	525016			302.57- 362.57	344.69
52 Acetone					CAS #: 67-64-1		
3.386	3.386 (0.621)	58	148593	46.8326	46.832	80.00- 120.00	100.00
3.386	3.378 (0.621)	43	552141			323.05- 383.05	371.58
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.471 (0.638)	76	596930	43.5075	43.508	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.550	3.550 (0.651)	45	697579	51.5323	51.532	80.00- 120.00	100.00
3.550	3.550 (0.651)	43	146592			0.00- 49.72	21.01
3.550	3.550 (0.651)	59	22438			0.00- 33.36	3.22
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.715 (0.682)	76	101609	44.3829	44.383	80.00- 120.00	100.00
3.722	3.715 (0.682)	41	446906			339.09- 399.09	439.83
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.715)	49	456407	61.0458	61.046	80.00- 120.00	100.00
3.901	3.901 (0.715)	84	216316			25.63- 85.63	47.40
3.901	3.901 (0.715)	51	137620			0.46- 60.46	30.15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.123 (0.756)	73	676120	45.3354	45.335	80.00- 120.00	100.00
4.123	4.116 (0.756)	57	223321			0.00- 59.13	33.03
4.123	4.116 (0.756)	41	231904			0.00- 58.91	34.30
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.145	4.145 (0.760)	98	140170	45.6550	45.655	80.00- 120.00	100.00
4.145	4.145 (0.760)	61	405829			242.97- 302.97	289.53
4.145	4.145 (0.760)	96	215345			127.33- 187.33	153.63
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.800)	57	527851	52.3697	52.370	80.00- 120.00	100.00
4.367	4.367 (0.800)	43	374278			34.30- 94.30	70.91
4.367	4.367 (0.800)	86	58125			0.00- 42.17	11.01
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	552659	54.0292	54.029	80.00- 120.00	100.00
4.639	4.639 (0.850)	65	159296			0.09- 60.09	28.82
86 Vinyl Acetate					CAS #: 108-05-4		
4.682	4.682 (0.858)	86	63830	47.4500	47.450	80.00- 120.00	100.00
4.682	4.682 (0.858)	43	1085245			1535.12-1595.12	1700.21
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.957)	98	185002	53.8417	53.842	80.00- 120.00	100.00
5.219	5.219 (0.957)	96	287384			125.21- 185.21	155.34
5.219	5.219 (0.957)	61	482249			211.41- 271.41	260.67
92 2-Butanone					CAS #: 78-93-3		
5.241	5.241 (0.961)	72	122222	46.9516	46.952	80.00- 120.00	100.00
5.241	5.241 (0.961)	43	761317			452.15- 512.15	622.90
5.241	5.241 (0.961)	57	55856			9.54- 69.54	45.70
99 Tetrahydrofuran					CAS #: 109-99-9		
5.441	5.441 (0.997)	42	416269	59.7894	59.789	80.00- 120.00	100.00
5.441	5.441 (0.997)	71	107073			2.09- 62.09	25.72
5.441	5.441 (0.997)	72	112836			3.61- 63.61	27.11
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.010)	83	537746	50.4961	50.496	80.00- 120.00	100.00
5.513	5.513 (1.010)	85	350742			35.60- 95.60	65.22
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.628 (1.032)	84	336960	45.0343	45.034	80.00- 120.00	100.00
5.628	5.620 (1.032)	56	569081			115.43- 175.43	168.89
5.628	5.620 (1.032)	41	344509			53.65- 113.65	102.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.034)	97	594246	48.9106	48.910	80.00- 120.00	100.00
5.642	5.642 (1.034)	99	380363			33.21- 93.21	64.01
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.757 (1.055)	119	652209	51.7284	51.728	80.00- 120.00	100.00
5.756	5.757 (1.055)	117	677781			76.21- 136.21	103.92
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.964	5.957 (1.093)	57	1781880	53.9196	53.920	80.00- 120.00	100.00
5.964	5.964 (1.093)	56	588177			1.10- 61.10	33.01
5.964	5.957 (1.093)	41	538685			0.00- 57.08	30.23
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	740541	50.0448	50.045	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	173055			0.00- 53.91	23.37
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.050 (0.955)	62	450871	55.2034	55.203	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	140041			0.29- 60.29	31.06
121 Heptane					CAS #: 142-82-5		
6.129	6.129 (0.966)	71	266433	41.6523	41.652	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	679787			172.43- 232.43	255.14
6.129	6.129 (0.966)	57	353596			85.51- 145.51	132.71
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	375423	52.6844	52.684	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	423416			79.80- 139.80	112.78
6.537	6.537 (1.030)	97	238513			33.64- 93.64	63.53
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	485115	46.3325	46.332	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	226437			16.94- 76.94	46.68
6.645	6.645 (1.047)	55	544222			65.75- 125.75	112.18
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.774	6.766 (1.068)	63	355128	52.2358	52.236	80.00- 120.00	100.00
6.774	6.766 (1.068)	62	254997			39.62- 99.62	71.80
6.766	6.766 (1.067)	41	254734			30.53- 90.53	71.73
136 1,4-Dioxane					CAS #: 123-91-1		
6.852	6.852 (1.080)	88	180580	49.0074	49.007	80.00- 120.00	100.00
6.852	6.852 (1.080)	58	166173			52.00- 112.00	92.02
6.852	6.852 (1.080)	57	60325			0.00- 56.29	33.41

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	624057	53.1294	53.129	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	398150			34.30- 94.30	63.80
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	467590	47.4017	47.402	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	149145			2.71- 62.71	31.90
7.368	7.368 (1.161)	39	358260			35.07- 95.07	76.62
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	322598	53.4154	53.415	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	936320			230.95- 290.95	290.24
7.483	7.483 (1.180)	85	108063			7.98- 67.98	33.50
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	1019753	49.2896	49.290	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	589911			27.38- 87.38	57.85
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	461503	52.0305	52.030	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	149913			2.10- 62.10	32.48
7.848	7.848 (0.894)	39	330582			30.98- 90.98	71.63
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.999	7.999 (0.911)	97	354982	51.1079	51.108	80.00- 120.00	100.00
7.999	7.999 (0.911)	99	217963			31.34- 91.34	61.40
7.999	7.999 (0.911)	83	300681			57.20- 117.20	84.70
156 Tetrachloroethene					CAS #: 127-18-4		
8.049	8.049 (0.917)	166	622570	51.3601	51.360	80.00- 120.00	100.00
8.049	8.049 (0.917)	129	412175			35.33- 95.33	66.21
8.049	8.049 (0.917)	131	400772			35.36- 95.36	64.37
158 2-Hexanone					CAS #: 591-78-6		
8.170	8.170 (0.931)	58	449052	58.0953	58.095	80.00- 120.00	100.00
8.170	8.170 (0.931)	43	920712			156.39- 216.39	205.03
8.170	8.170 (0.931)	100	73562			0.00- 48.05	16.38
160 Dibromochloromethane					CAS #: 124-48-1		
8.314	8.314 (0.947)	129	751233	52.9592	52.959	80.00- 120.00	100.00
8.314	8.314 (0.947)	127	578447			48.12- 108.12	77.00
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.960)	107	588918	52.2839	52.284	80.00- 120.00	100.00
8.428	8.428 (0.960)	109	547629			63.87- 123.87	92.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.003)	112	884620	51.3120	51.312	80.00- 120.00	100.00
8.808	8.808 (1.003)	114	279131			2.38- 62.38	31.55
8.808	8.808 (1.003)	77	464646			24.59- 84.59	52.52
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.858 (1.009)	106	445930	49.1839	49.184	80.00- 120.00	100.00
8.858	8.858 (1.009)	91	1375076			276.53- 336.53	308.36
169 m,p-Xylene					CAS #: 108-38-3		
8.958	8.958 (1.020)	106	556538	50.4691	50.469	80.00- 120.00	100.00
8.958	8.958 (1.020)	91	1083366			166.59- 226.59	194.66
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	538231	50.8451	50.845	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	1117668			176.08- 236.08	207.66
172 Styrene					CAS #: 100-42-5		
9.316	9.317 (1.061)	104	868057	54.7400	54.740	80.00- 120.00	100.00
9.316	9.309 (1.061)	78	408994			17.58- 77.58	47.12
174 Bromoform					CAS #: 75-25-2		
9.510	9.503 (1.083)	173	1215924	69.7925	69.792	80.00- 120.00	100.00
9.510	9.503 (1.083)	171	620149			21.36- 81.36	51.00
175 Cumene					CAS #: 98-82-8		
9.589	9.582 (1.092)	105	1673029	49.8832	49.883	80.00- 120.00	100.00
9.589	9.582 (1.092)	120	462202			0.00- 57.79	27.63
9.589	9.582 (1.092)	51	226577			0.00- 41.33	13.54
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.890	9.882 (1.126)	83	823875	48.9495	48.949	80.00- 120.00	100.00
9.890	9.882 (1.126)	85	526417			34.22- 94.22	63.90
182 Propylbenzene					CAS #: 103-65-1		
9.933	9.925 (1.131)	91	2017109	51.1478	51.148	80.00- 120.00	100.00
9.933	9.925 (1.131)	120	483661			0.00- 54.34	23.98
9.933	9.925 (1.131)	105	71842			0.00- 33.54	3.56
188 4-Ethyltoluene					CAS #: 622-96-8		
10.026	10.019 (1.142)	120	537068	49.5925	49.592	80.00- 120.00	100.00
10.026	10.019 (1.142)	105	1704914			279.66- 339.66	317.45
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.083	10.069 (1.148)	120	716878	52.1999	52.200	80.00- 120.00	100.00
10.083	10.069 (1.148)	105	1469343			169.72- 229.72	204.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.412	10.398 (1.186)	120	652331	51.6114	51.611	80.00- 120.00	100.00
10.412	10.398 (1.186)	105	1405500			185.64- 245.64	215.46
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.692	10.678 (1.218)	146	1109516	51.5056	51.506	80.00- 120.00	100.00
10.692	10.678 (1.218)	148	698233			34.23- 94.23	62.93
10.692	10.678 (1.218)	111	413082			7.40- 67.40	37.23
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.778	10.756 (1.228)	146	1110700	50.8367	50.837	80.00- 120.00	100.00
10.778	10.756 (1.228)	148	701281			33.60- 93.60	63.14
10.778	10.756 (1.228)	111	399069			4.87- 64.87	35.93
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.892	10.871 (1.241)	91	1459686	53.5237	53.524	80.00- 120.00	100.00
10.892	10.878 (1.241)	126	333358			0.00- 53.22	22.84
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.107	11.086 (1.265)	146	1063409	51.7866	51.787	80.00- 120.00	100.00
11.107	11.086 (1.265)	148	673815			33.66- 93.66	63.36
11.107	11.086 (1.265)	111	392530			7.92- 67.92	36.91
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.518	12.483 (1.426)	180	1146698	65.9355	65.936	80.00- 120.00	100.00(R)
12.518	12.483 (1.426)	182	1092598			66.61- 126.61	95.28
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.611	12.583 (1.437)	225	1005107	66.3961	66.396	80.00- 120.00	100.00(R)
12.611	12.583 (1.437)	223	636947			32.66- 92.66	63.37
228 Naphthalene					CAS #: 91-20-3		
12.783	12.748 (1.456)	128	222382	7.45506	7.455	80.00- 120.00	100.00(R)
12.783	12.748 (1.456)	127	27302			0.00- 42.82	12.28

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/16mar16.b/p031604.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 16-MAR-2016 10:59
Operator : js Inst ID: msdp.i
Smp Info : 100mL #2759-247A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/16mar16.b/p16q0201b.m
Meth Date : 16-Mar-2016 13:00 jscarbro Quant Type: ISTD
Cal Date : 18-FEB-2016 12:39 Cal File: p021807.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p031604.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/16mar16.b/p16q0201b.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 16-MAR-2016
Calibration Time: 10:10
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	119129	71477	166781	120352	1.03
123 1,4-Difluorobenze	491164	294698	687630	485534	-1.15
163 Chlorobenzene-d5	462293	277376	647210	458163	-0.89

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdp.i/16mar16.b/p031604.d

Date : 16-MAR-2016 10:59

Client ID: LCSD

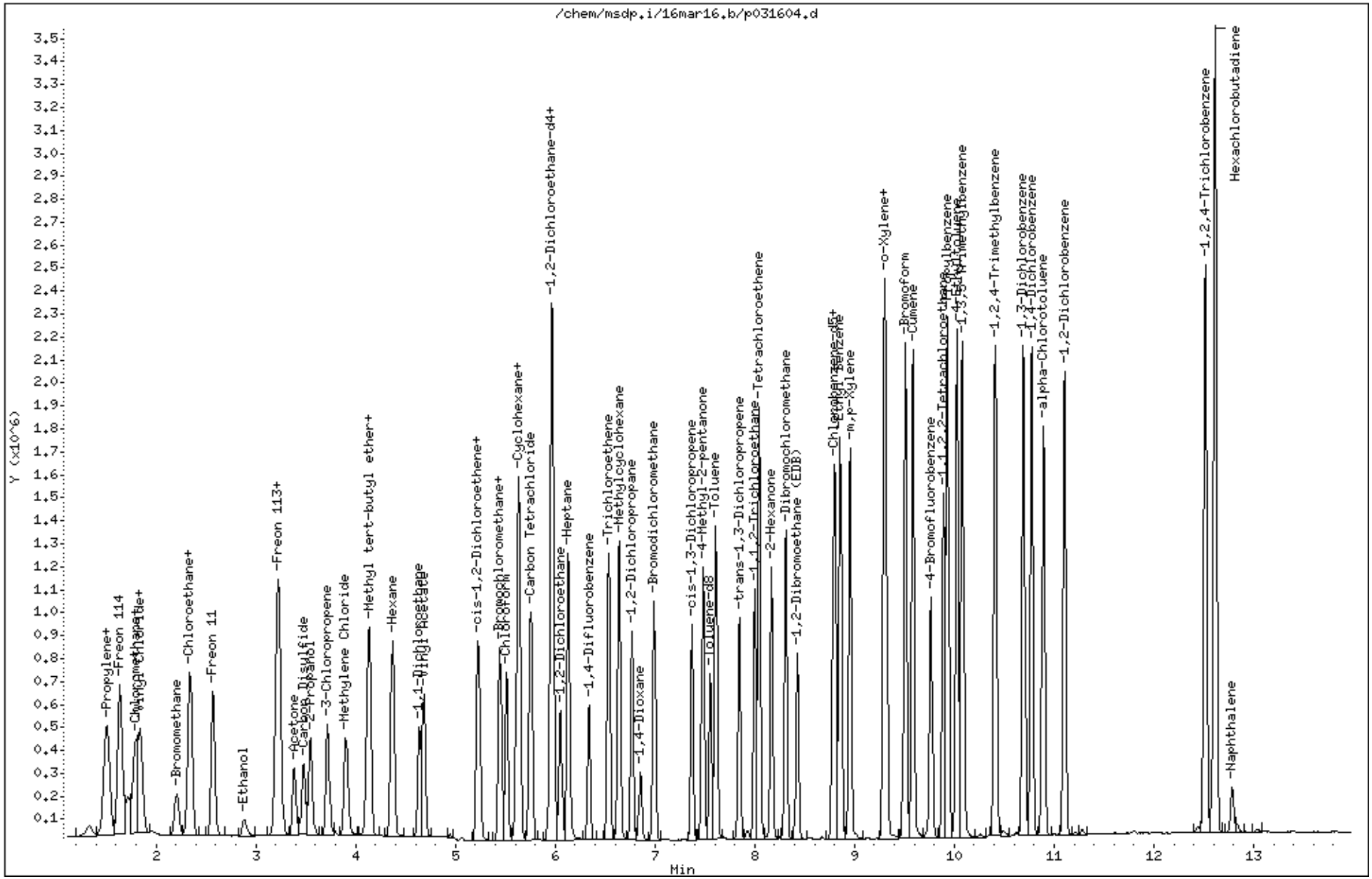
Sample Info: 100mL #2759-247A

Column phase: RTX-624

Instrument: msdp.i

Operator: js

Column diameter: 0.25



MSDP

BFB verification of 176/174 ratio: (161984/171904) *100 = 94.22%			
IS/Surr Std#	2759-299	Exp. Date:	6/1/2016
BCM	119,129		
1,4-DFB	491,164		
CB-d5	462,293		

Method TO-15/TO-14	
SOP# 6	
Vacuum:	NA
Please check all standards	
Surrogate# NA	Exp. Date: NA
Surrogate# NA	Exp. Date: NA

Verified CCV vs ICAL mid-point(-40%): js

Method: P16Q0201B

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Lead	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	P031601	BFB Tune Check	2759-299	12	36ng	1.0mL	1.00	js	js	3/16/16	0926	js	
√	P031602	CCV	2759-209A	13	50ppbv (100ppbv)	100mL	1.00	js	js	3/16/16	1010	js	Exp.4/6/16; 2 out. Chloromethane must be ND.
√	P031603	LCS	2759-247A	14	50ppbv (100ppbv)	100mL	1.00	js	js	3/16/16	1034	js	Exp. 5/16/16; 2 out
√	P031604	LCSD	2759-247A	14	50ppbv (100ppbv)	100mL	1.00	js	js	3/16/16	1059	js	Exp. 5/16/16.
√	P031605	CCVsp	2759-254	1	50ppbv (200ppbv)	50ml	1.00	js	js	3/16/16	1145	js	exp. 5/16/16; combo; 0 out
√	P031606	Lab Blank	403	12	Humid	200ml	1.00	js	js	3/16/16	1212	js	
√	P031607	1603144-01A	34605	2	3.9 Hg->14.8 psi	200ml	2.31	gd	js	3/16/16	1419	gd	
√	P031608	1603115-01A	11835	3	5.5 Hg->15 psi	200ml	2.47	gd	js	3/16/16	1445	gd	
√	P031609	1603115-02A	35604	4	5.0 Hg->15 psi	200ml	2.42	gd	js	3/16/16	1511	gd	
√	P031610	1603115-03A	12356	5	8.0 Hg->15 psi	200ml	2.76	gd	js	3/16/16	1538	gd	
√	P031611	1603115-04A	36496	6	7.5 Hg->15 psi	200ml	2.69	gd	js	3/16/16	1604	gd	
√	P031612	1603148-01A	1L2739	7	1.8 Hg->14.6 psi	200ml	2.12	gd	js	3/16/16	1630	gd	
√	P031613	1603148-02A	1L1758	8	3.5 Hg->14.8 psi	200ml	2.27	gd	js	3/16/16	1656	gd	
√	P031614	1603148-03A	34615	9	0.4 psi->15.1 psi	50ml	7.89	gd	js	3/16/16	1721	gd	dil NTC
√	P031615	1603148-04A	3059	10	5.7 Hg->15 psi	200ml	2.49	gd	js	3/16/16	1747	gd	
√	P031616	1603288-02A	1L bag	6	SVE-1S EFF	50ml	4.00	gd	gd	3/16/16	2059	gd	Low volume

3/21/16

Eurofins Air Toxics Inc.

Data file : /var/chem/msdp.i/01feb16.b/p020101.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 01-FEB-2016 13:16
Operator : kl Inst ID: msdp.i
Smp Info : 1.0ml #2759-216 BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/01feb16.b/bfb30.m
Meth Date : 01-Feb-2016 13:40 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.768	9.898	-0.130	95	230784			100.00- 100.00	99.57
9.768	9.898	-0.130	50	52453			8.00- 40.00	22.73
9.768	9.898	-0.130	75	110495			30.00- 66.00	47.88
9.768	9.898	-0.130	96	15327			5.00- 9.00	6.64
9.768	9.898	-0.130	173	1804			0.00- 1.99	0.78
9.768	9.898	-0.130	174	231786			50.01- 120.00	100.43
9.768	9.898	-0.130	175	16677			4.00- 9.00	7.19
9.768	9.898	-0.130	176	224704			93.00- 101.00	96.94
9.768	9.898	-0.130	177	15248			5.00- 9.00	6.79

Data File: /var/chem/msdp.i/01feb16.b/p020101.d

Page 1

Date : 01-FEB-2016 13:16

Client ID: BFB

Instrument: msdp.i

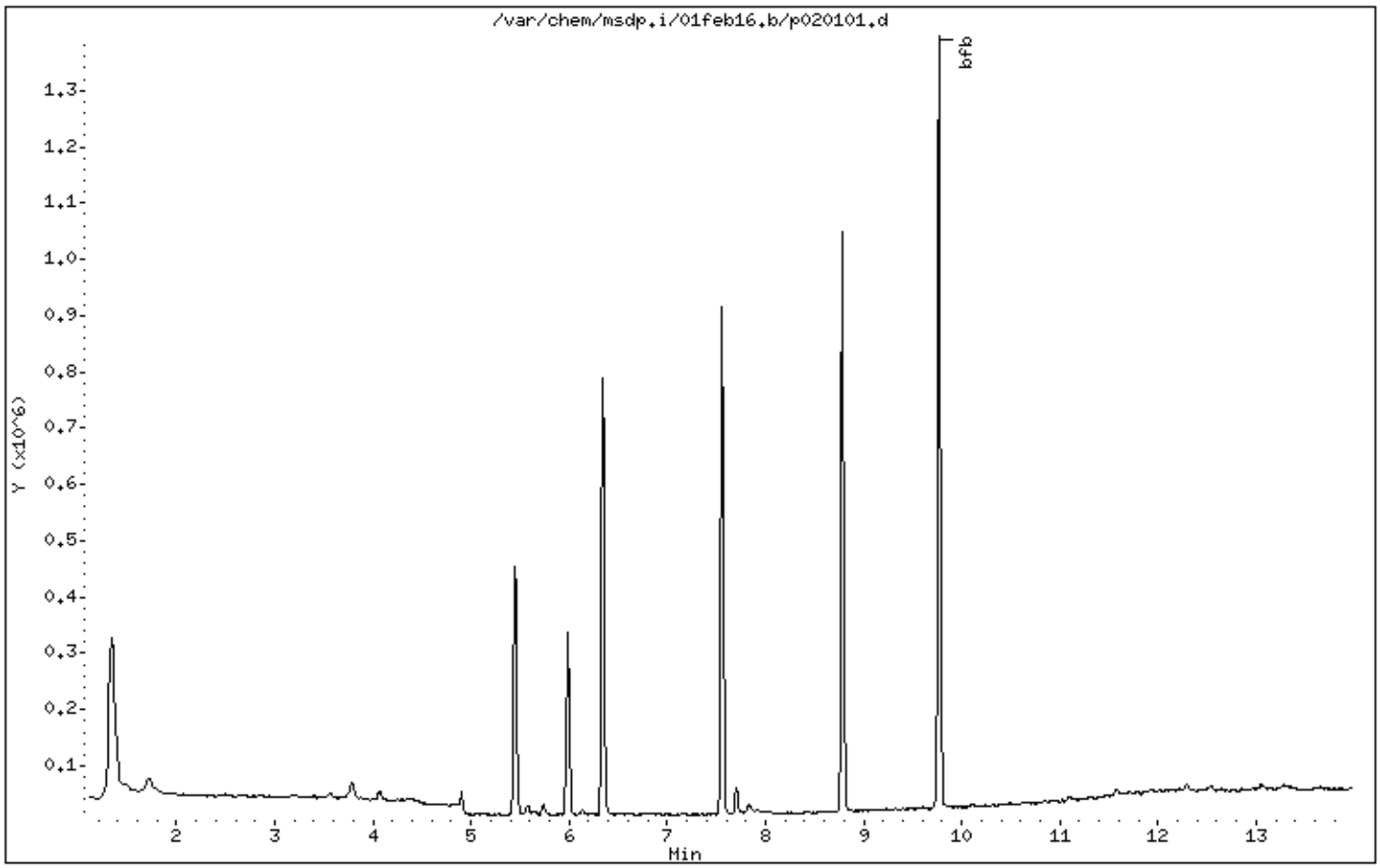
Sample Info: 1.0ml #2759-216 BFB;BFB

Volume Injected (uL): 1.0

Operator: kl

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdp.i/01feb16.b/p020101.d

Date : 01-FEB-2016 13:16

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0ml #2759-216 BFB;BFB

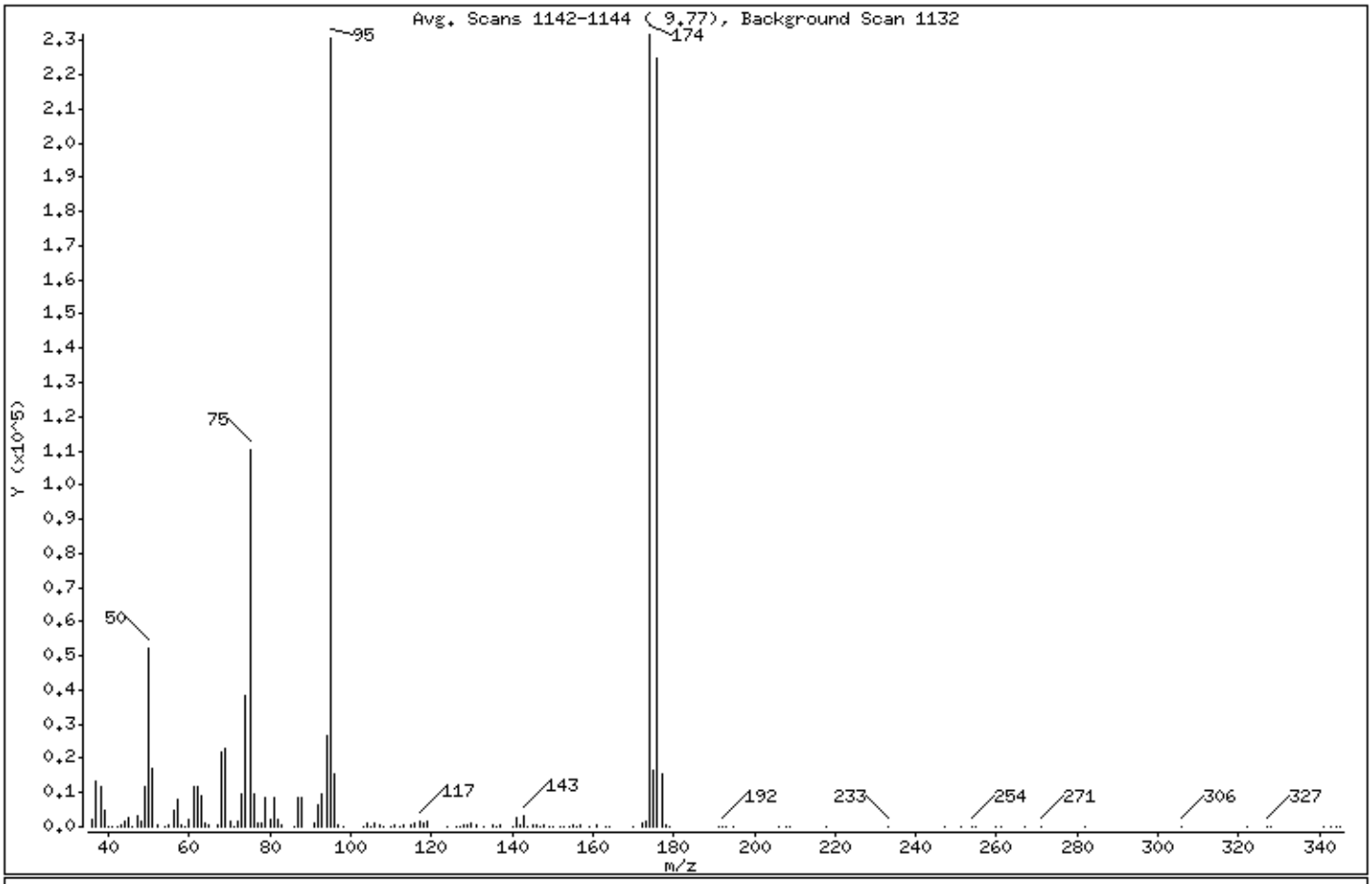
Volume Injected (uL): 1.0

Operator: kl

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.73
75	30.00 - 66.00% of mass 95	47.88
96	5.00 - 9.00% of mass 95	6.64
173	Less than 1.99% of mass 174	0.78 (0.78)
174	50.01 - 120.00% of mass 95	100.43
175	4.00 - 9.00% of mass 174	7.23 (7.19)
176	93.00 - 101.00% of mass 174	97.37 (96.94)
177	5.00 - 9.00% of mass 176	6.61 (6.79)

Date : 01-FEB-2016 13:16

Client ID: BFB Instrument: msdp.i

Sample Info: 1.0ml #2759-216 BFB;BFB

Volume Injected (uL): 1.0 Operator: kl

Column phase: Column diameter: 2.00

Data File: p020101.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1132
Location of Maximum: 174.00
Number of points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2162	73.00	9780	118.00	1125	172.00	1010
37.00	13409	74.00	38160	119.00	1353	173.00	1804
38.00	11964	75.00	110488	124.00	44	174.00	231744
39.00	4820	76.00	9511	126.00	213	175.00	16672
40.00	78	77.00	932	127.00	72	176.00	224704
41.00	102	78.00	808	128.00	785	177.00	15248
42.00	84	79.00	8412	129.00	410	178.00	423
43.00	346	80.00	2040	130.00	891	179.00	132
44.00	1495	81.00	8344	131.00	485	191.00	91
45.00	2417	82.00	1957	133.00	41	192.00	258
46.00	190	83.00	332	135.00	420	193.00	27
47.00	3044	86.00	177	136.00	171	195.00	55
48.00	1827	87.00	8274	137.00	427	206.00	43
49.00	11951	88.00	8264	140.00	122	208.00	36
50.00	52448	91.00	1228	141.00	2825	209.00	102
51.00	16800	92.00	6481	142.00	400	218.00	49
52.00	658	93.00	9450	143.00	2996	233.00	53
54.00	109	94.00	26808	144.00	182	247.00	42
55.00	699	95.00	230784	145.00	449	251.00	39
56.00	4608	96.00	15327	146.00	320	254.00	256
57.00	7795	97.00	483	147.00	176	255.00	112
58.00	434	98.00	86	148.00	515	260.00	199
59.00	60	103.00	185	149.00	241	261.00	106
60.00	2049	104.00	1097	150.00	202	267.00	165
61.00	11688	105.00	251	152.00	150	271.00	154
62.00	11841	106.00	1125	153.00	181	282.00	7
63.00	9285	107.00	343	154.00	260	306.00	83
64.00	981	108.00	158	155.00	718	322.00	72
65.00	366	110.00	190	156.00	179	327.00	177
67.00	421	111.00	281	157.00	362	328.00	70
68.00	21976	112.00	236	159.00	261	341.00	78
69.00	23120	113.00	358	161.00	468	343.00	143
70.00	1769	115.00	297	163.00	56	344.00	52
71.00	141	116.00	880	164.00	198	345.00	83
72.00	1339	117.00	1759	170.00	243		

Data File: /var/chem/msdp.i/01feb16.b/p020101.d

Date : 01-FEB-2016 13:16

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0ml #2759-216 BFB;BFB

Volume Injected (uL): 1.0

Operator: kl

Column phase:

Column diameter: 2.00

Data File: p020101.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1132
Location of Maximum: 174.00
Number of points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y

Eurofins Air Toxics Inc.

Data file : /var/chem/msdp.i/02feb16.b/p020201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-FEB-2016 12:39
Operator : sab Inst ID: msdp.i
Smp Info : 1.0ml 2759-216;BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/02feb16.b/bfb30.m
Meth Date : 02-Feb-2016 13:02 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.768	9.898	-0.130	95	239530			100.00- 100.00	99.19
9.768	9.898	-0.130	50	53749			8.00- 40.00	22.44
9.768	9.898	-0.130	75	114554			30.00- 66.00	47.82
9.768	9.898	-0.130	96	15322			5.00- 9.00	6.40
9.768	9.898	-0.130	173	1989			0.00- 1.99	0.82
9.768	9.898	-0.130	174	241493			50.01- 120.00	100.82
9.768	9.898	-0.130	175	17045			4.00- 9.00	7.06
9.768	9.898	-0.130	176	237141			93.00- 101.00	98.20
9.768	9.898	-0.130	177	15315			5.00- 9.00	6.46

Data File: /var/chem/msdp.i/02feb16.b/p020201.d

Date : 02-FEB-2016 12:39

Client ID: BFB

Instrument: msdp.i

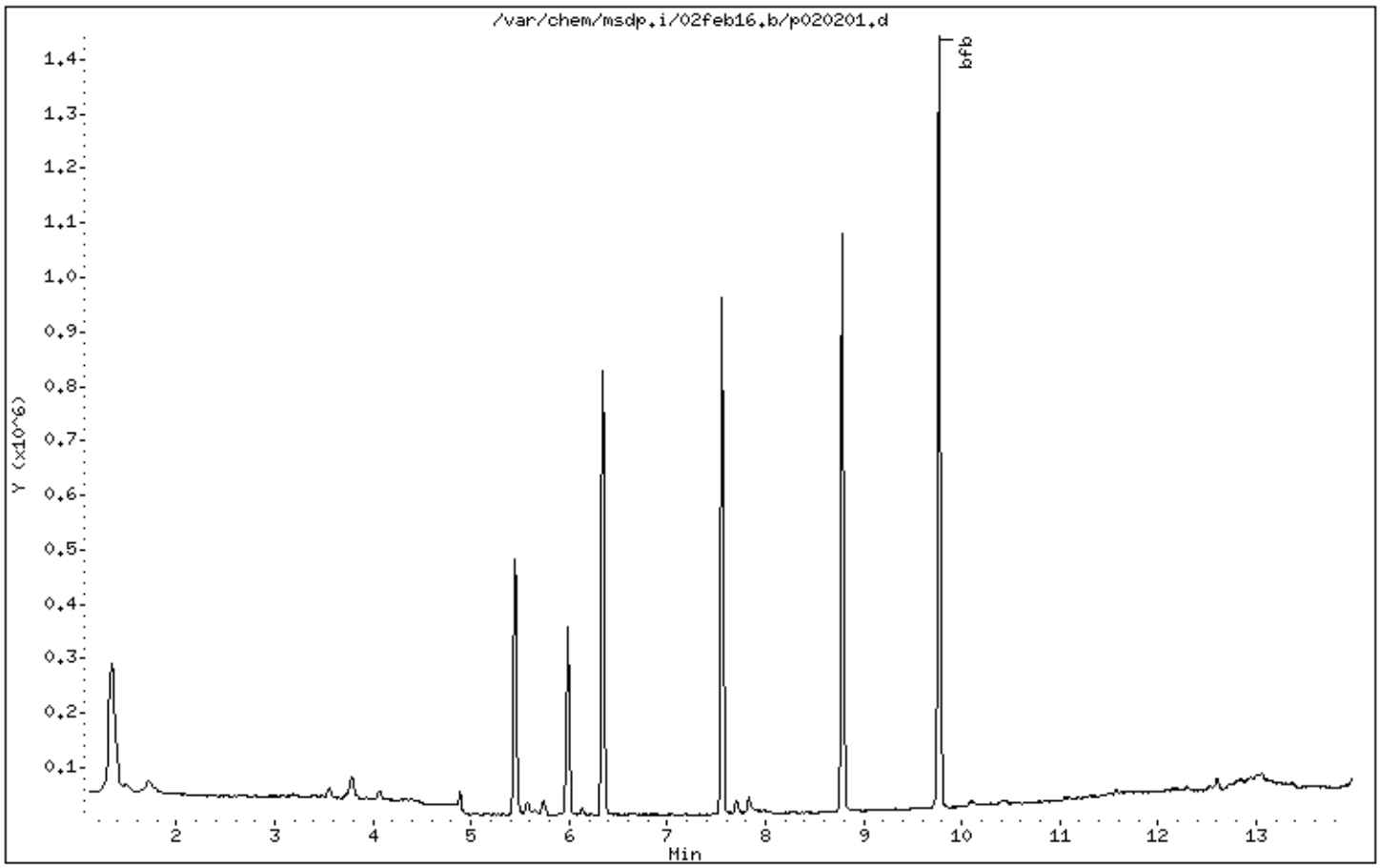
Sample Info: 1.0ml 2759-216;BFB Tune Check

Volume Injected (uL): 1.0

Operator: sab

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdp.i/02feb16.b/p020201.d

Date : 02-FEB-2016 12:39

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0ml 2759-216;BFB Tune Check

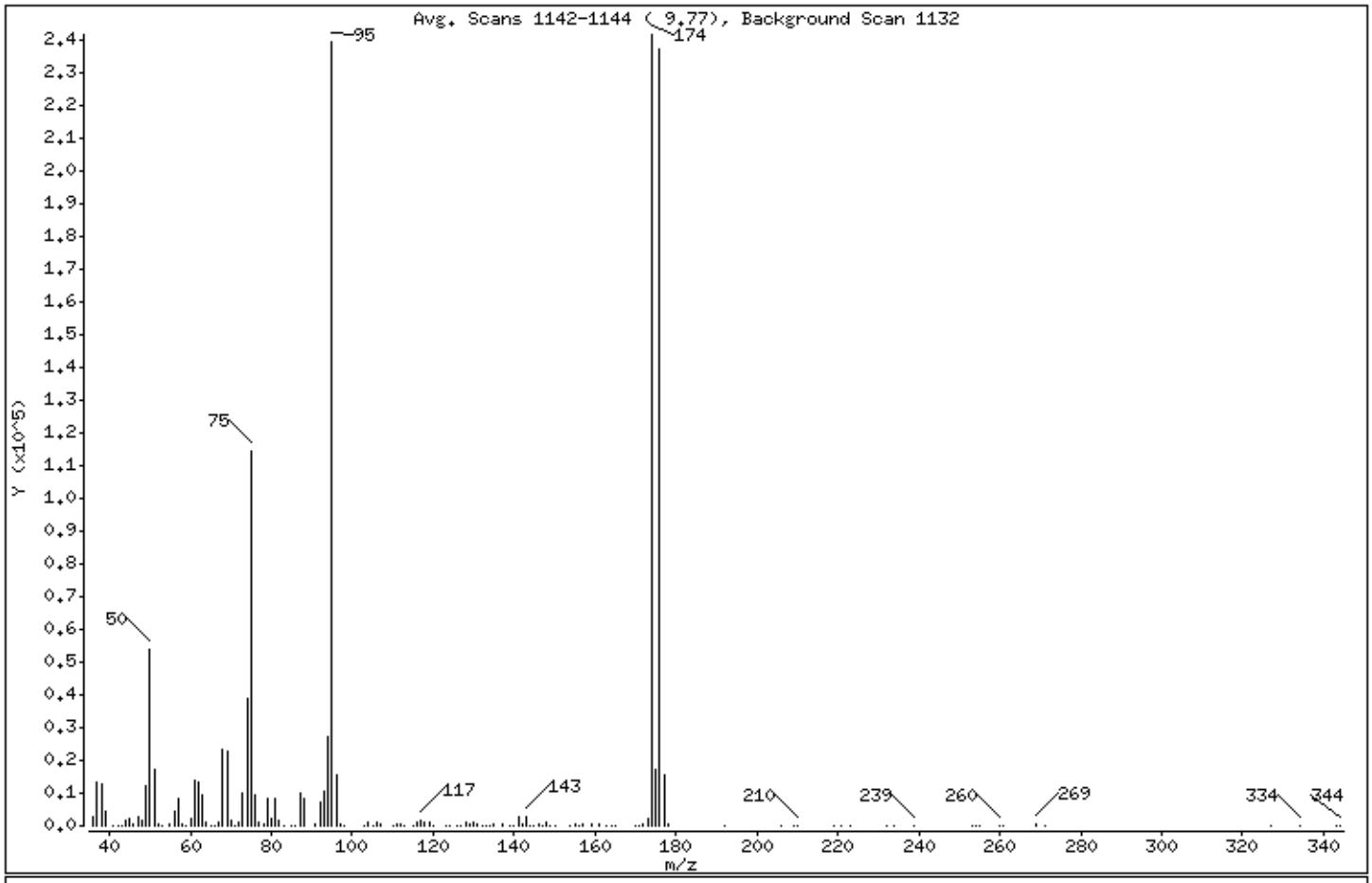
Volume Injected (uL): 1.0

Operator: sab

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.44
75	30.00 - 66.00% of mass 95	47.82
96	5.00 - 9.00% of mass 95	6.40
173	Less than 1.99% of mass 174	0.83 (0.82)
174	50.01 - 120.00% of mass 95	100.82
175	4.00 - 9.00% of mass 174	7.12 (7.06)
176	93.00 - 101.00% of mass 174	99.00 (98.20)
177	5.00 - 9.00% of mass 176	6.39 (6.46)

Date : 02-FEB-2016 12:39

Client ID: BFB Instrument: msdp.i

Sample Info: 1.0ml 2759-216;BFB Tune Check

Volume Injected (uL): 1.0 Operator: sab

Column phase: Column diameter: 2.00

Data File: p020201.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1132
Location of Maximum: 174.00
Number of points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2745	73.00	9878	118.00	954	164.00	37
37.00	13455	74.00	38696	119.00	1190	165.00	120
38.00	12516	75.00	114552	120.00	79	170.00	34
39.00	4539	76.00	9160	123.00	135	171.00	127
41.00	217	77.00	1183	124.00	204	172.00	581
42.00	34	78.00	735	126.00	38	173.00	1989
43.00	97	79.00	8265	127.00	104	174.00	241472
44.00	1488	80.00	2244	128.00	895	175.00	17040
45.00	2251	81.00	8593	129.00	421	176.00	237120
46.00	302	82.00	1856	130.00	1054	177.00	15315
47.00	2996	83.00	271	131.00	586	178.00	515
48.00	1548	85.00	73	132.00	38	192.00	50
49.00	12341	86.00	238	133.00	1	206.00	34
50.00	53744	87.00	9843	134.00	133	209.00	7
51.00	17112	88.00	8282	135.00	433	210.00	102
52.00	823	91.00	657	137.00	334	219.00	40
53.00	6	92.00	7017	139.00	80	221.00	41
55.00	714	93.00	10803	140.00	108	223.00	69
56.00	4472	94.00	27424	141.00	2579	232.00	1
57.00	8062	95.00	239488	142.00	372	234.00	40
58.00	310	96.00	15322	143.00	2799	239.00	144
59.00	200	97.00	432	144.00	190	253.00	134
60.00	2387	98.00	177	145.00	263	254.00	3
61.00	13784	103.00	276	146.00	383	255.00	3
62.00	13178	104.00	1286	147.00	244	260.00	207
63.00	9567	105.00	275	148.00	924	261.00	154
64.00	965	106.00	1150	149.00	224	269.00	323
65.00	175	107.00	344	150.00	185	271.00	4
66.00	38	110.00	238	154.00	124	327.00	62
67.00	880	111.00	298	155.00	635	334.00	237
68.00	23104	112.00	296	156.00	99	343.00	50
69.00	22856	113.00	161	157.00	570	344.00	47
70.00	1860	115.00	177	159.00	317		
71.00	137	116.00	1152	161.00	380		
72.00	1138	117.00	1661	163.00	18		

Data File: /var/chem/msdp.i/02feb16.b/p020201.d

Date : 02-FEB-2016 12:39

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0ml 2759-216;BFB Tune Check

Volume Injected (uL): 1.0

Operator: sab

Column phase:

Column diameter: 2.00

Data File: p020201.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1132
Location of Maximum: 174.00
Number of points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y

Eurofins Air Toxics Inc.

Data file : /chem/msdp.i/18feb16.b/p021801.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 18-FEB-2016 09:41
Operator : js Inst ID: msdp.i
Smp Info : 1.0ml #2759-264 BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/18feb16.b/bfb30.m
Meth Date : 18-Feb-2016 10:05 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.768	9.898	-0.130	95	165312			100.00- 100.00	97.37
9.768	9.898	-0.130	50	40389			8.00- 40.00	24.43
9.768	9.898	-0.130	75	77567			30.00- 66.00	46.92
9.768	9.898	-0.130	96	11067			5.00- 9.00	6.69
9.768	9.898	-0.130	173	1447			0.00- 1.99	0.85
9.768	9.898	-0.130	174	169770			50.01- 120.00	102.70
9.768	9.898	-0.130	175	12278			4.00- 9.00	7.23
9.768	9.898	-0.130	176	165632			93.00- 101.00	97.56
9.768	9.898	-0.130	177	10330			5.00- 9.00	6.24

Data File: /chem/msdp.i/18feb16.b/p021801.d

Date : 18-FEB-2016 09:41

Client ID: BFB

Instrument: msdp.i

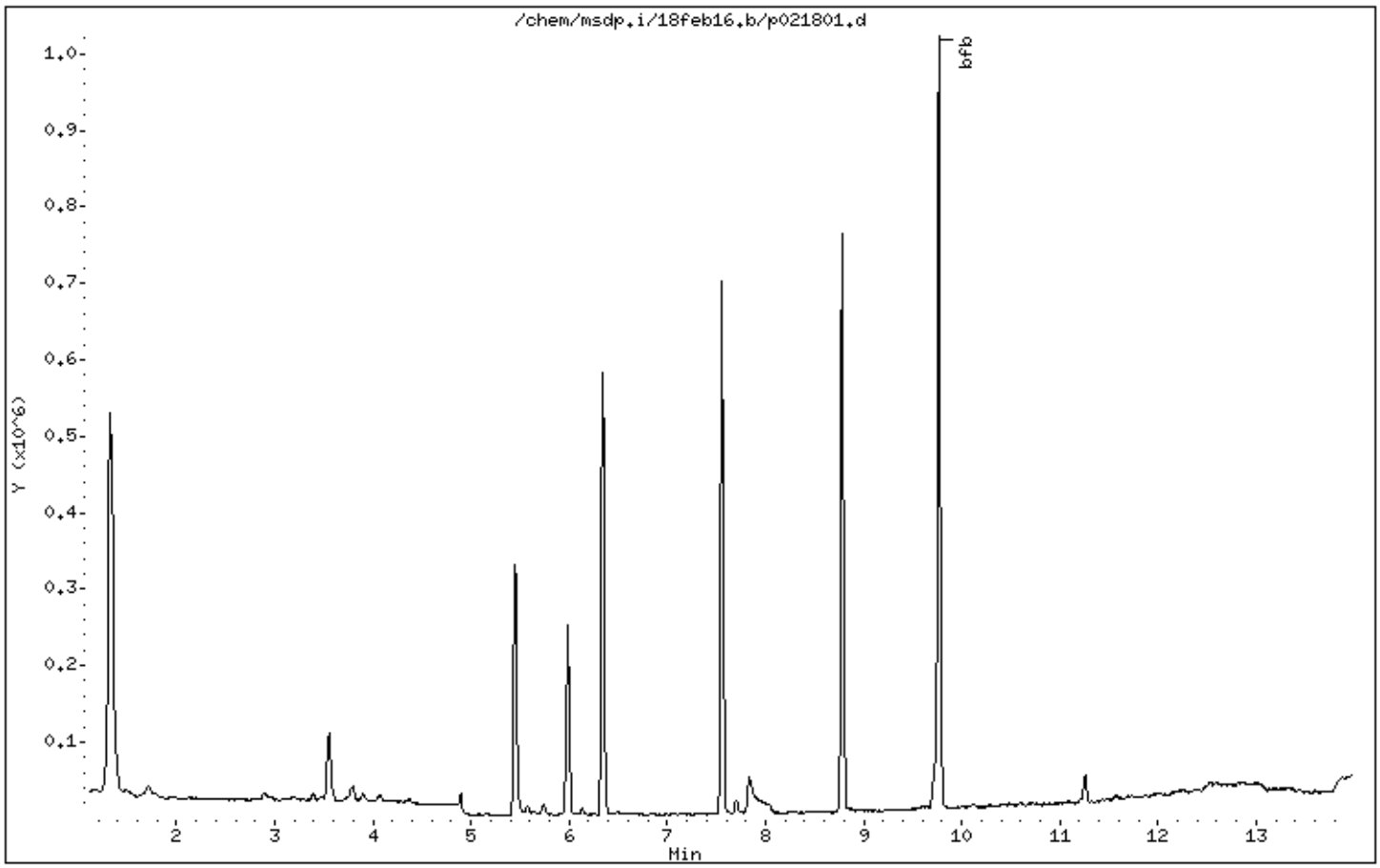
Sample Info: 1.0ml #2759-264 BFB;BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/18feb16.b/p021801.d

Date : 18-FEB-2016 09:41

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0ml #2759-264 BFB;BFB

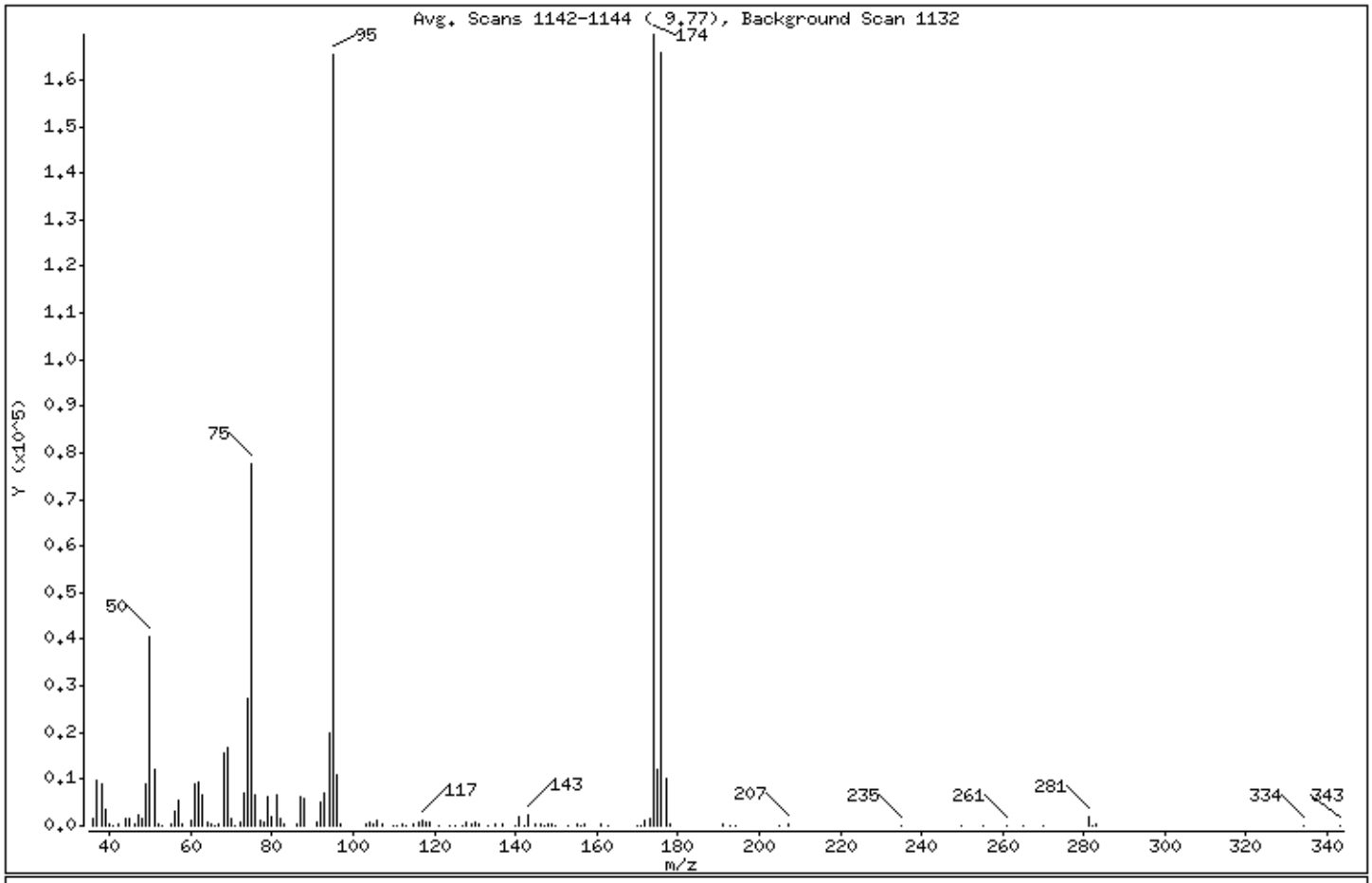
Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	24.43
75	30.00 - 66.00% of mass 95	46.92
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	0.88 (0.85)
174	50.01 - 120.00% of mass 95	102.70
175	4.00 - 9.00% of mass 174	7.43 (7.23)
176	93.00 - 101.00% of mass 174	100.19 (97.56)
177	5.00 - 9.00% of mass 176	6.25 (6.24)

Data File: /chem/msdp.i/18feb16.b/p021801.d

Date : 18-FEB-2016 09:41

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0ml #2759-264 BFB;BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

Data File: p021801.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1132
Location of Maximum: 174.00
Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1702	70.00	1472	112.00	248	157.00	286
37.00	9670	71.00	116	113.00	195	161.00	427
38.00	9147	72.00	771	115.00	246	163.00	74
39.00	3598	73.00	7139	116.00	963	170.00	76
40.00	261	74.00	27504	117.00	1081	171.00	91
41.00	75	75.00	77560	118.00	707	172.00	1089
42.00	254	76.00	6645	119.00	697	173.00	1447
44.00	1560	77.00	984	121.00	158	174.00	169728
45.00	1727	78.00	716	124.00	195	175.00	12278
46.00	236	79.00	6305	125.00	109	176.00	165632
47.00	2295	80.00	1908	127.00	134	177.00	10330
48.00	1409	81.00	6734	128.00	658	178.00	423
49.00	8877	82.00	1456	129.00	251	191.00	216
50.00	40384	83.00	244	130.00	668	193.00	33
51.00	12160	86.00	235	131.00	279	194.00	94
52.00	540	87.00	6270	133.00	136	205.00	46
53.00	36	88.00	6047	135.00	424	207.00	260
55.00	562	91.00	630	137.00	372	235.00	145
56.00	3043	92.00	4969	140.00	113	250.00	43
57.00	5474	93.00	6964	141.00	2053	255.00	75
58.00	296	94.00	19880	142.00	171	261.00	86
60.00	1340	95.00	165312	143.00	2258	265.00	64
61.00	8976	96.00	11067	145.00	326	270.00	3
62.00	9394	97.00	378	146.00	322	281.00	1813
63.00	6752	103.00	264	147.00	191	282.00	176
64.00	909	104.00	970	148.00	522	283.00	546
65.00	464	105.00	401	149.00	226	334.00	30
66.00	86	106.00	1049	150.00	92	343.00	157
67.00	450	107.00	253	153.00	178		
68.00	15578	110.00	183	155.00	491		
69.00	16600	111.00	111	156.00	140		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdp.i/16mar16.b/p031601.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 16-MAR-2016 09:26
Operator : js Inst ID: msdp.i
Smp Info : 1.0mL #2759-299; BFB; BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/16mar16.b/bfb30.m
Meth Date : 16-Mar-2016 09:49 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.768	9.898	-0.130	95	161024			100.00- 100.00	93.67
9.768	9.898	-0.130	50	45799			8.00- 40.00	28.44
9.768	9.898	-0.130	75	80997			30.00- 66.00	50.30
9.768	9.898	-0.130	96	10364			5.00- 9.00	6.44
9.768	9.898	-0.130	173	1969			0.00- 1.99	1.15
9.768	9.898	-0.130	174	171904			50.01- 120.00	106.76
9.768	9.898	-0.130	175	12983			4.00- 9.00	7.55
9.768	9.898	-0.130	176	161984			93.00- 101.00	94.23
9.768	9.898	-0.130	177	11404			5.00- 9.00	7.04

Data File: /chem/msdp.i/16mar16.b/p031601.d

Date : 16-MAR-2016 09:26

Client ID: BFB

Instrument: msdp.i

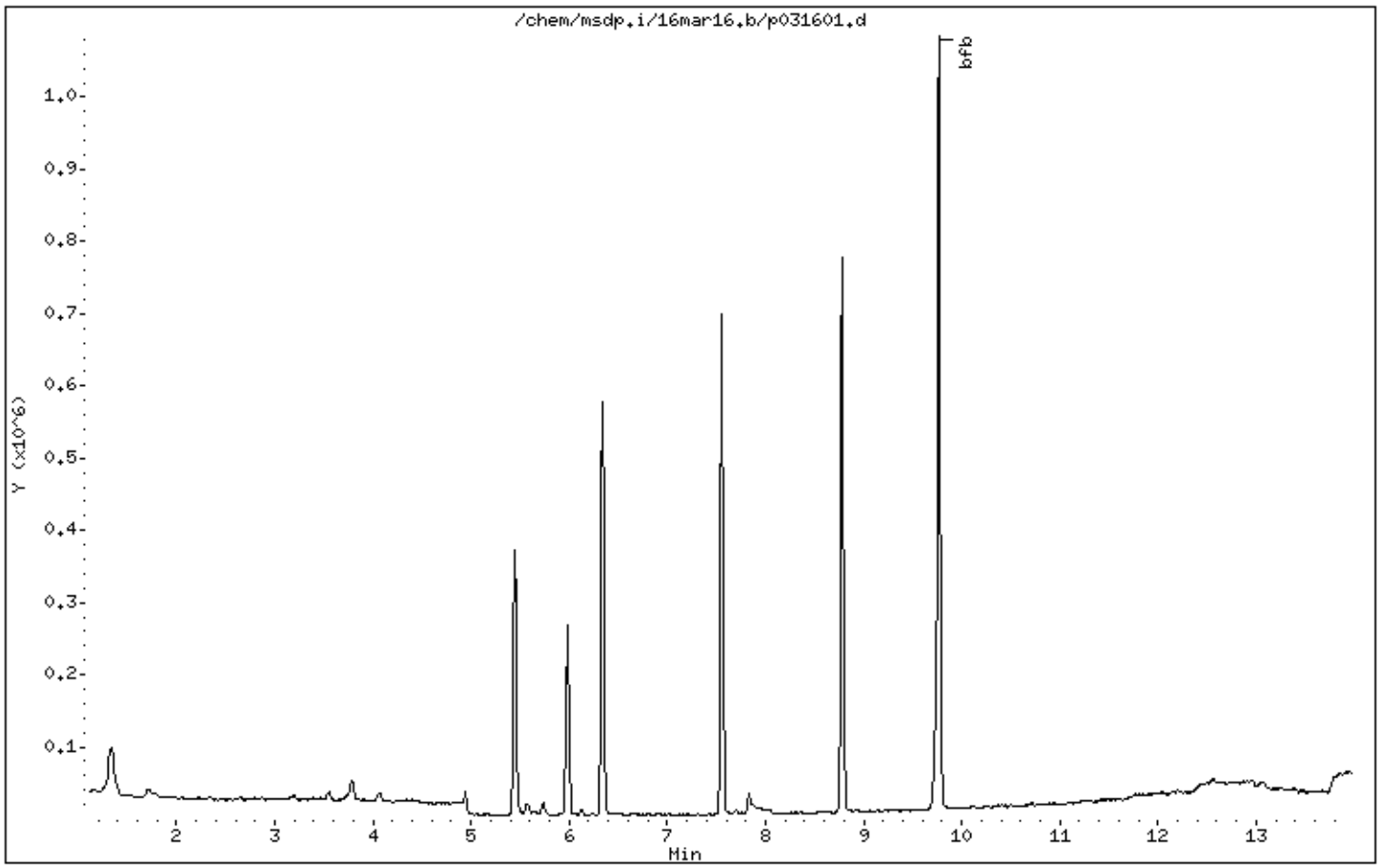
Sample Info: 1.0mL #2759-299; BFB; BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/16mar16.b/p031601.d

Date : 16-MAR-2016 09:26

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0mL #2759-299; BFB; BFB

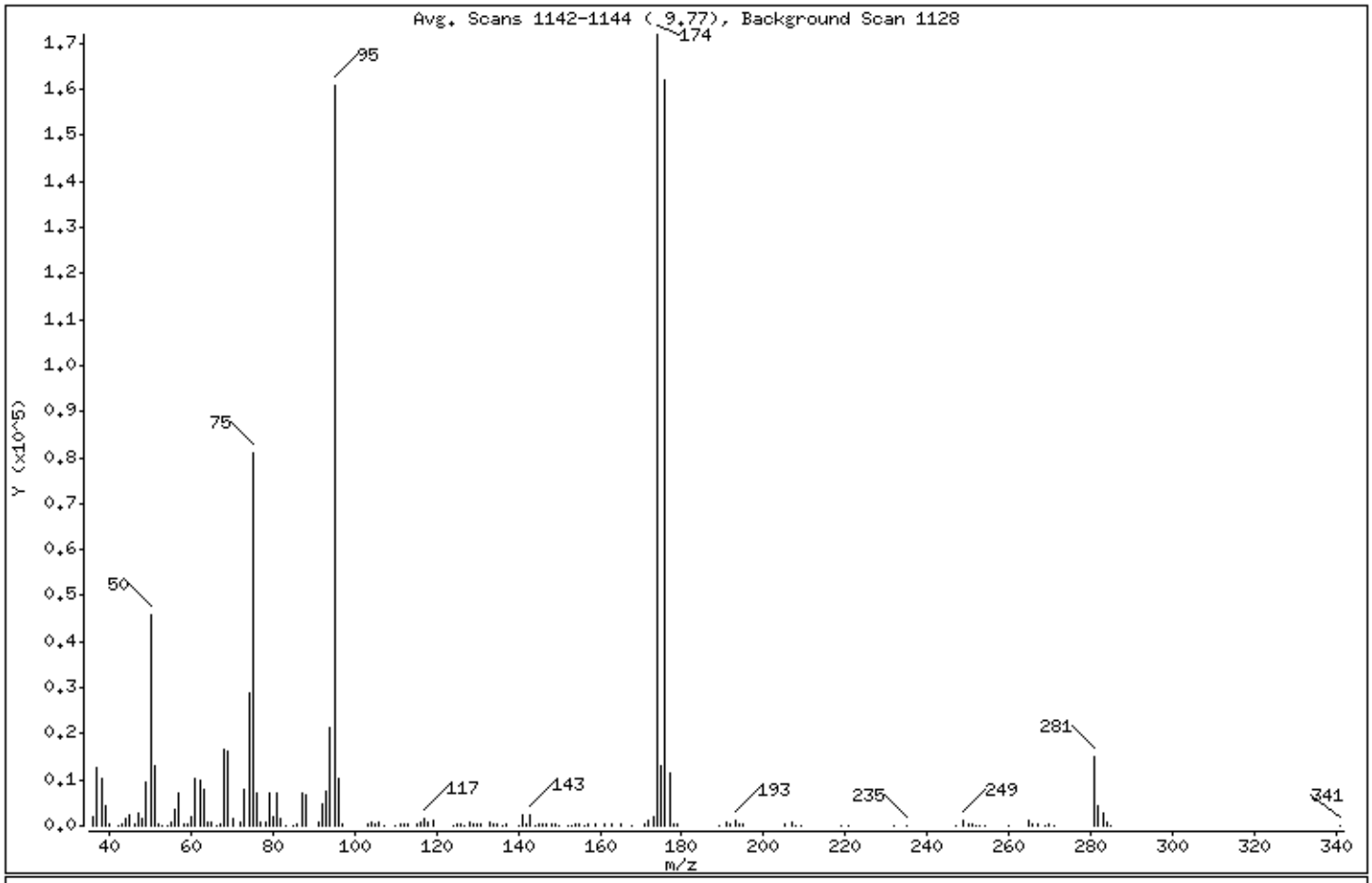
Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	28.44
75	30.00 - 66.00% of mass 95	50.30
96	5.00 - 9.00% of mass 95	6.44
173	Less than 1.99% of mass 174	1.22 (1.15)
174	50.01 - 120.00% of mass 95	106.76
175	4.00 - 9.00% of mass 174	8.06 (7.55)
176	93.00 - 101.00% of mass 174	100.60 (94.23)
177	5.00 - 9.00% of mass 176	7.08 (7.04)

Date : 16-MAR-2016 09:26

Client ID: BFB Instrument: msdp.i

Sample Info: 1.0mL #2759-299; BFB; BFB

Volume Injected (uL): 1.0 Operator: js

Column phase: Column diameter: 2.00

Data File: p031601.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1128
Location of Maximum: 174.00
Number of points: 149

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1938	76.00	7218	129.00	247	179.00	508
37.00	12493	77.00	769	130.00	560	189.00	48
38.00	10355	78.00	602	131.00	334	191.00	969
39.00	4355	79.00	7017	133.00	929	192.00	234
40.00	358	80.00	1850	134.00	333	193.00	1319
42.00	39	81.00	7300	135.00	464	194.00	400
43.00	254	82.00	1653	136.00	69	195.00	221
44.00	1766	83.00	184	137.00	440	205.00	304
45.00	2345	85.00	37	140.00	119	207.00	983
46.00	303	86.00	203	141.00	2268	208.00	85
47.00	2654	87.00	7189	142.00	291	209.00	19
48.00	1716	88.00	6522	143.00	2464	219.00	76
49.00	9520	91.00	775	144.00	96	221.00	82
50.00	45792	92.00	4690	145.00	204	232.00	4
51.00	13186	93.00	7602	146.00	319	235.00	190
52.00	315	94.00	21208	147.00	290	247.00	40
53.00	156	95.00	161024	148.00	470	249.00	1055
54.00	52	96.00	10364	149.00	231	250.00	329
55.00	745	97.00	269	150.00	136	251.00	580
56.00	3490	103.00	311	152.00	150	252.00	117
57.00	6973	104.00	870	153.00	125	253.00	64
58.00	362	105.00	479	154.00	215	254.00	140
59.00	204	106.00	975	155.00	442	260.00	163
60.00	1848	107.00	183	156.00	156	265.00	1259
61.00	10270	110.00	131	157.00	346	266.00	515
62.00	9871	111.00	293	159.00	205	267.00	421
63.00	8036	112.00	223	161.00	284	269.00	74
64.00	823	113.00	216	163.00	306	270.00	334
65.00	818	115.00	272	165.00	348	271.00	83
66.00	79	116.00	705	168.00	73	281.00	14993
67.00	456	117.00	1576	171.00	251	282.00	4209
68.00	16632	118.00	716	172.00	1344	283.00	2603
69.00	16296	119.00	1373	173.00	1969	284.00	679
70.00	1713	124.00	37	174.00	171904	285.00	193
72.00	896	125.00	246	175.00	12983	341.00	37

Data File: /chem/msdp.i/16mar16.b/p031601.d

Date : 16-MAR-2016 09:26

Client ID: BFB

Instrument: msdp.i

Sample Info: 1.0mL #2759-299; BFB; BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

Data File: p031601.d
Spectrum: Avg. Scans 1142-1144 (9.77), Background Scan 1128
Location of Maximum: 174.00
Number of points: 149

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	8060	126.00	198	176.00	161984		
74.00	28952	127.00	5	177.00	11404		
75.00	80992	128.00	644	178.00	401		

Shipping/ Receiving Documents

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Air Toxics, Ltd. at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager: VIN MARESCO

Collected by: (Print and Sign) SHAWN P. SKELLY

Company: ARCADIS Email: ~~shawn.skelly@arcadis.com~~

Address: 6723 TOWPATH RD City: SYRACUSE State: NY Zip: 13214

Phone: (315) 671.9256 ~~Fax~~ Email: vin.maresco@arcadis.com

Project Info:

P.O. #:

Project #: B0087377.0000.0001A

Project Name: BMS-BUFFALO

Turn Around Time:

[X] Normal

[ ] Rush

specify

Lab Use Only

Pressurized by:

Date:

Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SV-B9-1	11835	03/03/16	1245-1315	TO-15	-29.5	-7.0		
02A	SV-B9-2	35604	↓	1335-1405	↓	-26.0	-6.5		
03A	SV-B9-3	12356		1430-1500		-29.5	-9.5		
04A	FD-030316	36496		30min		-29.5	-9.0		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
	03/04/16 0900	MHEATL	3-5-16 0930
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: See Attached Analytical List

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx		Mq	Good	Yes No None	1603115

Form 1293 rev.11

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1603115

Client

Ms. Margaret Bartee
Arcadis U.S., Inc.
8 South River Road
CRANBURY, NJ 08512

Phone

(609) 860-0590

Fax

Date Promised: 03/21/16
Date Completed: 3/21/16
Date Received: 3/5/16
PO#: B0087377.0000.0001A
Project#: B0087377.0000.0001A BMS-BUFFALO

Sales Rep: N/A

Total $: $ 716.00
Logged By: MH

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	SV-B9-1	TO-15	3/3/2016	5.5 "Hg	$150.00
02A	SV-B9-2	TO-15	3/3/2016	5.0 "Hg	$150.00
03A	SV-B9-3	TO-15	3/3/2016	8.0 "Hg	$150.00
04A	FD-030316	TO-15	3/3/2016	7.5 "Hg	$150.00
05A	Lab Blank	TO-15	NA	NA	$0.00
06A	CCV	TO-15	NA	NA	$0.00
07A	LCS	TO-15	NA	NA	$0.00
07AA	LCSD	TO-15	NA	NA	$0.00

Misc. Charges	1 Liter Summa Canister (4) @ $15.00 each., Shipment 106206	$60.00
	Blue Body Flow Controller (4) @ $10.00 each., Shipment 106206	$40.00
	Fitting w/ Pink Ferrule (4) @ $4.00 each.	$16.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: BMS Buffalo/21131

BILL TO: Accounts Payable
Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sp)/SpTICs-Arcadis (NY site)

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7 psi + Final Pressure (psi)}}{\text{14.7 psi + Initial Pressure (psi)}}$$

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

TO-15 (Sp)/SpTICs-Arcadis (NY site)

CAS Number	Compound	Detection Limit ppbv	Type
75-01-4	Vinyl Chloride	0.50	
67-64-1	Acetone	5.0	
110-02-1	Thiophene		
110-82-7	Cyclohexane	0.50	
526-73-8	1,2,3-Trimethylbenzene	2.0	
91-20-3	Naphthalene	1.0	
108-87-2	Methylcyclohexane	2.0	
527-53-7	Benzene, 1,2,3,5-tetramethyl-		
156-59-2	cis-1,2-Dichloroethene	0.50	
67-66-3	Chloroform	0.50	
71-43-2	Benzene	0.50	
79-01-6	Trichloroethene	0.50	
108-88-3	Toluene	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
98-82-8	Cumene	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
75-09-2	Methylene Chloride	5.0	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
95-93-2	1,2,4,5-Tetramethylbenzene		
488-23-3	1,2,3,4-Tetramethylbenzene		
95-13-6	Indene		
496-11-7	Indan		

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 02/23/16
Workorder # 1402315	Form F1.27	Revision #13	Revision Date: 02/23/16	Page 1 of 2

S1	S2	S3	S4	D	*Section 1* – Spec Out				
					Initials/Instrument/Date	**S1:** CK 3/16/16 LMSP	**S2:**	**S3:**	**S4:**
✓	✓			■	Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
				■	Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
✓				■	Manual Integrations included and approved				
✓				✓	Chain of Custody verified for special comments (add comments below)				
	✓			■	Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				

Profile, analyses, reporting, special notes and unusual circumstances:

Short list, multiple CCVs, 1mid CCV, 1ovt

A1	A2	A3	A4	D	*Section 2* – Sample Analysis				
					Initials/Date	**A1:** gd 3/16/16	**A2:**	**A3:**	**A4:**
✓				✓	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, and Canister #s Verified				
NA				NA	**a)** Tedlar Bag IDs verified against COC **b)** Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
✓				NA	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓				■	12/24 Hr clock time & Hold Time met for all samples				
NA				✓	Re-analysis of sample(s) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks, samples following bad loads on CIAAs have been verified (system blks, confirmation runs).				
✓				✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes: CIA - DAA OK

D1	D2	D3	D4	T	3T	*Section 3* – Target Data Reduction	**Technical Review Needed?** Circle one: Yes/No		**T:**	
						Initials/Instrument/Date	**D1:** mc 3/21/16	**D2:**	**D3:**	**D4:**
NA					■	CAR # *(if applicable)*				
✓					■	Spectra Verified *(documentation of spectral defense included if applicable)*				
✓					■	TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
NA					■	TPH/NMOC calculations complete and included in folder				

Special notes:
1. Special TICs
2. QC exceedance
3. Multiple CCV

A	3T	*Section 4*- Atlas Data Entry	**Lumen verified and included in folder**	**Circle one:** Yes/No
		Initials/Date: mc 3/21/16	**3rd Tier:** *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
NA		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :				**Reason for Reissue:**
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				**Reason for Reissue:**
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

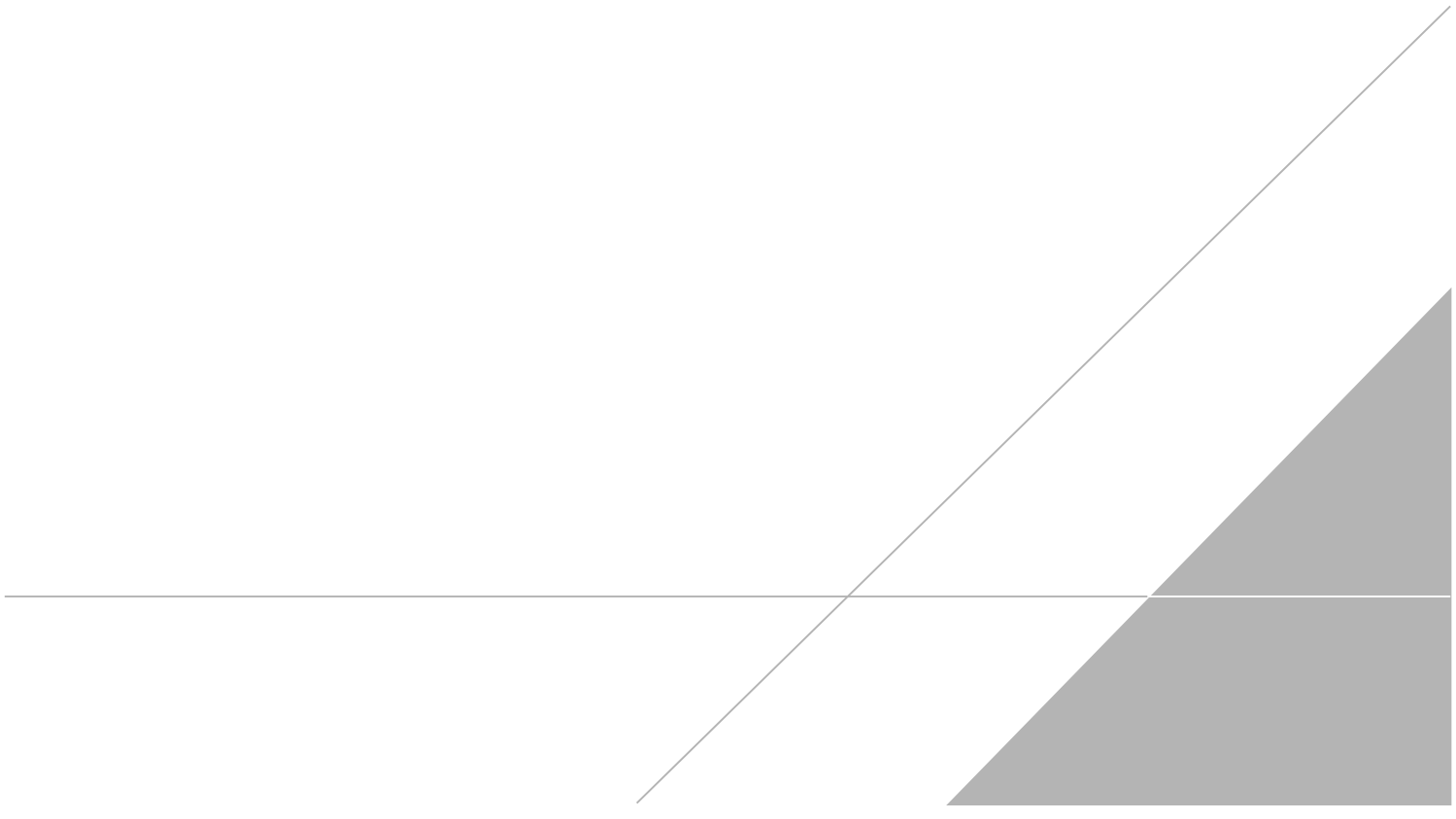
Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

ATTACHMENT D

Data Review Memorandum



ARCADIS
6723 Towpath Road
P.O. Box 66
Syracuse
New York 13214-0066
Tel 315.446.9120
Fax 315.449.0017

MEMO

To:
Vin Maresco

Copies:
Dennis Capria, Arcadis
Margaret Bartee, Arcadis

From:
Joseph C. Houser

ARCADIS Project No.:
B0087377.0000.00001

Date:
April 10, 2016

Subject:
Data Review for Bristol-Myers Squibb Company (BMS) - Soil Vapor Intrusion Evaluation Work Plan Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site.

Data verification and a cursory review of the laboratory analytical data produced as part of the Iroquois Gas/Westwood Pharmaceutical Terrestrial Site sampling event were performed to check for completeness and technical compliance. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 (Organic Data Review), USEPA Region II SOP HW-31- Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15) and NYSDEC Modifications to R9 TO-15 QA/QC Criteria October 2009. Where applicable, the review of the data package included checking the following:

- Laboratory Case Narrative
- Chain-of custody, including canister receipt vacuum
- Holding times
- Canister certifications
- Method Blanks
- Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and RPD
- Calibrations (initial & continuing)
- GC/MS instrument tuning
- Surrogate recoveries
- Internal standard areas

All of the air samples collected on March 3, 2016 at the site were analyzed by Eurofins Air Toxics, Inc. (NY Lab ID No. 11291) in Folsom, California. Samples were analyzed in accordance with USEPA Method TO-15.

Review of laboratory data package 1603115 submitted with this report identified a few minor quality assurance/quality control (QA/QC) non-compliance issues, as described below.

The LCS/LCSD exhibited recoveries above control limits for Naphthalene and Vinyl Chloride. These compounds were biased high in the LCS and were not detected in the associated samples; therefore, there was no impact on the data or qualification of data needed.

The laboratory noted that the compound 1,2,3-Trimethylbenzene was not spiked in the LCS/LCSD. This compound met calibration criteria. The reported 1,2,3-Trimethylbenzene results for all sample locations in this SDG should be considered estimated.

All applicable precision and accuracy criteria were met with the exception of the minor QA/QC non-compliance issues mentioned above. Therefore, the analytical data are considered reliable and acceptable for use for the Iroquois Gas/Westwood Pharmaceutical Terrestrial Site sampling event.