

Vapor Intrusion Assessment Report

IDEM VRP No. 6150101

Fabric Care Center
5760 W Morris St
Indianapolis, IN 46241

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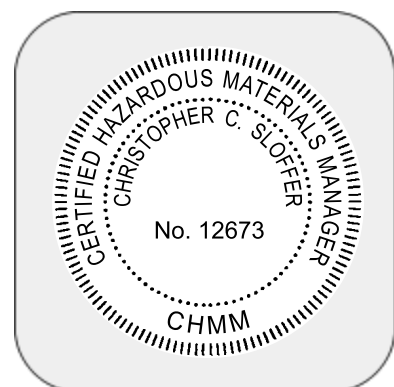




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1 Introduction

1.1 Purpose

The Environmental Liability and Asset Management Group (“The ELAM Group”) submitted a Remediation Work Plan (“RWP”) to the Indiana Department of Environmental Management (“IDEM”) for the Fabric Care Center facility (“Facility”) (ELAM 2023a). Based on its review of the RWP, IDEM made a specific request for a baseline vapor intrusion (“VI”) sampling event within the Facility prior to implementation of the planned active remedy (ELAM 2023b). IDEM further requested that the ensuing documentation of the baseline VI sampling event be submitted to IDEM as an RWP Addendum that would include revisions to the RWP, if necessary, based on the data.

Accordingly, The ELAM Group conducted a baseline VI sampling event and reported the results in an RWP Addendum intended to be incorporated with the RWP for IDEM’s Public Notice period (ELAM 2023c). The results from the baseline VI sampling event indicate that the VI data for the Facility met Scenario 3 specified in IDEM’s Risk-based Closure Guide (“R2”) (IDEM 2022). Scenario 3 recommends remedy or continued monitoring for VI until a remedy proves either necessary or unnecessary. Based on IDEM’s review of the VI sampling data set incorporated into the RWP Addendum, IDEM indicated that a winter worst-case sampling event in Winter 2023/2024 must be performed for the Facility (IDEM 2023).

In response, The ELAM Group submitted an Additional Investigation Scope of Work to IDEM (ELAM 2024), indicating that the following additional investigation activities would be conducted for the Facility:

“VI Sample Collection within the Fabric Care Center building at 5760 W Morris St, including the preparation of a field work plan, pre-VI sampling chemical inventory and removal (if possible) at least 48 hours before sampling, collection of 5 subslab soil gas (“SGs”), 6 indoor air (“IA”),¹ 1 field duplicate (“FD”) and 1 outdoor air (“OA”) samples into individually-certified 6-Liter Summa canisters through an 8-hour time-weighted average (“TWA”) air intake valve, and laboratory

¹ Unlike the initial event where 2nd floor sampling was conducted, IDEM’s letter specifies first floor only. This work plan therefore excludes the 2nd floor sample locations, and includes sample locations within the basement and first floor of the Fabric Care Center building.



analysis of the air samples for volatile organic compounds (“VOCs”) via Method TO-15”

This Vapor Intrusion Assessment (“VIA”) Report documents these activities, including field procedures, results, analysis and recommendations. Specific to this report, a two-season VIA is presented for the first time per IDEM’s R2 (IDEM 2022) for the data set comprising the Summer Season 2023 data included in the RWP Addendum and the Winter Season 2024 data contained herein.

1.2 Site Description

The Facility is located at 5760 W Morris St on the west side of Indianapolis in Marion County, Indiana (“Site”). Figure 1 shows the location of the Property, and Figure 2a shows a generalized Site Plan with all of the investigation locations referenced in the RWP.

The Facility where the VI sampling occurred currently consists of a two-story coin laundry and dry cleaning operation located in a commercial and residential setting that historically used tetrachloroethylene (“PCE”) in dry cleaning machines (“DCMs”). Dry cleaning activities have occurred at the Facility since at least 1957 (EFI 2014). In October 2019, the Facility began transitioning the solvent used in its DCMs from PCE to SENSENE,TM which is a modified alcohol solvent (ELAM 2023a). The Facility ceased using PCE in its DCMs in March of 2022 (ELAM 2023a).

1.3 Release-Related Chemicals

As presented in the RWP (ELAM 2023a), the Release-Related Chemicals (“RRCs”) for the Facility are chlorinated volatile organic compounds (“cVOCs”) related to the dry cleaning solvent tetrachloroethylene (“PCE”). Specifically, cVOCs include PCE, trichloroethene (“TCE”), cis-1,2-dichloroethene (“cDCE”), trans-1,2-dichloroethene (“tDCE”) and vinyl chloride (“VC”).



1.4 Rationale

Based on IDEM's review of the RWP Addendum, IDEM indicated that a winter worst-case sampling event in Winter 2023/2024 must be performed on the first floor and sub-slab for the Facility (IDEM 2023). This VIA report documents the requested winter worst-case VI sampling event (ELAM 2024). The Facility Plan depicting sample locations per floor is shown on Figure 2b.



2 Field Procedures

2.1 General

The planned field activities were executed on 3/1/24 and 3/3/24. They consisted of (1) a review of the chemicals used within the Facility on 3/1/24 and (2) the collection of 8-hour TWA air samples on 3/3/24. A summary of the air samples collected is provided below. The sample collection field documentation is provided in Appendix A.

Sample Season	Date of Sample Collection	Location Within Facility	Sub-slab Soil Gas ("SGss") Sample Locations	Indoor Air ("IA") Sample Locations
Winter Heating 2024	3/3/24	Boiler Room	SGss-1 Unable to collect due to presence of water	IA-1
		1st Floor	SGss-2	IA-2
			SGss-3	IA-3
SGss-4	IA-4			
SGss-5	IA-5 IA-6 plus FD1			
2nd Floor	Not Applicable	Not Applicable		

The field procedures for VI sample collection are specified in the *Quality Assurance Project Plan* ("QAPP") included with the RWP (ELAM 2023a).

2.2 Field Procedure Deviations

Three deviations from the planned activities occurred during sample collection activities. First, the ELAM scientist was unable to collect a sample from SGss-1, which is located in the below-grade boiler room, due to the presence of water in the sample port observed during integrity testing. Secondly, an ELAM scientist observed that a sample canister connected to SGss-4 was evacuating faster than the planned 8-hour TWA sample collection period. In order to prevent the full evacuation of the canister pressure, the sample collection period was terminated in Hour 7. Lastly, an ELAM scientist observed that the sample canisters associated with sample locations SGss-5 and IA-5 were evacuating slower than the planned 8-hour TWA sample collection period. The



sample collection period for both canisters was terminated in Hour 8 and the final recorded pressures were -15 pounds per square inch (“PSI”) and -14 PSI, respectively.

2.3 Laboratory Analysis of Samples

Following the completion of field activities, the air samples and associated quality assurance/quality control (“QA/QC”) samples were submitted to Envision Laboratories, Inc. located in Indianapolis, Indiana, for analysis of volatile organic compounds (“VOCs”) using United States Environmental Protection Agency (“USEPA”) Method TO-15 (USEPA 2019). Because these samples are related to investigation, a Level IV laboratory data package was requested from the laboratory.



3 Results

3.1 Air Analytical Results

The laboratory analytical report, with associated Level IV data package, is included in Appendix B. The analytical results for SGss and IA samples are summarized in Table 1 and depicted on Figure 3. The following sections discuss the QA/QC of the analytical data obtained during the VI sample collection event.

3.2 QA/QC Results

The QA/QC data associated with the air samples were evaluated to assess the quality of the VI data in relation to its intended use of documenting the presence of dry cleaning RRCs in air samples collected during the VI sampling event.

3.2.1 Method Blank

VOCs were not detected in the method blank associated with the sampling event. Therefore, no cross-contamination during laboratory analysis is suspected.

3.2.2 Field Duplicate

A FD sample, identified as FD-1, was collected at the same time as sample IA-6. FD-1 and IA-6 contained no detections above the respective laboratory reporting limits (“RLs”). Consequently, a relative percent difference (“RPD”) could not be calculated, as summarized in the table below. The data are presented in micrograms per cubic meter (“ $\mu\text{g}/\text{m}^3$ ”).



Worst-case Sample Season	Constituent	MDL (µg/m ³)	Sample IA6 Concentration (µg/m ³)	Duplicate FD1 Concentration (µg/m ³)	Duplicate Pair Results >RL and >5x MDL? (Y/N)	RPD (%)
Winter 2024	cVOCs	varies	<RL	<RL	N	Unable to calculate

3.2.3 Potential Indoor Air Contaminants

The chemical inventory consisted of a visit to the Facility prior to the sample collection activities to document chemicals present within the Facility. A couple of the observed materials included the chlorinated solvent trichloroethylene (“TCE”). TCE is an RRC at the Site. Any materials that contain an RRC in the Facility’s operations within the building space to be monitored for VI is a potential IA contaminant that could impact the IA analytical results and should therefore be removed at least 48 hours prior to sampling. The following potential IA contaminants were removed from the building space prior to sampling.

Product	COC Ingredient	Reference	Still in Use? (Y / N)	Potential IA Contaminant? (Y / N)	Removed
2-1 Formula	TCE	Facility SDS Binder	Y	Y	Y
Picrin	TCE	Facility SDS Binder	Y	Y	Y

3.2.4 Potential Outdoor Air Contaminants

VOCs were not detected in the outdoor air (“OA”) sample associated with the sampling event. Based on the absence of any RRCs in the OA sample, no cross-contamination from an OA source during sample collection is suspected.



4 Analysis

With an SGss/IA sampling event conducted in each of the Summer and Winter Seasons, the data set now collectively provides an opportunity to assess the VI exposure pathway per IDEM's R2 (IDEM 2022). Accordingly, the evaluation is conducted by comparing the analytical results to published levels ("PLs") associated with exposure of human receptors in a commercial exposure scenario for this commercially-zoned and occupied building. The analytical results for SGss and IA samples are summarized in Table 1 and depicted on Figure 3.

4.1 Winter Season VI Data Analysis

4.1.1 IA

The analytical results for the winter worst-case IA samples collected in the Facility were compared to the respective Commercial Indoor Air Published Levels ("CIA PLs") and Commercial Indoor Air Action Levels ("CIA ALs")² in IDEM's R2 (IDEM 2022, 2024). Review of the laboratory analytical data indicates that no cVOCs were detected at concentrations above the laboratory reporting limits ("RLs") in the winter worst-case indoor air samples collected from the Facility, and the RLs are lower than IDEM's PLs.

Chloroform was detected in IA samples collected at the Facility. The detected concentrations of chloroform in samples were as follows: IA-1 (8.30 $\mu\text{g}/\text{m}^3$) and IA-2 (7.37 $\mu\text{g}/\text{m}^3$). However, IDEM has determined that chloroform is not a dry cleaning contaminant of concern (IDEM 2018). Therefore, further evaluation of the detection of chloroform in these IA samples is not warranted.

4.1.2 SGss

The analytical results for the winter worst-case SGss samples collected in the Facility were compared to the respective Commercial Sub-slab Soil Gas Published Levels ("CSGss PLs") in IDEM's R2 (IDEM 2022, 2024). Review of the laboratory analytical

² IDEM defines the CIA AL for a chemical as ten times that chemical's CIA PL. Exceedances of the CIA AL warrant prompt action to reduce exposures.



data indicates that PCE and TCE were detected at concentrations above the laboratory RLs in the winter worst-case SGss samples collected from the Facility.

The detected concentrations of PCE in samples SGss-2 (36.6 $\mu\text{g}/\text{m}^3$) and SGss-3 (117 $\mu\text{g}/\text{m}^3$) are each below the CSGss PL of 6,000 $\mu\text{g}/\text{m}^3$. Conversely, the detected concentration of PCE in sample SGss-4 (40,300 $\mu\text{g}/\text{m}^3$), which is nearest the location of the former DCM that most recently used PCE, is approximately 6.7 times greater than the CSGss PL of 6,000 $\mu\text{g}/\text{m}^3$.

The detected concentration of TCE in sample SGss-2 (10.7 $\mu\text{g}/\text{m}^3$) and SGss-3 (35.2 $\mu\text{g}/\text{m}^3$) are each below the CSGss PL of 300 $\mu\text{g}/\text{m}^3$. Conversely, the detected concentration of TCE in sample SGss-4 (1,080 $\mu\text{g}/\text{m}^3$), again, which is nearest the former DCM that most recently used PCE, is approximately 3.6 times greater than the CSGss PL of 300 $\mu\text{g}/\text{m}^3$.

In addition to PCE and TCE, chloroform was also detected in IA samples collected at the Facility. The detected concentrations of chloroform in sample SGss-2 (41.2 $\mu\text{g}/\text{m}^3$) and SGss-4 (34.6 $\mu\text{g}/\text{m}^3$) are each below the CSGss PL of 200 $\mu\text{g}/\text{m}^3$. However, as noted above, IDEM has determined that chloroform is not a dry cleaning contaminant of concern (IDEM 2018). Therefore, further evaluation of the detection of chloroform in these SGss samples is not warranted.

4.2 Two-Season VIA

The timeline of observed PCE impacts to soil gas beneath the Facility are as follows:

- March 2022: Facility ceased using PCE as a dry cleaning solvent
- September 2023 (Summer Season): 301,000 ug/m^3 reported at SGss-4
- March 2024 (Winter Season): 40,300 ug/m^3 reported at SGss-4

The SGss concentration of PCE reported during the Winter Season event is approximately 13% of the prior Summer Season event value. A similar reduction is apparent with reported SGss concentrations of TCE, in which the Winter Season event value is approximately 12% of the Summer Season event value (8,980 ug/m^3 vs. 1,080 ug/m^3). Should both RRCs continue with this downward trend, both RRCs would fall below the respective PLs.



According to IDEM's R2, the winter worst-case VI data collected from the Facility falls into Scenario 3 (IDEM 2022). For Scenario 3, an SGss concentration must be greater than two times the CSGss PLs, but less than ten times the CSGss PLs, and IA concentrations must be below the CIA PLs. According to IDEM, "there is a significant potential for future vapor intrusion" and the Facility should implement a remedy or monitor VI sample concentrations until a remedy proves either necessary or unnecessary.

In this case the VI sampling data have met Scenario 3 during both pre-remedy VI sample collection events. The downward trend observed for data from the Summer Season 2023 to the Winter Season 2024 provides a rationale for continuing monitoring rather than implementing an active remedy at this time. Accordingly, the recommended further action with regards to the VI exposure pathway at the Facility is to continue monitoring. The next VI sample collection event will be scheduled to occur during the summer worst-case season of 2024.



5 Recommendation

This VIA report was prepared to document winter worst-case VI sample collection activities at the Facility and to conduct a full VIA in accordance with IDEM's R2 using a two-season VI sampling data set consisting of a Summer Season and a Winter Season. The resulting VIA meets IDEM's Scenario 3 specified in R2. This Scenario recommends remedy or continued monitoring for VI until a remedy proves either necessary or unnecessary.

In this case, the VI sampling data have met Scenario 3 during both pre-remedy VI sample collection events, and RRC concentrations reported in the more recent data set are approximately 13% of the baseline VI sampling event. Accordingly, further action is warranted with regards to the VI exposure pathway, and that further action is continued monitoring given the observed reduction in RRC concentrations between the first and second sampling events.

The next VI sample collection event will be scheduled to occur during the summer worst-case season of 2024. The event will be identical to the Winter Season event reported herein. The results will be reported to IDEM, and the forthcoming VIA Report will also include a VIA of the Winter 2024 and Summer 2024 sample sets.



6 References

- EFI, 2014, *Work Plan for Initial Site Investigation Activities*, 7/9/14, Enviroforensics, IDEM VFC Document No. [70206953](#) (URL last verified 6/18/24).
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- ELAM, 2023c, *RWP Addendum*, Fabric Care Center, VRP #6150101, 10/13/23, IDEM VFC Document No. [83544583](#) (URL last verified 6/18/24).
- ELAM, 2024, *Additional Investigation Scope of Work*, Fabric Care Center, VRP #6150101, 1/26/24, IDEM VFC Document No. [83589524](#) (URL last verified 6/18/24).
- IDEM, 2018, *Dry Cleaning Industry Contaminants of Concern (COCs)*, Technical Guidance Document, IDEM Office of Land Quality, Created 11/11/07, Revised 4/8/14 and 4/12/18, IDEM: https://www.in.gov/idem/cleanups/files/chem_guidance_contaminants_drycleaners.pdf (URL last verified 6/18/24).
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- IDEM, 2023, *Remediation Work Plan Addendum Review*, Fabric Care Center, VRP #6150101, 11/30/23, IDEM VFC Document No. [83564494](#) (URL last verified 6/18/24).
- IDEM, 2024, *2024 Published Level Table 1*, 3/1/24, IDEM: https://www.in.gov/idem/cleanups/files/risk-based_closure_table_2024_01.pdf (URL last verified 6/18/24).
- USEPA, 2019, *Method TO-15A: Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially Prepared Canisters and Analyzed by Gas*
-



IDEM VRP No. 6150101

Project No. INMI5760M8.6

Date: 6/26/24

Chromatography-Mass Spectrometry (GC-MS), United States Environmental Protection Agency, September 2019.



IDEM VRP No. 6150101

Project No. INMI5760M8.6

Date: 6/26/24

Table

Table 1. Vapor Intrusion Analytical Results (cVOCs)

Fabric Care Center
 5760 West Morris Street, Indianapolis, IN 46241
 IDEM VRP No: 6150101

Address	Season	Sample Location	Sample ID	Type	Date	PCE	TCE	cDCE	tDCE	VC	Chloroform
Chemical Abstracts Service Registry Number (CASRN)						127-18-4	79-01-6	156-59-2	156-60-5	75-01-4	67-66-3
Commercial Indoor Air Action Level (CIAAL) (ug/m3)						2,000	90	2,000	2,000	300	50
Commercial Indoor Air Published Level (CIA PL) (ug/m3)						200	9	200	200	30	5
Commercial Subslab Soil Gas Published Level (CSGss PL) (ug/m3)						6,000	300	6,000	6,000	900	200
Fabric Care Center 5760 W Morris St (Commercial)	Summer Cooling Season 2023	Boiler Room	IA1:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SGSS1	Subslab Soil Gas	Not Applicable	Unable to Collect Due to Presence of Water					
		1st Floor	IA2:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SGSS2:A091023	Subslab Soil Gas	09/10/23	17.8	<1.07	<19.8	<39.6	<1.28	<0.83
			IA3:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SGSS3:A091023	Subslab Soil Gas	09/10/23	633	29.1	<19.8	<39.6	<1.28	<0.83
			IA4:A091023	Indoor Air	09/10/23	<3.19	5.37	<19.8	<39.6	<1.28	<0.83
			SGSS4:A091023	Subslab Soil Gas	09/10/23	301,000	8,980	<19.8	<39.6	<1.28	9.37
			IA5:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SGSS5:A091023	Subslab Soil Gas	09/10/23	25.1	<1.07	<19.8	<39.6	<1.28	<0.83
			IA6:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			FD1:A091023	Indoor Air	09/10/23	12.6	<1.07	<19.8	<39.6	<1.28	<0.83
		2nd Floor	IA7:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			IA8:A091023	Indoor Air	09/10/23	<3.19	2.15	<19.8	<39.6	<1.28	<0.83
			IA9:A091023	Indoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
		Outside	OA1:A091023	Outdoor Air	09/10/23	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83

Table 1. Vapor Intrusion Analytical Results (cVOCs)

Fabric Care Center
 5760 West Morris Street, Indianapolis, IN 46241
 IDEM VRP No: 6150101

Address	Season	Sample Location	Sample ID	Type	Date	PCE	TCE	cDCE	tDCE	VC	Chloroform
Chemical Abstracts Service Registry Number (CASRN)						127-18-4	79-01-6	156-59-2	156-60-5	75-01-4	67-66-3
Commercial Indoor Air Action Level (CIA AL) (ug/m3)						2,000	90	2,000	2,000	300	50
Commercial Indoor Air Published Level (CIA PL) (ug/m3)						200	9	200	200	30	5
Commercial Subslab Soil Gas Published Level (CSGss PL) (ug/m3)						6,000	300	6,000	6,000	900	200
Fabric Care Center 5760 W Morris St (Commercial)	Winter Heating Season 2024	Boiler Room	IA1:A091023	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	8.30
			SS1	Subslab Soil Gas	Not Applicable	Unable to Collect Due to Presence of Water					
		1st Floor	IA2:A030324	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	7.37
			SS2:A030324	Subslab Soil Gas	03/03/24	36.6	10.7	<19.8	<39.6	<1.28	41.2
			IA3:A030324	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SS3:A030324	Subslab Soil Gas	03/03/24	117	35.2	<19.8	<39.6	<1.28	<0.83
			IA4:A030324	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SS4:A030324	Subslab Soil Gas	03/03/24	40,300	1,080	<19.8	<39.6	<1.28	34.6
			IA5:A030324	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			SS5:A030324	Subslab Soil Gas	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			IA6:A030324	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
			FD1:A030324	Indoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83
		Outside	OA1:A030324	Outdoor Air	03/03/24	<3.19	<1.07	<19.8	<39.6	<1.28	<0.83

Notes:

- Air analytical results are presented in micrograms per cubic meter (ug/m3).
- Gray shading indicates that air sample collected from below grade sample point.
- A bold font style and orange shading indicates that the concentration exceeds the applicable 2023 IDEM R2 Commercial Indoor Air Published Level or Commercial Subslab Soil Gas Published Level.
- A bold font style and red shading indicates that the concentration exceeds the applicable 2023 IDEM R2 Commercial Indoor Air Action Level.
- Winter Heating Season is when building windows and doors are closed and the building heating system is in operation (when indoor air temperature is consistently at least ten degrees higher than the outdoor temperature).
- Summer Cooling Season is when building windows and doors are closed and the building cooling system is in operation.

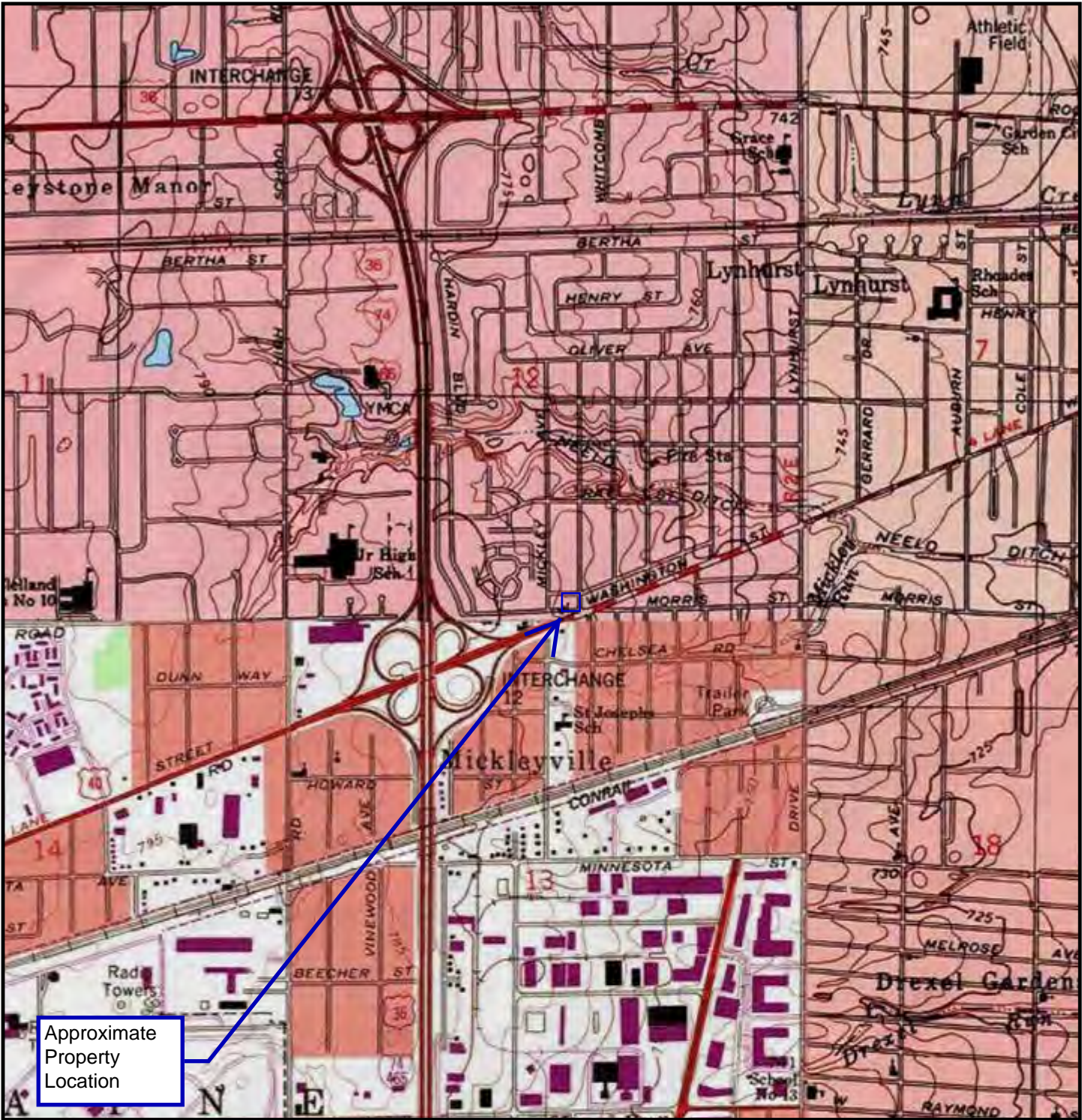


IDEM VRP No. 6150101




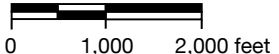
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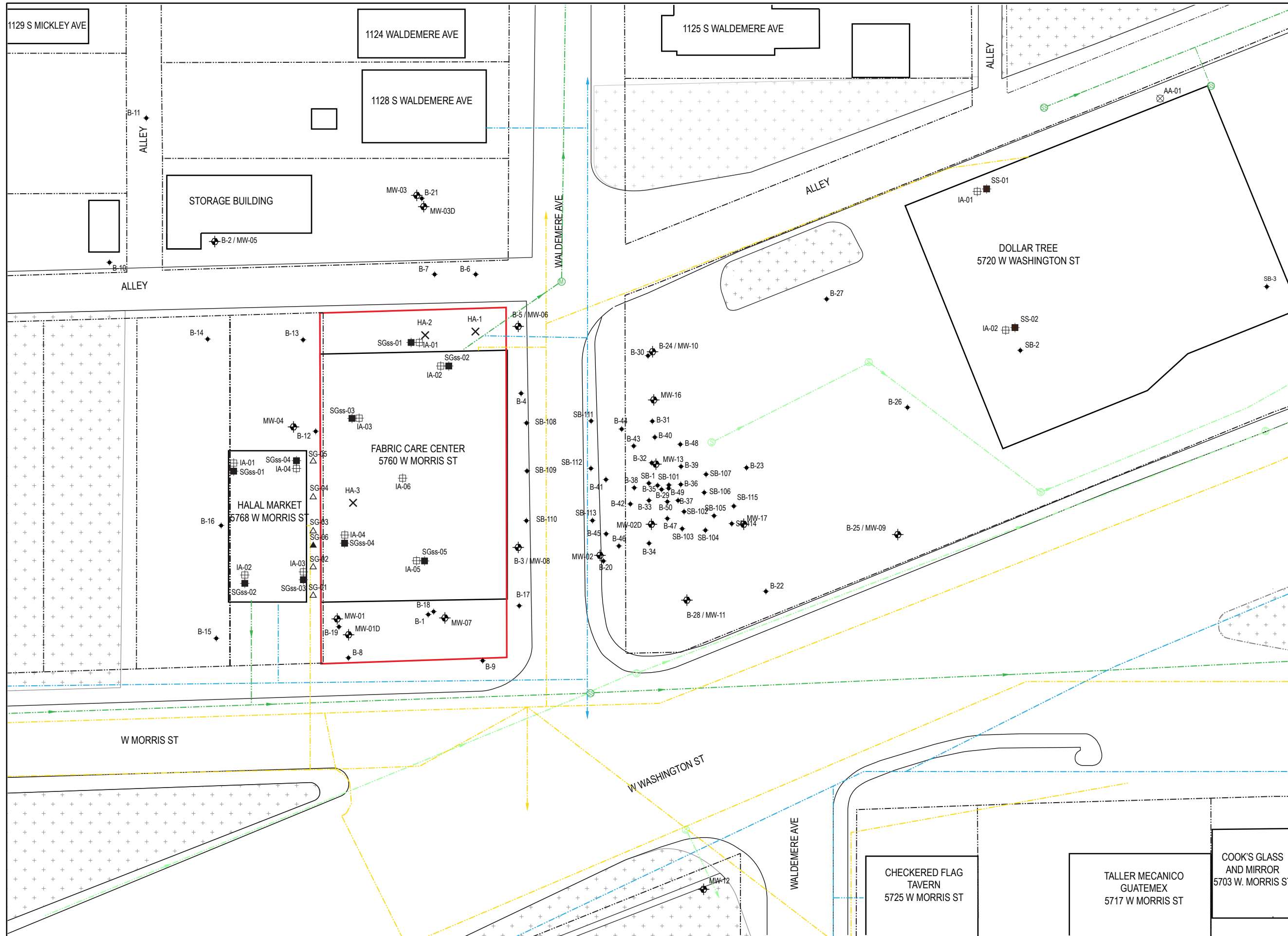
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Figures



Approximate
Property
Location

<p>LEGEND</p>  <p>Approximate Property Location</p>	 	<p>SITE NAME: Fabric Care Center</p>	<p>Figure No: 1</p>
		<p>ADDRESS: 5760 W Morris St</p>	
		<p>CITY: Indianapolis</p>	<p>Scale: 1:24,000 (1 inch = 2,000 ft)</p>
		<p>STATE: Indiana</p>	<p>Project No: INMI5760M8.6</p>
		<p>ZIP CODE: 46241</p>	<p>Report: VIA Report</p>
		<p>COUNTY: Marion</p>	<p>Drawn By: The ELAM Group</p>
		<p>TOWNSHIP NAME: Wayne</p>	<p>Date: 5/29/24</p>
		<p>TOWNSHIP LINE: T15N</p>	
		<p>RANGE LINE: R2E</p>	
		<p>SECTION: 12</p>	
		<p>UTM Coordinates: 16S 563480m E 4400340m N</p>	
		<p>Source: https://dnrmaps.dnr.in.gov/apps/oilgaswells/</p>	



The **ELAM** Group

LEGEND

- Subject Site Property Line
- - - Off-site Property Line
- Storm Sewer
- - - Sanitary Sewer
- Water
- Gas
- + Grass
- ⊕ Monitoring Well
- ◆ Soil Boring
- ✕ Hand Auger
- ⊞ Indoor Air
- Subslab Vapor
- ⊗ Outdoor Air
- ▲ Soil Gas port
- △ Former Soil Gas port



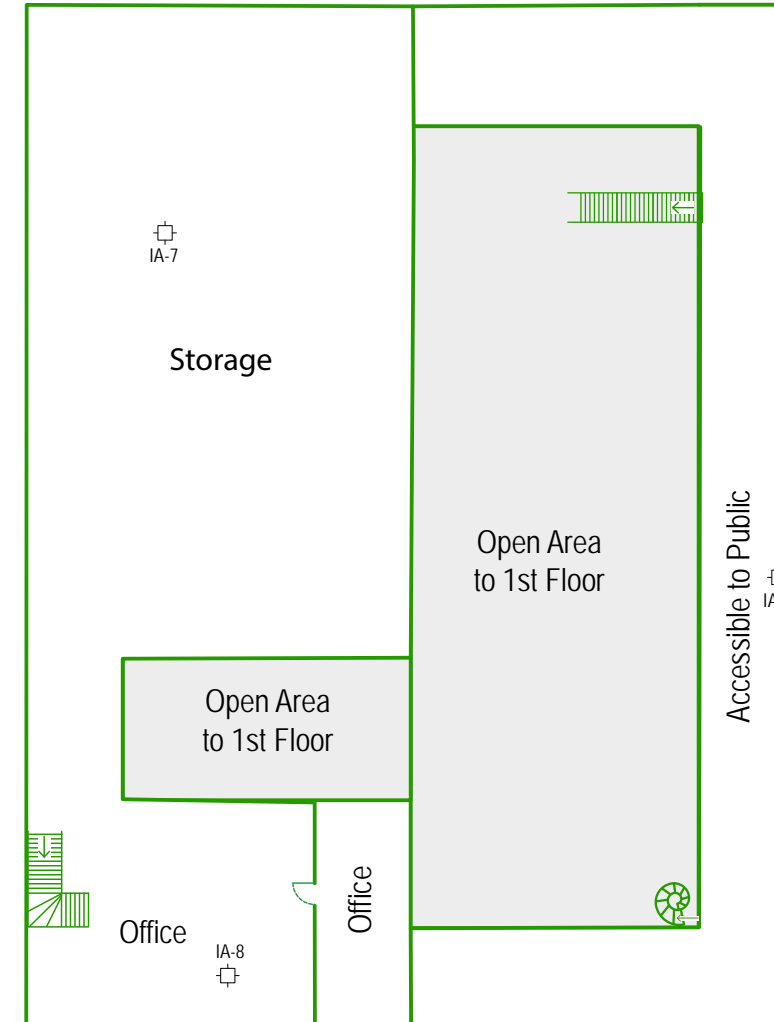
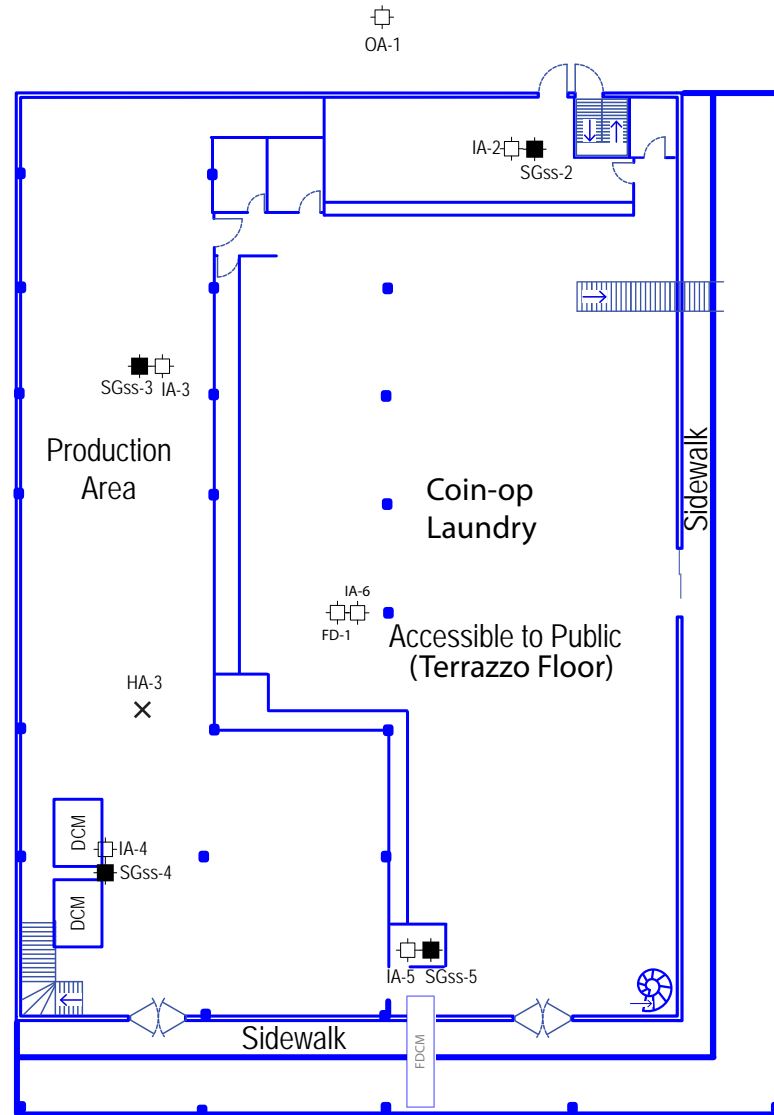
0 20 40 feet

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Scale: 1:480 (1 in = 40 ft)
Project No: INMI5760M
Report: VIA Report
Drawn by: The ELAM Group
Date: 5/29/24

BASEMENT PLAN

1ST FLOOR PLAN

2ND FLOOR PLAN



LEGEND

- ☐ IA Sampling Point
- SGss Gas Sampling Point
- DCM Dry Cleaning Machine
- FDCM Former Dry Cleaning Machine
- Building Column
- ✕ Hand Auger

Notes:

1. Building plan shown is located at 5760 W Morris St. Indianapolis, IN.
2. SGss points are not allowed through the Terrazzo floor.

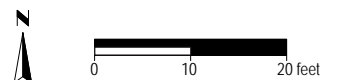


Figure No: 2b

Title: Facility Plan

Scale: 1:240 (1 in = 20 ft)

Project No: INMI5760M

Report: VIA Report

Drawn by: The ELAM Group

Date: 5/30/24



The ELAM Group

LEGEND

- ☐ IA Sampling Point
- SGss Gas Sampling Point
- DCM Dry Cleaning Machine
- FDCM Former Dry Cleaning Machine
- Building Column
- ✕ Hand Auger

Notes:

1. Building plan shown is located at 5760 W Morris St. Indianapolis, IN.
2. SGss points are not allowed through the Terrazzo floor.
3. **Bold** result indicates exceedance of applicable Published Level.
4. **Bold** and underline indicates exceedance of applicable Action Level.

- PCE Tetrachloroethene
- TCE Trichloroethene
- cDCE cis-1,2-Dichloroethene
- tDCE trans-1,2-Dichloroethene
- VC Vinyl Chloride

- CIA AL Commercial Indoor Air Action Level
- CIA PL Commercial Indoor Air Published Level
- CSGss PL Commercial Subslab Soil Gas Published Level

(Values reported in µg/m³)

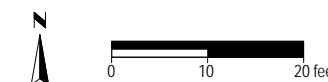


Figure No: 3

Title: Two-Season VIA

Scale: 1:240 (1 in = 20 ft)

Project No: INMI5760M

Report: VIA Report

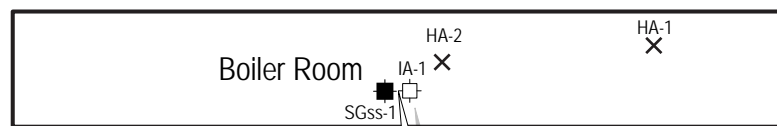
Drawn by: The ELAM Group

Date: 5/30/24

BASEMENT PLAN

1ST FLOOR PLAN

2ND FLOOR PLAN



IA-1	9/10/23	IA-1	3/03/24
PCE	<3.19	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28
SGss-1	9/10/23	SGss-1	3/03/24
Water in port		Water in port	

IA-3	9/10/23	IA-3	3/03/24
PCE	<3.19	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28
SGss-3	9/10/23	SGss-3	3/03/24
PCE	633	PCE	117
TCE	29.1	TCE	35.2
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28

IA-6	9/10/23	IA-6	3/03/24
PCE	<3.19	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28
FD-1	9/10/23	FD-1	3/03/24
PCE	12.6	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28

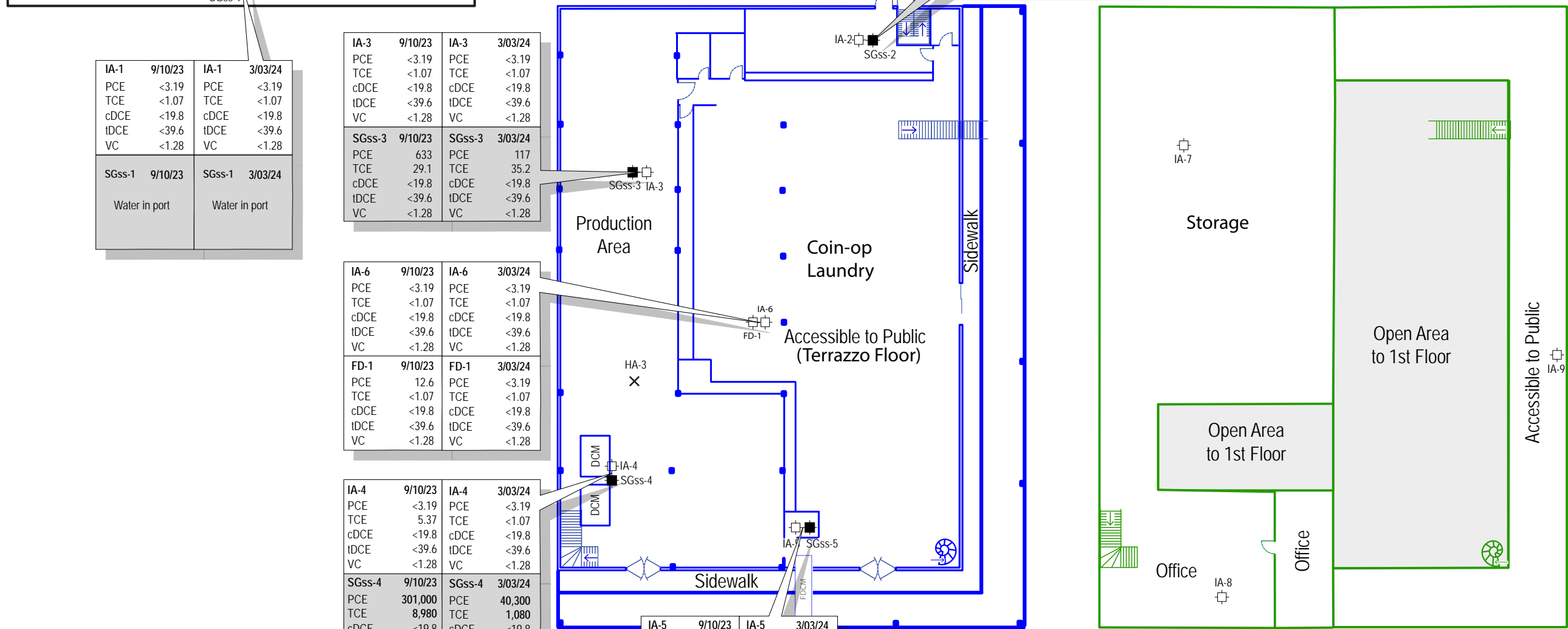
IA-4	9/10/23	IA-4	3/03/24
PCE	<3.19	PCE	<3.19
TCE	5.37	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28
SGss-4	9/10/23	SGss-4	3/03/24
PCE	301,000	PCE	40,300
TCE	8,980	TCE	1,080
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28

OA-1	9/10/23	OA-1	3/03/24
PCE	<3.19	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28

IA-2	9/10/23	IA-2	3/03/24
PCE	<3.19	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28
SGss-2	9/10/23	SGss-2	3/03/24
PCE	17.8	PCE	36.6
TCE	<1.07	TCE	10.7
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28

IA-5	9/10/23	IA-5	3/03/24
PCE	<3.19	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28
SGss-5	9/10/23	SGss-5	3/03/24
PCE	25.1	PCE	<3.19
TCE	<1.07	TCE	<1.07
cDCE	<19.8	cDCE	<19.8
tDCE	<39.6	tDCE	<39.6
VC	<1.28	VC	<1.28

	CIA AL	CIA PL	CSGss PL
PCE:	2,000	200	6,000
TCE:	90	9	300
cDCE:	2,000	200	6,000
tDCE:	2,000	200	6,000
VC:	300	30	900





IDEM VRP No. 6150101

Project No. INMI5760M8.6

Date: 6/26/24

Appendix A

VI Sample Collection Field Documentation



The ELAM Group

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VAPOR INTRUSION ASSESSMENT BUILDING SURVEY

PROJECT NAME: Fabric Care Center DATE: 9/5/2023

PROJECT NUMBER: ENM15760W PERSONNEL: CS/AG

PHASE: 7.2 PROJECT MANAGER: CS

PROJECT ADDRESS: 5760 West Morris St

IDEM PROGRAM ID: VRP

PART I: GENERAL INFORMATION

Chemicals of Concern (check applicable options):

- Chlorinated Solvents
- Petroleum Hydrocarbons
- Other (specify):

No changes
 on
 3/1/24
 JM 3/1/24

Rationale for Vapor Intrusion Assessment (check applicable options):

- Odor Complaint
- Soil Impacts Greater Than Applicable Screening Levels
- Groundwater Impacts Greater Than Applicable Screening Levels
- Other (specify): IDEM requested assessment prior to approving RWP

Anticipated Vapor Intrusion Assessment Activities (check applicable options):

- Install Sample Port(s) (circle applicable options): Soil Gas / Sewer Gas / Subslab Vapor
- Document Building Characteristics
- Complete Chemical Inventory
- Collect Vapor Intrusion Assessment Samples (circle applicable options):
 Soil Gas / Sewer Gas / Subslab Vapor / Indoor Air
- Other (specify):



9/5/2023
 5760 Morris
 2 of 8
 JM 3/1/24

PART II: BUILDING CHARACTERISTICS

A. General Information

Property Address: 5760 W Morris St, Indianapolis IN

Year Constructed: 1965

Use of Structure (circle applicable options): Residential / Commercial / Industrial / Multi-unit

Floors Above Grade: 2 Ceiling Height (feet): _____

Type of Construction (circle applicable options): Basement / Craw Space / Slab on Grade
 ↳ north of building (boiler room)

Subslab Vapor/Moisture Barrier Present? Yes / No / Unknown

Radon Mitigation System Present? Yes / No

B. Basement Details (if applicable)

Depth Below Grade (feet): 28 Area: ~960 sq feet

Walls (circle applicable options): Block / Poured / Other (specify): _____

Walls Cracked? Yes / No Walls Sealed? Yes / No

Floor (circle applicable options): Dirt/Stones / Concrete Slab / Other (specify): _____

Floor Cracked? Yes / No Floor Sealed? Yes / No

Sump Present? Yes / No Water in Sump? Yes / No

Water Intrusion? Yes / No If yes, describe:
water on floor from boiler overflow



9/5/2023

JNMS5760W

5760 Morris

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JM 3/1/24

C. Heating/Cooling

Type of Heating System Used (check applicable options):

- Furnace Heated Air Circulation
- Hot Water Boiler / Radiators
- Steam Boiler / Radiators
- Heat Pump
- Space Heater(s)
- Electric Baseboards
- Fireplace / Stove
- Other (specify): *No Heating*

Type of Cooling System Used (check applicable options):

- Central Air Conditioning
- Window-mounted Air Conditioning
- Whole House Fan
- Portable Fans
- Other (specify):

Fuel Type (check applicable options):

- Electricity
- Natural Gas
- Propane
- Fuel Oil
- Wood
- Coal
- Kerosene
- Other (specify):



9/5/2023
 ENMIS760m
 5760 Morris
 4 of 8
 JM 3/1/24

D. Utilities

Type	Source (circle one)	Floor Penetration (circle one)
Water	Public / Private	Yes / No
Sewer	Public / Private	Yes / No
Electricity	Overhead / Underground	Yes / No
Gas	Public / Private / Not Applicable	Yes / No
Communications	Overhead / Underground	Yes / No

Floor Drain(s) Present?: Yes / No

Cleanout Plug(s) Intact? Yes / No

Additional Information (if applicable)

PART III: OCCUPANT INFORMATION

OCCUPANT NAME	AGE	SEX	OCCUPATION
Fabric Care Center		M / F	
Workers		M / F	
		M / F	
Public		M / F	
		M / F	
		M / F	
		M / F	
		M / F	



9/5/2023

EWMB57604

57604-1111

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JM 3/1/24

Potential Background Contaminant(s):

Do any occupants of the building smoke? Yes / No

If yes, when was the last time someone smoked in the building? unknown

Attached Garage? Yes / No

If yes, are vehicles stored in garage? Yes / No

If yes, gasoline / gas-powered equipment stored in garage? Yes / No

Dry cleaned items brought into structure? Yes / No

If yes, how often?:

When was the last dry cleaned garment brought home?: @ property

Do any occupants use solvents in work? Yes / No

What type?:

If yes, are their clothes washed at work? Yes / No

Are pesticides applied in / around the structure? Yes / No

What type?:

If yes, when was the most recent application?:

Has there ever been a fire in the building? Yes / No

If yes, when?:

Painting or staining completed in the building during the last 6 months? Yes / No

If yes, when?:

If yes, which room(s)?:

PART IV: CHEMICAL INVENTORY

Complete Chemical Inventory Form(s) to Identify:

- potential contamination sources found in the building (including attached garages)
- the location of the potential source(s) (floor & room), and
- whether the item was removed from the building 48 hours prior to the indoor air sampling event.

Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Chemical Inventory

Building Name/Address: Fabric Care 5760W Morris ST

Date 3/1/24
Thu 3/1/24

Product Name	Container type/size	Location	Listed Ingredients		
			VOCs (Y or N)	cVOCs? (Y or N)	Removed? (Y or N)
Ammonia Solution	1gal	under counter by DCM	Y or (N)	Y or (N)	Y or (N)
Picrin	1gal	↓	(Y) or N	(Y) or N	(Y) or N
Primary Amylacetate	1gal		Y or (N)	Y or (N)	Y or (N)
Streetex	1gal		Y or (N)	Y or (N)	Y or (N)
Streetan	1gal		Y or (N)	Y or (N)	Y or (N)
Pyratex	1gal		Y or (N)	Y or (N)	Y or (N)
Solvex 1	1gal		Y or (N)	Y or (N)	Y or (N)
Solvex 2	1gal		Y or (N)	Y or (N)	Y or (N)
Solvex 3	1gal		Y or (N)	Y or (N)	Y or (N)
Polyspot Kww	1gal		Y or (N)	Y or (N)	Y or (N)
BPR Blood + Protein remover	1gal		Y or (N)	Y or (N)	Y or (N)
Stamford S.C.A.N.	1gal		Y or (N)	Y or (N)	Y or (N)
Flow Crest	1gal		Y or (N)	Y or (N)	Y or (N)
Fresh Tex	1gal		Y or (N)	Y or (N)	Y or (N)
Simple green	1gal		Y or (N)	Y or (N)	Y or (N)
2-1 Formula	1gal		(Y) or N	(Y) or N	(Y) or N
Clorox Bleach	1gal		Y or (N)	Y or (N)	Y or (N)
CITRAZYME	2/b		Y or (N)	Y or (N)	Y or (N)
				Y or N	Y or N
			Y or N	Y or N	Y or N
			Y or N	Y or N	Y or N
			Y or N	Y or N	Y or N

*If VOCs or cVOCs are in the product, list them



SUMMA CANISTER AIR SAMPLING FORM

The ELAM Group

GENERAL INFORMATION						
SITE: <u>INMI 5760 W Fabric care</u>						
SAMPLING ADDRESS: <u>5760 W MORRIS ST Indy, IN 46241</u>						
SAMPLING EVENT (circle one):			SUMMERTIME		WINTERTIME	
TEMPERATURE (F): <u>43</u>		BAROMETRIC PRESSURE: <u>30.10</u>		PRECIPITATION (circle one): Y <u>(N)</u>		
WIND DIRECTION (circle one): N NE E <u>(SE)</u> S SW W NW						
SAMPLING PERSONNEL ID & AFFILIATION: <u>Jadva Moffett</u>						

SAMPLING INFORMATION							
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
<u>TA1: A030324</u>		<u>A8050</u>	<u>04656</u>	SHUT IN TEST	<u>3/3/24</u>	<u>740</u>	<u>-29</u>
				INITIAL		<u>852</u>	<u>-29</u>
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)	1	↓	<u>959</u>	<u>-26</u>
			2	<u>1100</u>		<u>-24</u>	
<u>400 mL</u>	<u>TO-14A</u>	<u>Air</u>	<u>24 hour</u>	<u>6</u>		<u>1458</u>	<u>-11</u>
<u>1 L</u>	<u>TO-15</u>	<u>SGss</u>	<u>8 hour</u>	<u>7</u>		<u>1556</u>	<u>-6</u>
<u>6 L</u>	<u>TO-15 SIM</u>	<u>SGe</u>	<u>200 ml/min</u>	FINAL		<u>1706</u>	<u>-5</u>
<u>IA2: A030324</u>		<u>19565</u>	<u>07461</u>	SHUT IN TEST		<u>3/3/24</u>	<u>742</u>
				INITIAL	<u>854</u>		<u>-29</u>
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)	1	↓	<u>1000</u>	<u>-26</u>
			2	<u>1101</u>		<u>-24</u>	
<u>400 mL</u>	<u>TO-14A</u>	<u>Air</u>	<u>24 hour</u>	<u>6</u>		<u>1500</u>	<u>-11</u>
<u>1 L</u>	<u>TO-15</u>	<u>SGss</u>	<u>8 hour</u>	<u>7</u>		<u>1600</u>	<u>-9</u>
<u>6 L</u>	<u>TO-15 SIM</u>	<u>SGe</u>	<u>200 ml/min</u>	FINAL		<u>1709</u>	<u>-6</u>
<u>SS2: A030324</u>		<u>11074</u>	<u>03059</u>	SHUT IN TEST		<u>3/3/24</u>	<u>743</u>
				INITIAL	<u>854</u>		<u>-29</u>
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)	1	↓	<u>1000</u>	<u>-26</u>
			2	<u>1101</u>		<u>-24</u>	
<u>400 mL</u>	<u>TO-14A</u>	<u>Air</u>	<u>24 hour</u>	<u>6</u>		<u>1500</u>	<u>-12</u>
<u>1 L</u>	<u>TO-15</u>	<u>SGss</u>	<u>8 hour</u>	<u>7</u>		<u>1600</u>	<u>-10</u>
<u>6 L</u>	<u>TO-15 SIM</u>	<u>SGe</u>	<u>200 ml/min</u>	FINAL		<u>1710</u>	<u>-7</u>
<u>IA3: A030324</u>		<u>91609</u>	<u>67622</u>	SHUT IN TEST		<u>3/3/24</u>	<u>744</u>
				INITIAL	<u>858</u>		<u>-29</u>
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)	1	↓	<u>1005</u>	<u>-26</u>
			2	<u>1057</u>		<u>-29-24</u>	
<u>400 mL</u>	<u>TO-14A</u>	<u>Air</u>	<u>24 hour</u>	<u>6</u>		<u>1456</u>	<u>-13</u>
<u>1 L</u>	<u>TO-15</u>	<u>SGss</u>	<u>8 hour</u>	<u>7</u>		<u>1550</u>	<u>-10</u>
<u>6 L</u>	<u>TO-15 SIM</u>	<u>SGe</u>	<u>200 ml/min</u>	FINAL		<u>1657</u>	<u>-7</u>

- (1) Pressure reading recording guidelines for various time-weighted average (TWA) valves:
- 24-hour TWA: Initial, Hour 1, Hour 2, Hour 22, Hour 23, and Final
 - 8-hour TWA: Initial, Hour 1, Hour 2, Hour 6, Hour 7, and Final
 - 200 mL/min: Initial and Final (5 min for 1 L, and 30 min for 6 L)



SUMMA CANISTER AIR SAMPLING FORM

GENERAL INFORMATION

SITE: *Fabric Care Center (See Parcel to Information)*

SAMPLING ADDRESS: *(See Parcel to Information)*

SAMPLING EVENT (circle one): SUMMERTIME WINTERTIME

TEMPERATURE (F): BAROMETRIC PRESSURE: PRECIPITATION (circle one): Y N

WIND DIRECTION (circle one): N NE E SE S SW W NW

SAMPLING PERSONNEL ID & AFFILIATION:

SAMPLING INFORMATION								
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)	
<i>SS3: A030324</i>		<i>16060</i>	<i>05724</i>	SHUT IN TEST	<i>3/3/24</i>	<i>748</i>	<i>-29</i>	
				INITIAL		<i>858</i>	<i>-29</i>	
TYPE	METHOD	SOURCE	VALVE	<i>1</i>	↓	<i>1005</i>	<i>-28-20</i>	
(circle one)	(circle one)	(circle one)	(circle one)	<i>2</i>		<i>1057</i>	<i>-24</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1456</i>	<i>-11</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1556</i>	<i>-8</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1657</i>	<i>-5</i>	
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)		DATE	TIME	CAN P ("Hg)
<i>IA4: A030324</i>		<i>14111</i>	<i>07779</i>	SHUT IN TEST		<i>3/3/24</i>	<i>749</i>	<i>-28</i>
				INITIAL		<i>857</i>	<i>-28</i>	
TYPE	METHOD	SOURCE	VALVE	<i>1</i>	↓	<i>1005</i>	<i>-26</i>	
(circle one)	(circle one)	(circle one)	(circle one)	<i>2</i>		<i>1057</i>	<i>-24</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1457</i>	<i>-12</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1557</i>	<i>-9</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1658</i>	<i>-1</i>	
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)		DATE	TIME	CAN P ("Hg)
<i>SS4: A030324</i>		<i>4692</i>	<i>05218</i>	SHUT IN TEST		<i>3/3/24</i>	<i>8748</i>	<i>-27</i>
				INITIAL		<i>857</i>	<i>-28-27</i>	
TYPE	METHOD	SOURCE	VALVE	<i>1</i>	↓	<i>1005</i>	<i>-25</i>	
(circle one)	(circle one)	(circle one)	(circle one)	<i>2</i>		<i>1057</i>	<i>-22</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1457</i>	<i>-7</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1557</i>	<i>-3</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1557</i>	<i>-3</i>	
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)		DATE	TIME	CAN P ("Hg)
<i>IA5: A030324</i>		<i>4660</i>	<i>07623</i>	SHUT IN TEST		<i>3/3/24</i>	<i>752</i>	<i>-29</i>
				INITIAL		<i>855</i>	<i>-29</i>	
TYPE	METHOD	SOURCE	VALVE	<i>1</i>	↓	<i>1001</i>	<i>-27</i>	
(circle one)	(circle one)	(circle one)	(circle one)	<i>2</i>		<i>1102</i>	<i>-25</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1501</i>	<i>-18</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1601</i>	<i>-16</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1714</i>	<i>-15</i>	

- (1) Pressure reading recording guidelines for various time-weighted average (TWA) valves:
- a. 24-hour TWA: Initial, Hour 1, Hour 2, Hour 22, Hour 23, and Final
 - b. 8-hour TWA: Initial, Hour 1, Hour 2, Hour 6, Hour 7, and Final
 - b. 200 mL/min: Initial and Final (5 min for 1 L, and 30 min for 6 L)



The ELAM Group

SUMMA CANISTER AIR SAMPLING FORM

GENERAL INFORMATION									
SITE: <i>Fabric Care Center (See Page 1 for Information)</i>									
SAMPLING ADDRESS: <i>Fabric Care Center (See Page 1 for Information)</i>									
SAMPLING EVENT (circle one):		SUMMERTIME			WINTERTIME				
TEMPERATURE (F):		BAROMETRIC PRESSURE:			PRECIPITATION (circle one):			Y N	
WIND DIRECTION (circle one):		N	NE	E	SE	S	SW	W	NW
SAMPLING PERSONNEL ID & AFFILIATION:									

SAMPLING INFORMATION								
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)	
<i>SSS: A030324</i>		<i>4659</i>	<i>07458</i>	SHUT IN TEST	<i>3/3/24</i>	<i>754</i>	<i>-29</i>	
				INITIAL		<i>855</i>	<i>-29</i>	
TYPE	METHOD	SOURCE	VALVE	1	↓	<i>1001</i>	<i>-27</i>	
(circle one)	(circle one)	(circle one)	(circle one)	2		<i>1102</i>	<i>-25</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1501</i>	<i>-18</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1601</i>	<i>-16</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1714</i>	<i>-14</i>	
<i>IAC: A030324</i>		<i>4697</i>	<i>07437</i>	SHUT IN TEST		<i>3/3/24</i>	<i>756</i>	<i>-29</i>
				INITIAL			<i>855</i>	<i>-29</i>
TYPE	METHOD	SOURCE	VALVE	1	↓	<i>1000</i>	<i>-25</i>	
(circle one)	(circle one)	(circle one)	(circle one)	2		<i>1102</i>	<i>-23</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1501</i>	<i>-11</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1661</i>	<i>-8</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1712</i>	<i>-5</i>	
<i>FD: A030324</i>		<i>17896</i>	<i>04648</i>	SHUT IN TEST		<i>3/3/24</i>	<i>757</i>	<i>-30</i>
				INITIAL			<i>855</i>	<i>-30</i>
TYPE	METHOD	SOURCE	VALVE	1	↓	<i>1000</i>	<i>-27</i>	
(circle one)	(circle one)	(circle one)	(circle one)	2		<i>1102</i>	<i>-25</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1501</i>	<i>-14</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1601</i>	<i>-12</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1712</i>	<i>-9</i>	
<i>OA: A030324</i>		<i>16032</i>	<i>05721</i>	SHUT IN TEST		<i>3/3/24</i>	<i>800</i>	<i>-29</i>
				INITIAL			<i>850</i>	<i>-29</i>
TYPE	METHOD	SOURCE	VALVE	1	↓	<i>957</i>	<i>-28</i>	
(circle one)	(circle one)	(circle one)	(circle one)	2		<i>1055</i>	<i>24</i>	
<i>400 mL</i>	<i>TO-14A</i>	<i>Air</i>	<i>24 hour</i>	<i>6</i>		<i>1555</i>	<i>-11</i>	
<i>1 L</i>	<i>TO-15</i>	<i>SGss</i>	<i>8 hour</i>	<i>7</i>		<i>1555</i>	<i>-8</i>	
<i>6 L</i>	<i>TO-15 SIM</i>	<i>SGe</i>	<i>200 ml/min</i>	FINAL		<i>1656</i>	<i>-6</i>	

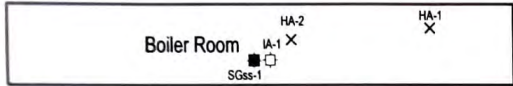
(1) Pressure reading recording guidelines for various time-weighted average (TWA) valves:

- a. 24-hour TWA: Initial, Hour 1, Hour 2, Hour 22, Hour 23, and Final
- b. 8-hour TWA: Initial, Hour 1, Hour 2, Hour 7, and Final
- b. 200 mL/min: Initial and Final (5 min for 1 L, and 30 min for 6 L)

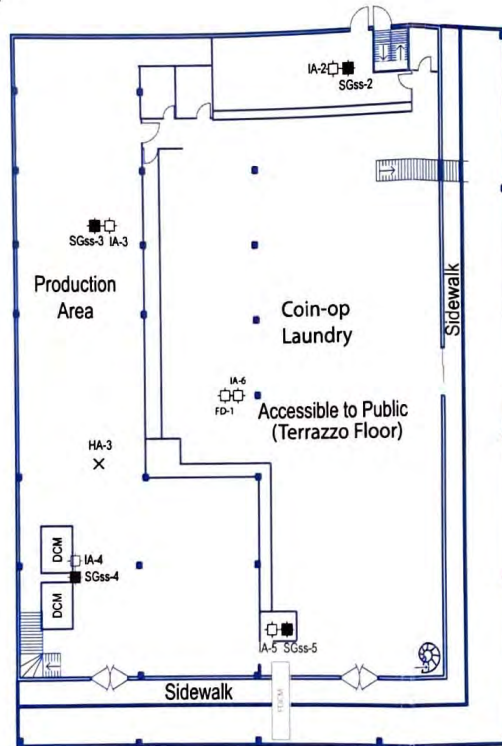
BASEMENT PLAN

1ST FLOOR PLAN

2ND FLOOR PLAN



OA-1



LEGEND

- ⊕ IA Sampling Point
- SGss Gas Sampling Point
- DCM Dry Cleaning Machine
- DCM Former Dry Cleaning Machine
- Building Column
- × Hand Auger

Notes:

1. Building plan shown is located at 5760 W Morris St. Indianapolis, IN.
2. SGss points are not allowed through the Terrazzo floor.

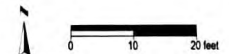


Figure No: 2b

Title: VIA Building Plan

Scale: 1:240 (1 in = 20 ft)

Project No: INMI5760M

Report: RWP Addendum

Drawn by: The ELAM Group

Date: 10/03/2023

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: <u>The ELAM Group</u>	P.O. Number: <u>INM15760M 7.0</u>
Report Address: <u>161 Executive Dr Suite B Bloomington, IN 47403</u>	Project Name or Number: <u>INM15760M</u>
Report To: <u>Jason Olund</u>	Sampled by: <u>Judda Maffers</u>
Phone: <u>(498) 510-3200</u>	QA/QC Required: (circle if applicable) Level III Level IV
Invoice Address: <u>account payable@elamusa.com</u>	Reporting Units needed: (circle) ug/m³ mg/m³ PPBV PPMV
Desired TAT: (Please Circle One) 1 day 2 days 3 days Std (5 bus. days)	Media type: 1LC = 1 Liter Canister 6LC = 6 Liter Canister TB = Tedlar Bag TD = Thermal Desorption Tube

REQUESTED PARAMETERS

TO-15 Full List

TO-15 Short List (Specify in notes)



- Sampling Type:**
- Soil-Gas:
 - Sub-Slab:
 - Indoor-Air:

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Canister Pressure / Vacuum

Air Sample ID	Media Type <small>(see code above)</small>	Coll. Date <small>(Grab/Comp Start)</small>	Coll. Time <small>(Grab/Comp Start)</small>	Coll. Date <small>(Comp. End)</small>	Coll. Time <small>(Comp. End)</small>					Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
IA1:A030324	6LC	3/3/24	852	3/3/24	1706	X				A8050	04656	-29	-5		
IA2:A030324	6LC	3/3/24	854	3/3/24	1709	X				19565	07461	-29	-6		
SS2:A030324	6LC	3/3/24	854	3/3/24	1710	X				11074	03059	-29	-7		
IA3:A030324	6LC	3/3/24	858	3/3/24	1657	X				91609	07622	-29	-7		
SS3:A030324	6LC	3/3/24	858	3/3/24	1657	X				16060	05724	-29	-5		
IA4:A030324	6LC	3/3/24	857	3/3/24	1658	X				19111	07779	-28	-6		
SS4:A030324	6LC	3/3/24	857	3/3/24	1557	X				4692	05018	-27	-3		
IA5:A030324	6LC	3/3/24	855	3/3/24	1714	X				4660	07623	-29	-15		
SS5:A030324	6LC	3/3/24	855	3/3/24	1714	X				4659	07458	-29	-14		
IA6:A030324	6LC	3/3/24	855	3/3/24	1712	X				4697	07437	-29	-5		

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Judda Maffers</u>	<u>3/4/24</u>	<u>10:05</u>	<u>[Signature]</u>	<u>3/4/24</u>	<u>10:05</u>



IDEM VRP No. 6150101

Project No. INMI5760M8.6

Date: 6/26/24

Appendix B

Laboratory Analytical Report with Level IV Data Package



EnvisionAir
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www.envision-air.com

Mr. Jason Oland
The ELAM Group
161 Lakeview Drive
Suite B
Noblesville, IN 46060

March 13, 2024

EnvisionAir Project Number: 2024-126
Client Project Name: INMI5760M

Dear Mr. Oland,

Please find the attached analytical report for the samples received March 4, 2024. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

A handwritten signature in black ink that reads "David Norris". The signature is fluid and cursive.

David Norris
Project Manager
EnvisionAir, LLC



EnvisionAir
 1441 Sadlier Circle West Drive
 Indianapolis, IN 46239
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 Fax: 317-351-0882
 www.envision-air.com

Client Name: THE ELAM GROUP
Project ID: INMI5760M
Client Project Manager: JASON OLAND
EnvisionAir Project Number: 2024-126

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START</u>	<u>START</u>	<u>End Date</u>	<u>End Time</u>	<u>Date</u>	<u>Time</u>	<u>Canister Pressure / Vacuum</u>		<u>Lab</u>
			<u>Date</u>	<u>Time</u>					<u>Initial Field</u>	<u>Final Field</u>	
			<u>Collected:</u>	<u>Collected:</u>	<u>Collected:</u>	<u>Collected:</u>	<u>Received:</u>	<u>Received</u>	<u>(in. Hg)</u>	<u>(in. Hg)</u>	<u>(in. Hg)</u>
24-639	IA1:A030324	A	3/3/24	8:52	3/3/24	17:06	3/4/24	10:05	29	5	5
24-640	IA2:A030324	A	3/3/24	8:54	3/3/24	17:09	3/4/24	10:05	29	6	6
24-641	SS2:A030324	A	3/3/24	8:54	3/3/24	17:10	3/4/24	10:05	29	7	7
24-642	IA3:A030324	A	3/3/24	8:58	3/3/24	16:57	3/4/24	10:05	29	7	7
24-643	SS3:A030324	A	3/3/24	8:58	3/3/24	16:57	3/4/24	10:05	29	5	5
24-644	IA4:A030324	A	3/3/24	8:57	3/3/24	16:58	3/4/24	10:05	28	6	6
24-645	SS4:A030324	A	3/3/24	8:57	3/3/24	15:57	3/4/24	10:05	27	3	3
24-646	IA5:A030324	A	3/3/24	8:55	3/3/24	17:14	3/4/24	10:05	29	15	15
24-647	SS5:A030324	A	3/3/24	8:55	3/3/24	17:14	3/4/24	10:05	29	14	14
24-648	IA6:A030324	A	3/3/24	8:55	3/3/24	17:12	3/4/24	10:05	29	5	5
24-649	FD:A030324	A	3/3/24	8:55	3/3/24	17:12	3/4/24	10:05	30	9	9
24-650	OA:A030324	A	3/3/24	8:50	3/3/24	16:56	3/4/24	10:05	29	6	6



EnvisionAir
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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: IA1:A030324

Sample Collection START Date/Time: 3/3/24 8:52
Sample Collection END Date/Time: 3/3/24 17:06
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-639
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	8.30	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	107%		
Analysis Date/Time:	3-7-24/00:55		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: IA2:A030324

Sample Collection START Date/Time: 3/3/24 8:54
Sample Collection END Date/Time: 3/3/24 17:09
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-640
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	7.37	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	105%		
Analysis Date/Time:	3-7-24/02:21		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: SS2:A030324

Sample Collection START Date/Time: 3/3/24 8:54
Sample Collection END Date/Time: 3/3/24 17:10
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-641
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	41.2	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	36.6	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	10.7	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	97%		
Analysis Date/Time:	3-7-24/03:04		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: IA3:A030324

Sample Collection START Date/Time: 3/3/24 8:58
Sample Collection END Date/Time: 3/3/24 16:57
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-642
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	3-7-24/03:47		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: SS3:A030324

Sample Collection START Date/Time: 3/3/24 8:58
Sample Collection END Date/Time: 3/3/24 16:57
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-643
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	117	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	35.2	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	3-7-24/04:31		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: IA4:A030324

Sample Collection START Date/Time: 3/3/24 8:57
Sample Collection END Date/Time: 3/3/24 16:58
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-644
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	103%		
Analysis Date/Time:	3-7-24/06:41		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: SS4:A030324

Sample Collection START Date/Time: 3/3/24 8:57
Sample Collection END Date/Time: 3/3/24 15:57
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-645
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	34.6	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	40,300	5100	3
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	1,080	43.0	2
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	3-7-24/08:04		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: IA5:A030324

Sample Collection START Date/Time: 3/3/24 8:55
Sample Collection END Date/Time: 3/3/24 17:14
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-646
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	107%		
Analysis Date/Time:	3-7-24/10:15		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: SS5:A030324

Sample Collection START Date/Time: 3/3/24 8:55
Sample Collection END Date/Time: 3/3/24 17:14
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-647
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	3-7-24/11:06		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: IA6:A030324

Sample Collection START Date/Time: 3/3/24 8:55

Sample Collection END Date/Time: 3/3/24 17:12

EnvisionAir Sample Number: 24-648

Sample Received Date/Time: 3/4/24 10:05

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	3-7-24/11:49		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: FD:A030324

Sample Collection START Date/Time: 3/3/24 8:55
Sample Collection END Date/Time: 3/3/24 17:12
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-649
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	3-7-24/12:37		
Analyst Initials	tjg		



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Client Name: THE ELAM GROUP

Project ID: INMI5760M

Client Project Manager: JASON OLAND

EnvisionAir Project Number: 2024-126

Analytical Method: TO-15
Analytical Batch: 030624AIR

Client Sample ID: OA:A030324

Sample Collection START Date/Time: 3/3/24 8:50
Sample Collection END Date/Time: 3/3/24 16:56
Sample Received Date/Time: 3/4/24 10:05

EnvisionAir Sample Number: 24-650
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	3-7-24/07:21		
Analyst Initials	tjg		



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Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 030624AIR

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,1,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 15	15	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
Naphthalene	< 0.1	0.1	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

Analytical Report

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichloroethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	97%		
Analysis Date/Time:	3-6-24/18:26		
Analyst Initials	tjg		

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u> <u>Conc(ppbv)</u>	<u>LCS</u> <u>Rec.</u>	<u>LCSD</u> <u>Rec.</u>	<u>RPD</u>	<u>Flag</u>
Propylene	9.85	10.1	10	99%	101%	2.5%	
Dichlorodifluoromethane	9.67	9.69	10	97%	97%	0.2%	
Chloromethane	9.75	9.85	10	98%	99%	1.0%	
Vinyl Chloride	9.66	9.95	10	97%	100%	3.0%	
1,3-Butadiene	10.9	10.5	10	109%	105%	3.7%	
Bromomethane	10.5	10.5	10	105%	105%	0.0%	
Chloroethane	10.2	10.3	10	102%	103%	1.0%	
Vinyl Bromide	10.7	10.5	10	107%	105%	1.9%	
Trichlorofluoromethane	9.96	9.96	10	100%	100%	0.0%	
Acetone	10.7	10.8	10	107%	108%	0.9%	
1,1-Dichloroethene	9.69	9.69	10	97%	97%	0.0%	
Methylene Chloride	10.2	10.1	10	102%	101%	1.0%	
Carbon Disulfide	10.2	10.5	10	102%	105%	2.9%	
trans-1,2-Dichloroethene	9.24	9.51	10	92%	95%	2.9%	
Methyl-tert-butyl ether	9.75	9.95	10	98%	100%	2.0%	
1,1-Dichloroethane	9.92	9.94	10	99%	99%	0.2%	
Vinyl Acetate	10	9.69	10	100%	97%	3.1%	
N-Hexane	9.51	9.91	10	95%	99%	4.1%	
2-Butanone (MEK)	9.45	10.1	10	95%	101%	6.6%	
cis-1,2-Dichloroethene	9.93	10	10	99%	100%	0.7%	
Ethyl Acetate	9.78	10.4	10	98%	104%	6.1%	
Chloroform	11	10.9	10	110%	109%	0.9%	
Tetrahydrofuran	10.5	10.1	10	105%	101%	3.9%	
1,2-Dichloroethane	10.5	9.79	10	105%	98%	7.0%	
1,1,1-Trichloroethane	10.1	10.4	10	101%	104%	2.9%	
Carbon Tetrachloride	10.3	9.93	10	103%	99%	3.7%	
Benzene	9.9	9.73	10	99%	97%	1.7%	
Cyclohexane	10.4	10.1	10	104%	101%	2.9%	
1,2-Dichloropropane	10	9.21	10	100%	92%	8.2%	
Trichloroethene	10.5	10.6	10	105%	106%	0.9%	
Bromodichloromethane	10.2	10.3	10	102%	103%	1.0%	
1,4-Dioxane	10.3	9.67	10	103%	97%	6.3%	
Isooctane	10.4	9.69	10	104%	97%	7.1%	
N-Heptane	9.65	9.73	10	97%	97%	0.8%	
cis-1,3-Dichloropropene	10.3	10.5	10	103%	105%	1.9%	
4-Methyl-2-pentanone (MIBK)	9.89	9.78	10	99%	98%	1.1%	
trans-1,3-Dichloropropene	9.71	9.5	10	97%	95%	2.2%	
1,1,2-Trichloroethane	9.67	10.6	10	97%	106%	9.2%	
Toluene	9.3	10.9	10	93%	109%	15.8%	
2-Hexanone	10.2	9.34	10	102%	93%	8.8%	
Dibromochloromethane	9.65	9.74	10	97%	97%	0.9%	
1,2-dibromoethane (EDB)	9.65	9.19	10	97%	92%	4.9%	
Tetrachloroethene	9.82	9.91	10	98%	99%	0.9%	
Chlorobenzene	10.2	10.6	10	102%	106%	3.8%	
Ethylbenzene	10.5	10.3	10	105%	103%	1.9%	
m,p-Xylene	20.9	22	20	105%	110%	5.1%	
Bromoform	10	9.81	10	100%	98%	1.9%	



EnvisionAir
 1441 Sadlier Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Analytical Report

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D Conc(ppbv)</u>	<u>LCS Rec.</u>	<u>LCSD Rec.</u>	<u>RPD</u>	<u>Flag</u>
Styrene	9.69	9.24	10	97%	92%	4.8%	
1,1,2,2-Tetrachloroethane	9.52	9.6	10	95%	96%	0.8%	
o-Xylene	9.59	9.67	10	96%	97%	0.8%	
4-Ethyltoluene	10.6	10.7	10	106%	107%	0.9%	
1,3,5-Trimethylbenzene	10.9	10.6	10	109%	106%	2.8%	
1,2,4-Trimethylbenzene	10.5	9.97	10	105%	100%	5.2%	
1,3-Dichlorobenzene	10.6	10.5	10	106%	105%	0.9%	
Benzyl Chloride	9.69	10.3	10	97%	103%	6.1%	
1,4-Dichlorobenzene	9.97	10.6	10	100%	106%	6.1%	
1,2-Dichlorobenzene	10.4	10.3	10	104%	103%	1.0%	
1,2,4-Trichlorobenzene	10.8	9.66	10	108%	97%	11.1%	
Naphthalene	9.53	10.4	10	95%	104%	8.7%	
Hexachloro-1,3-butadiene	9.63	9.62	10	96%	96%	0.1%	
4-bromofluorobenzene (surrogate)	97%	101%					
Analysis Date/Time:	3-6-24/15:35	3-6-24/16:18					
Analyst Initials	tjg	tjg					



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www.envision-air.com

<u>Flag Number</u>	<u>Comments</u>
1	Reporting limit is supported by MDL. TJJ
2	Reported value is from a 40x dilution. TJJ 3/12/24
3	Reported value is from a 1600x dilution. TJJ 3/12/24

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: The ELAM Group
 Report ~~from~~ Site 161 Lakeview Dr
 Address: Noblesville, IN 46060
 Report To: Jason Oland
 Phone: (888) 510-3526
 Invoice Address: 1441 Sadlier Circle West Drive
 Desired TAT: (Please Circle One)
 1 day 2 days 3 days Std (5 bus. days)

P.O. Number: INM157604 72
 Project Name or Number: 1441576 DM
 Sampled by: Yelda Maffey
 QA/QC Required: (Circle if applicable)
 Level III Level IV

Reporting Units needed: (circle)
 ug/m³ mg/m³ ppbv ppmv
 Media Type: 1L = 1 Liter Canister
6L = 6 Liter Canister
 TB = Tediator Bag
 TD = Thermal Description Tube

REQUESTED PARAMETERS

TO-15 Full List
 TO-15 Short List (Specify in notes)

Sampling Type:
 Soil-Gas:
 Sub-Slab:
 Indoor-Air:

Canister Pressure / Vacuum

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Air Sample ID	Media Type (see code above)	Coll. Date (grab/Comp Start)	Coll. Time (grab/Comp Start)	Coll. Date (Comp. End)	Coll. Time (Comp. End)	Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
IA1: A030324	6LC	3/3/24	852	3/3/24	1706	A8050	04656	-29	-5	-5	24-639
IA2: A030324	6LC	3/3/24	854	3/3/24	1709	14565	07461	-29	-6	-6	24-640
IA3: A030324	6LC	3/3/24	858	3/3/24	1710	11074	03059	-29	-7	-7	24-641
IA4: A030324	6LC	3/3/24	858	3/3/24	1657	91609	07622	-29	-7	-7	24-642
IA5: A030324	6LC	3/3/24	858	3/3/24	1657	16060	05724	-29	-5	-5	24-643
IA6: A030324	6LC	3/3/24	857	3/3/24	1557	14111	07779	-28	-6	-6	24-644
IA7: A030324	6LC	3/3/24	855	3/3/24	1714	4692	05218	-27	-3	-3	24-645
IA8: A030324	6LC	3/3/24	855	3/3/24	1714	4660	07623	-29	-15	-15	24-646
IA9: A030324	6LC	3/3/24	855	3/3/24	1714	4654	07458	-29	-14	-14	24-647
IA10: A030324	6LC	3/3/24	855	3/3/24	1712	4697	07437	-29	-5	-5	24-648

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Yelda Maffey</u>	<u>3/19/24</u>	<u>10:05</u>	<u>[Signature]</u>	<u>3/19/24</u>	<u>10:05</u>

2024-126

LEVEL IV



TO-15 VOC

- Sequence Log

Injection Log

Directory: C:\HPCHEM\1\DATA\030624

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0101001.D	1.	BFB/CCV 10PPBV	TO-15 ANALYSIS	6 Mar 2024 14:51
2	2	0201002.D	1.	LCS 10PPBV	TO-15 ANALYSIS	6 Mar 2024 15:35
3	3	0301003.D	1.	LCSD 10PPBV	TO-15 ANALYSIS	6 Mar 2024 16:18
4	4	0401004.D	1.	LCSDD 10PPBV	TO-15 ANALYSIS	6 Mar 2024 17:02
5	5	0501005.D	1.	METHOD BLANK	TO-15 ANALYSIS	6 Mar 2024 17:44
6	6	0601006.D	1.	METHOD BLANK	TO-15 ANALYSIS	6 Mar 2024 18:26
7	7	0701007.D	1.	24-651	TO-15 ANALYSIS	6 Mar 2024 19:08
8	8	0801008.D	1.	24-652	TO-15 ANALYSIS	6 Mar 2024 19:50
9	9	0901009.D	1.	24-653	TO-15 ANALYSIS	6 Mar 2024 20:32
10	10	1001010.D	1.	24-654	TO-15 ANALYSIS	6 Mar 2024 21:14
11	11	1101011.D	1.	24-655	TO-15 ANALYSIS	6 Mar 2024 21:57
12	12	1201012.D	1.	24-656	TO-15 ANALYSIS	6 Mar 2024 22:39
13	13	1301013.D	1.	24-657	TO-15 ANALYSIS	6 Mar 2024 23:21
14	14	1401014.D	1.	24-658	TO-15 ANALYSIS	7 Mar 2024 00:12
15	15	1501015.D	1.	24-639	TO-15 ANALYSIS	7 Mar 2024 00:55
16	16	1601016.D	1.	LCSDD 10PPBV	TO-15 ANALYSIS	7 Mar 2024 01:38
17	17	1701017.D	1.	24-640	TO-15 ANALYSIS	7 Mar 2024 02:21
18	18	1801018.D	1.	24-641	TO-15 ANALYSIS	7 Mar 2024 03:04
19	19	1901019.D	1.	24-642	TO-15 ANALYSIS	7 Mar 2024 03:47
20	20	2001020.D	1.	24-643	TO-15 ANALYSIS	7 Mar 2024 04:31
21	21	2101001.D	1.		TO-15 ANALYSIS	7 Mar 2024 05:15
22	22	2201002.D	1.	24-653:10 PETRO	TO-15 ANALYSIS	7 Mar 2024 05:58
23	23	2301003.D	1.	24-644	TO-15 ANALYSIS	7 Mar 2024 06:41
24	24	2401004.D	1.	24-650 OA	TO-15 ANALYSIS	7 Mar 2024 07:21
25	25	2501005.D	1.	24-645	TO-15 ANALYSIS	7 Mar 2024 08:04
26	26	2601006.D	1.	24-645:40	TO-15 ANALYSIS	7 Mar 2024 08:42
27	27	2701007.D	1.	24-645:1600	TO-15 ANALYSIS	7 Mar 2024 09:22
28	28	2801008.D	1.	24-646	TO-15 ANALYSIS	7 Mar 2024 10:15
29	29	2901009.D	1.	24-647	TO-15 ANALYSIS	7 Mar 2024 11:06

Injection Log

Directory: C:\HPCHEM\1\DATA\030624

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
30	30	3001010.D	1.	24-648	TO-15 ANALYSIS	7 Mar 2024 11:49
31	31	3101011.D	1.	24-649	TO-15 ANALYSIS	7 Mar 2024 12:37
32		3201012.D	1.			



TO-15 VOC
Initial Calibration Data

- Tune
- Initial Calibration Summary
- Initial Calibration Quant Reports
- Initial Calibration Verification Summary

Injection Log

Directory: C:\HPCHEM\1\DATA\030524C

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0101001.D	1.	10PPBV	TO-15 ANALYSIS	5 Mar 2024 07:21
2	2	0201002.D	1.	10PPBV	TO-15 ANALYSIS	5 Mar 2024 08:05
3	3	0301003.D	1.	0.2PPBV	TO-15 ANALYSIS	5 Mar 2024 08:46
4	4	0401004.D	1.	0.3PPBV	TO-15 ANALYSIS	5 Mar 2024 09:29
5	5	0501005.D	1.	0.5PPBV	TO-15 ANALYSIS	5 Mar 2024 10:14
6	6	0601006.D	1.	0.1PPBV	TO-15 ANALYSIS	5 Mar 2024 10:57
7	7	0701007.D	1.	1PPBV	TO-15 ANALYSIS	5 Mar 2024 11:40
8	8	0801008.D	1.	2PPBV	TO-15 ANALYSIS	5 Mar 2024 12:23
9	9	0901009.D	1.	5PPBV	TO-15 ANALYSIS	5 Mar 2024 13:04
10	10	1001010.D	1.	10PPBV	TO-15 ANALYSIS	5 Mar 2024 13:49
11	11	1101011.D	1.	20PPBV	TO-15 ANALYSIS	5 Mar 2024 14:38
12	12	1201012.D	1.	10PPBV ICAL VER.	TO-15 ANALYSIS	5 Mar 2024 15:22
13	13	1301013.D	1.	LCS 10PPBV	TO-15 ANALYSIS	5 Mar 2024 16:06
14	14	1401014.D	1.	LCSD 10PPBV	TO-15 ANALYSIS	5 Mar 2024 16:50
15	15	1501015.D	1.	METHOD BLANK	TO-15 ANALYSIS	5 Mar 2024 17:33
16	16	1601016.D	1.	24-621 AMB	TO-15 ANALYSIS	5 Mar 2024 18:14
17	17	1701017.D	1.	24-622	TO-15 ANALYSIS	5 Mar 2024 18:57
18	18	1801018.D	1.	24-623	TO-15 ANALYSIS	5 Mar 2024 19:41
19	19	1901019.D	1.	24-624	TO-15 ANALYSIS	5 Mar 2024 20:25
20	20	2001020.D	1.	24-625	TO-15 ANALYSIS	5 Mar 2024 21:08
21	21	2101021.D	1.	24-626	TO-15 ANALYSIS	5 Mar 2024 21:52
22	22	2201022.D	1.	24-617 RR	TO-15 ANALYSIS	5 Mar 2024 22:35
23	23	2301023.D	1.	24-618 RR	TO-15 ANALYSIS	5 Mar 2024 23:18
24	24	2401024.D	1.	24-616 RR	TO-15 ANALYSIS	6 Mar 2024 00:01
25	25	2501025.D	1.	24-627	TO-15 ANALYSIS	6 Mar 2024 00:45
26	26	2601026.D	1.	24-628	TO-15 ANALYSIS	6 Mar 2024 01:28
27	27	2701027.D	1.	24-629	TO-15 ANALYSIS	6 Mar 2024 02:11
28	28	2801028.D	1.	LCSDD 10PPBV	TO-15 ANALYSIS	6 Mar 2024 02:55
29	29	2901029.D	1.	24-630	TO-15 ANALYSIS	6 Mar 2024 03:38

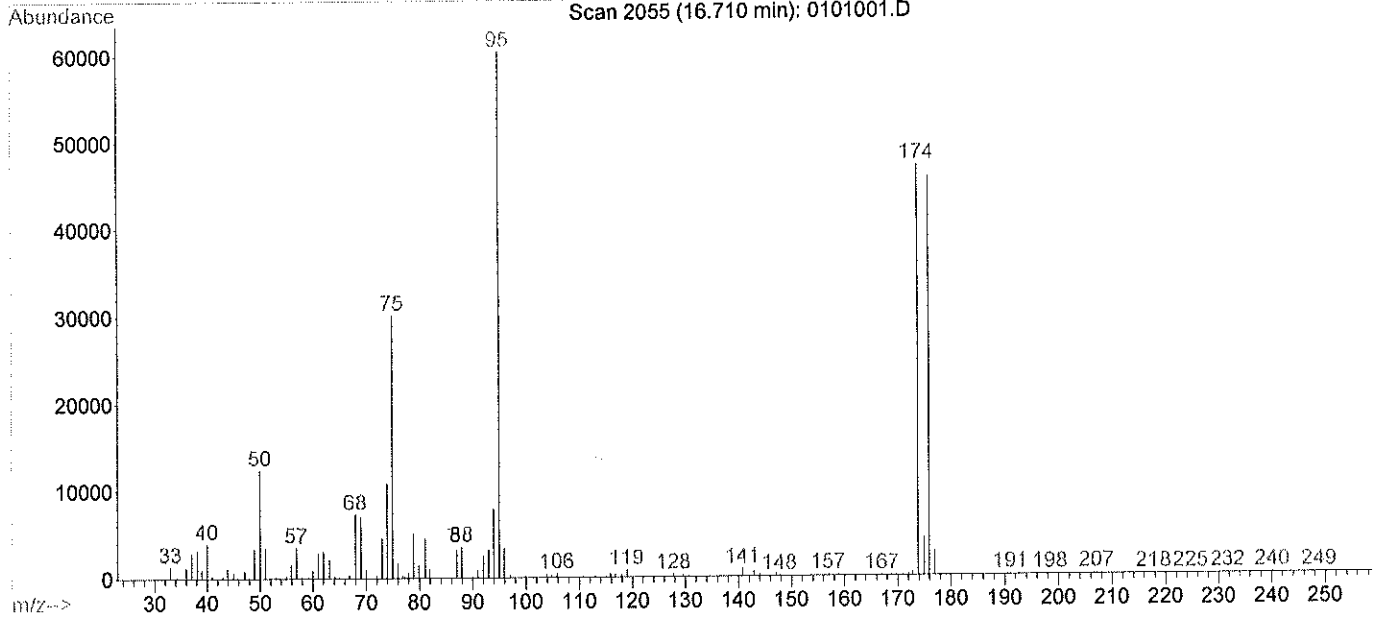
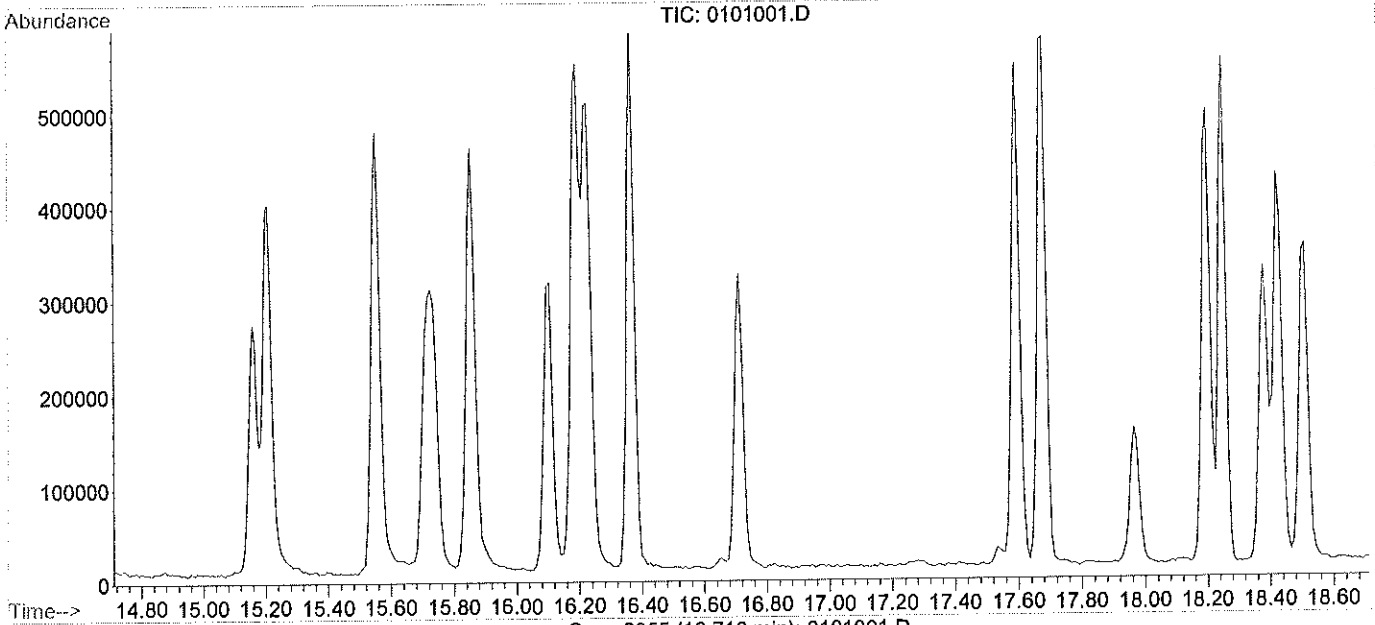
65)	Naphthalene	0.136	0.101	0.124	0.093	0.102	0.102	0.112	13.54
66) T	Hexachloro-1,3-buta	0.339	0.321	0.357	0.349	0.410	0.399	0.351	11.31

(#) = Out of Range ### Number of calibration levels exceeded format ###

030524AI.M Wed Mar 27 07:40:40 2024 6890

Data File : C:\HPCHEM\1\DATA\030524C\0101001.D
 Acq On : 5 Mar 2024 7:21 am
 Sample : 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION

Vial: 1
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00



Spectrum Information: Scan 2055

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	12387	PASS
75	95	30	60	50.0	30176	PASS
95	95	100	100	100.0	60376	PASS
96	95	2	9	5.7	3458	PASS
173	174	0.00	2	0.9	416	PASS
174	95	50	100	77.8	46992	PASS
175	174	5	9	9.2	4337	PASS
176	174	95	101	97.2	45664	PASS
177	176	5	9	6.1	2776	PASS

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\0601006.D
 Acq On : 5 Mar 2024 10:57 am
 Sample : 0.1PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:32 2024

Vial: 6
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 10:38:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	63570	5.00	ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.03	114	238420	5.00	ppbv	0.02
45) Chlorobenzene-d5 (IS)	15.17	117	187251	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.72	95	112513	4.76	ppbv	0.00
Spiked Amount	5.000	Range 62 - 145	Recovery	=	95.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.24	39	480	0.08	ppbv	
3) Dichlorodifluoromethane	4.34	85	2801	0.07	ppbv	
4) Chloromethane	4.60	50	925	0.10	ppbv #	88
5) Vinyl Chloride	4.88	62	570	0.05	ppbv	94
6) 1,3-Butadiene	5.06	39	733	0.12	ppbv #	32
7) Bromomethane	5.49	94	141	0.01	ppbv	100
8) Chloroethane	5.61	64	258	0.06	ppbv #	73
9) Vinyl Bromide	6.03	106	437	0.04	ppbv #	63
10) Trichlorofluoromethane	6.48	101	683	0.02	ppbv #	66
11) Acetone	6.23	43	6943	0.27	ppbv #	83
12) Isopropyl Alcohol (IPA)	6.43	45	1477	0.07	ppbv #	61
13) 1,1-Dichloroethene	7.15	61	426	0.02	ppbv #	1
14) Methylene Chloride	7.23	84	2064m	0.12	ppbv	
15) Carbon Disulfide	7.61	76	2424	0.07	ppbv #	100
16) trans-1,2-Dichloroethene	8.16	96	1043	0.08	ppbv #	3
17) Methyl-tert-butyl ether	8.36	73	1914	0.05	ppbv #	57
18) 1,1-Dichloroethane	8.34	63	1722	0.08	ppbv #	53
19) Vinyl Acetate	8.40	43	2692	0.07	ppbv #	91
20) N-Hexane	9.32	57	1158	0.08	ppbv #	85
21) 2-Butanone (MEK)	8.64	43	2104	0.09	ppbv #	69
22) cis-1,2-Dichloroethene	9.12	61	1207	0.07	ppbv #	41
23) Ethyl Acetate	9.24	43	2284	0.09	ppbv #	89
24) Chloroform	9.41	83	2170m	0.07	ppbv	
26) Tetrahydrofuran	9.76	42	799	0.07	ppbv #	85
27) 1,2-Dichloroethane	10.08	62	1481	0.07	ppbv #	88
28) 1,1,1-Trichloroethane	10.35	97	871	0.03	ppbv #	56
29) 1,1-Dichloropropene	12.96	75	899	0.04	ppbv #	72
30) Carbon Tetrachloride	10.93	117	1690m	0.05	ppbv	
31) Benzene	10.78	78	1637	0.05	ppbv	98
32) Cyclohexane	11.02	56	1718m	0.09	ppbv	
33) 1,2-Dichloropropane	11.52	63	713	0.06	ppbv	88
34) Trichloroethene	11.73	95	1245	0.08	ppbv	
35) Bromodichloromethane	11.67	83	1811	0.06	ppbv	
36) 1,4-Dioxane	11.69	88	637	0.09	ppbv	
37) Isooctane	11.75	57	3483	0.08	ppbv	
38) N-Heptane	11.95	43	1456	0.11	ppbv #	84
39) cis-1,3-Dichloropropene	12.49	75	1741	0.08	ppbv #	54
40) 4-Methyl-2-Pentanone (MIBK)	12.49	43	1668m	0.07	ppbv	
41) trans-1,3-Dichloropropene	12.96	75	899	0.04	ppbv #	41
42) 1,1,2-Trichloroethane	13.18	83	289	0.02	ppbv #	31
43) Toluene	13.45	91	2309	0.06	ppbv #	83
44) 2-Hexanone	13.60	43	1893	0.07	ppbv #	96
46) Dibromochloromethane	13.86	129	1049	0.04	ppbv #	49
47) 1,2-Dibromoethane (EDB)	14.12	107	1575	0.06	ppbv #	94
48) Tetrachloroethene	14.56	166	2375	0.11	ppbv	
49) Chlorobenzene	15.21	112	2366	0.07	ppbv	
50) Ethylbenzene	15.57	91	4449	0.08	ppbv	
51) m,p-Xylene	15.73	91	4873	0.18	ppbv	
52) Bromoform	15.87	173	2036	0.08	ppbv	
53) Styrene	16.10	104	3065	0.11	ppbv	

(#) = qualifier out of range (m) = manual integration
 0601006.D 030524AI.M Wed Mar 27 07:41:09 2024

Data File : C:\HPCHEM\1\DATA\030524C\0601006.D
 Acq On : 5 Mar 2024 10:57 am
 Sample : 0.1PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:32 2024

Vial: 6
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 10:38:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	3390m	0.10	ppbv	
55) o-Xylene	16.24	106	1562	0.09	ppbv	90
57) 4-Ethyltoluene	17.60	105	4150	0.08	ppbv	99
58) 1,3,5-Trimethylbenzene	17.69	105	4449	0.10	ppbv	
59) 1,2,4-Trimethylbenzene	18.21	105	3604	0.09	ppbv	
60) 1,3-Dichlorobenzene	18.44	146	1729	0.06	ppbv	
61) Benzyl Chloride	18.40	91	3549	0.09	ppbv	
62) 1,4-Dichlorobenzene	18.51	148	1240	0.06	ppbv	
63) 1,2-Dichlorobenzene	18.97	146	2035	0.07	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	1177	0.05	ppbv	
65) Naphthalene	21.77	128	777	0.04	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	1294	0.10	ppbv	

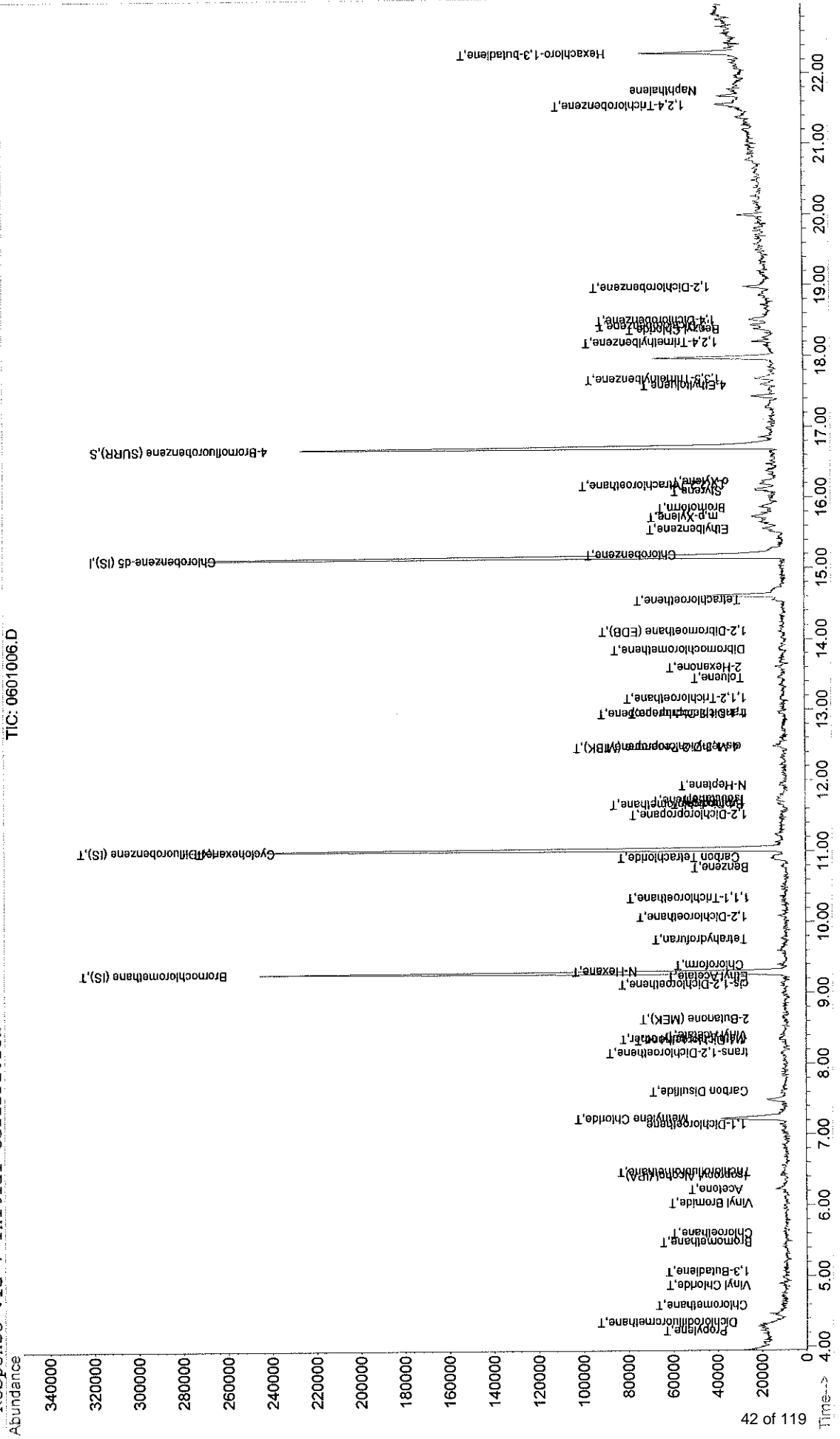
Quantitation Report

Data File : C:\HPCHEM\1\DATA\030524C\0601006.D
 Acq On : 5 Mar 2024 10:57 am
 Sample : 0.1PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:32 2024

Vial: 6
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RIE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\0301003.D
 Acq On : 5 Mar 2024 8:46 am
 Sample : 0.2PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:33 2024

Vial: 3
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 08:47:23 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	72729	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	281907	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	241407	5.00	ppbv	0.01

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.72 95 106016 3.27 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 65.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.25	39	1417m	0.22	ppbv	
3) Dichlorodifluoromethane	4.34	85	10682	0.23	ppbv #	77
4) Chloromethane	4.61	50	2305	0.23	ppbv	
5) Vinyl Chloride	4.89	62	2852	0.26	ppbv	
6) 1,3-Butadiene	5.04	39	1401	0.21	ppbv #	15
7) Bromomethane	5.43	94	3346	0.26	ppbv	
8) Chloroethane	5.60	64	1198	0.28	ppbv #	85
9) Vinyl Bromide	6.02	106	1594	0.12	ppbv #	16
10) Trichlorofluoromethane	6.47	101	9129	0.20	ppbv #	58
11) Acetone	6.22	43	4253	0.16	ppbv	
12) Isopropyl Alcohol (IPA)	6.42	45	5808	0.26	ppbv	
13) 1,1-Dichloroethene	7.12	61	5984	0.26	ppbv #	73
14) Methylene Chloride	7.26	84	2231	0.17	ppbv	
15) Carbon Disulfide	7.60	76	8563	0.23	ppbv #	100
16) trans-1,2-Dichloroethene	8.14	96	4228	0.32	ppbv #	68
17) Methyl-tert-butyl ether	8.35	73	9305	0.22	ppbv #	99
18) 1,1-Dichloroethane	8.34	63	7482	0.33	ppbv	94
19) Vinyl Acetate	8.38	43	11717	0.31	ppbv	98
20) N-Hexane	9.30	57	4582	0.33	ppbv #	71
21) 2-Butanone (MEK)	8.64	43	7745	0.32	ppbv #	96
22) cis-1,2-Dichloroethene	9.13	61	5942	0.31	ppbv	95
23) Ethyl Acetate	9.23	43	6833m	0.25	ppbv	
24) Chloroform	9.39	83	8452	0.22	ppbv #	86
26) Tetrahydrofuran	9.75	42	4531	0.39	ppbv	93
27) 1,2-Dichloroethane	10.08	62	5820	0.23	ppbv	98
28) 1,1,1-Trichloroethane	10.35	97	6627	0.20	ppbv #	89
29) 1,1-Dichloropropene	12.96	75	6299	0.26	ppbv	98
30) Carbon Tetrachloride	10.92	117	6760	0.16	ppbv	98
31) Benzene	10.77	78	6254	0.18	ppbv	
32) Cyclohexane	11.03	56	12808	0.84	ppbv #	41
33) 1,2-Dichloropropane	11.51	63	3081	0.24	ppbv	
34) Trichloroethene	11.71	95	4034	0.21	ppbv #	80
35) Bromodichloromethane	11.68	83	7116	0.21	ppbv	
36) 1,4-Dioxane	11.66	88	1823	0.22	ppbv	
37) Isooctane	11.76	57	14860	0.33	ppbv #	95
38) N-Heptane	11.95	43	4665	0.33	ppbv	
39) cis-1,3-Dichloropropene	12.48	75	5774	0.24	ppbv #	91
40) 4-Methyl-2-Pentanone (MIBK)	12.48	43	6092	0.22	ppbv	
41) trans-1,3-Dichloropropene	12.96	75	6299	0.26	ppbv #	87
42) 1,1,2-Trichloroethane	13.15	83	3348	0.23	ppbv #	82
43) Toluene	13.46	91	10183	0.24	ppbv #	95
44) 2-Hexanone	13.61	43	6558	0.22	ppbv #	89
46) Dibromochloromethane	13.87	129	5820	0.17	ppbv #	93
47) 1,2-Dibromoethane (EDB)	14.13	107	6944	0.20	ppbv #	99
48) Tetrachloroethene	14.56	166	5937	0.23	ppbv	95
49) Chlorobenzene	15.21	112	9884	0.24	ppbv	93
50) Ethylbenzene	15.57	91	14553	0.23	ppbv	
51) m, p-Xylene	15.75	91	15703	0.56	ppbv	
52) Bromoform	15.87	173	3481	0.10	ppbv #	49
53) Styrene	16.11	104	7264	0.20	ppbv	

Data File : C:\HPCHEM\1\DATA\030524C\0301003.D
 Acq On : 5 Mar 2024 8:46 am
 Sample : 0.2PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:33 2024

Vial: 3
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 08:47:23 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.21	83	10868	0.32	ppbv	
55) o-Xylene	16.24	106	5608	0.27	ppbv	87
57) 4-Ethyltoluene	17.60	105	15314	0.27	ppbv	97
58) 1,3,5-Trimethylbenzene	17.69	105	11242	0.21	ppbv	
59) 1,2,4-Trimethylbenzene	18.21	105	8908	0.17	ppbv	
60) 1,3-Dichlorobenzene	18.44	146	7094	0.18	ppbv	
61) Benzyl Chloride	18.39	91	12393	0.27	ppbv	96
62) 1,4-Dichlorobenzene	18.53	148	6822	0.31	ppbv	96
63) 1,2-Dichlorobenzene	18.98	146	5603	0.18	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	5800	0.22	ppbv	
65) Naphthalene	21.77	128	4713	0.17	ppbv #	92
66) Hexachloro-1,3-butadiene	22.30	225	2765	0.17	ppbv	

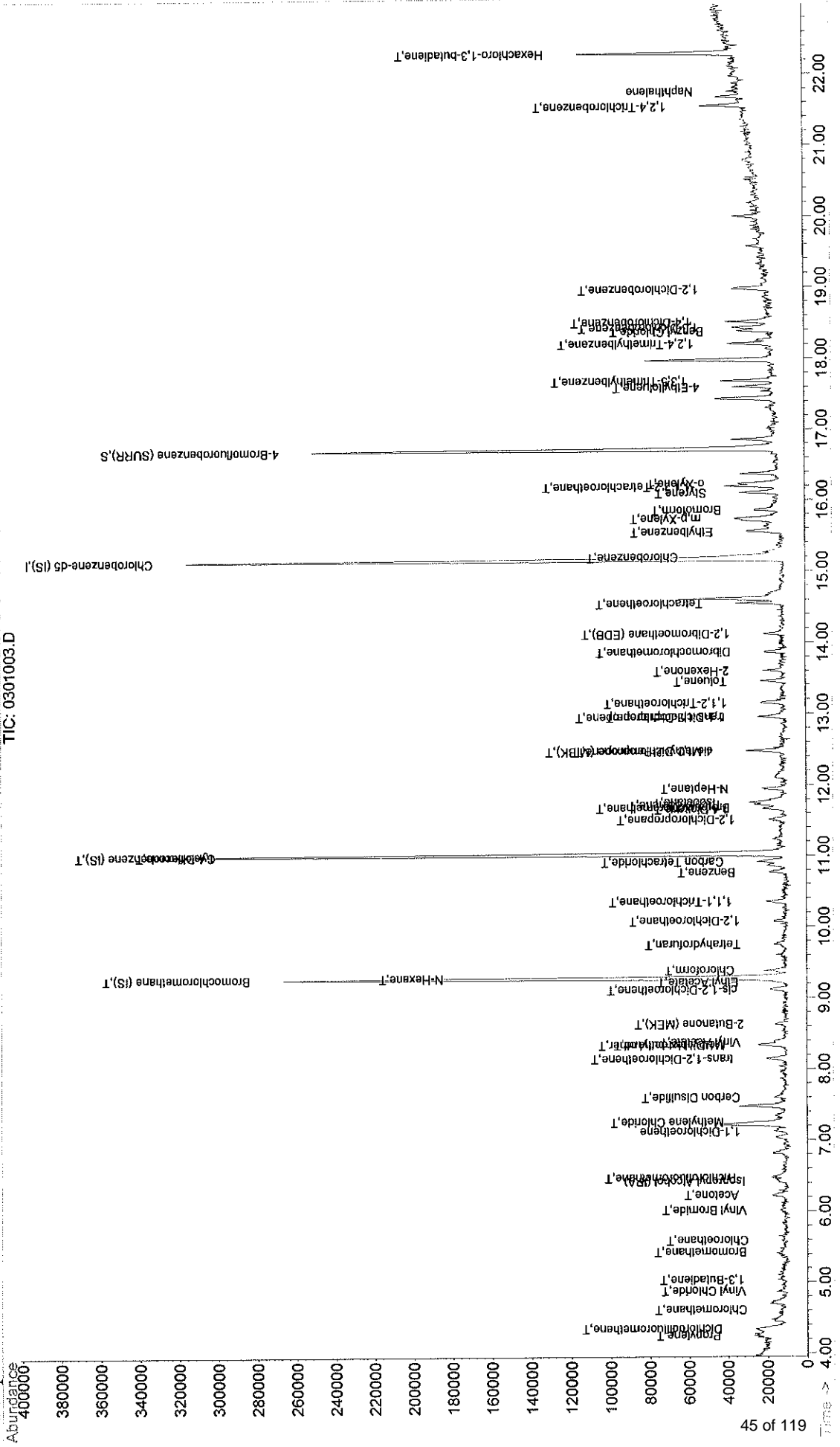
Quantitation Report

Data File : C:\HPCHEM\1\DATA\030524C\0301003.D
 Acq On : 5 Mar 2024 8:46 am
 Sample : 0.2PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:33 2024

Vial: 3
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\030524C\0501005.D
 Acq On : 5 Mar 2024 10:14 am
 Sample : 0.5PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:40 2024

Vial: 5
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 10:13:18 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	59489	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	250304	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	236106	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.72	95	109072	3.54	ppbv	0.00
Spiked Amount	5.000	Range 62 - 145	Recovery	=	70.80%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.24	39	2973	0.57	ppbv	
3) Dichlorodifluoromethane	4.34	85	17896	0.48	ppbv	
4) Chloromethane	4.59	50	4163	0.51	ppbv #	89
5) Vinyl Chloride	4.87	62	5357	0.59	ppbv	
6) 1,3-Butadiene	5.04	39	3307	0.60	ppbv #	70
7) Bromomethane	5.42	94	7140	0.68	ppbv #	12
8) Chloroethane	5.61	64	3540	0.98	ppbv #	84
9) Vinyl Bromide	6.02	106	7206	0.70	ppbv #	78
10) Trichlorofluoromethane	6.49	101	16582	0.46	ppbv #	94
11) Acetone	6.24	43	23487	1.15	ppbv #	97
12) Isopropyl Alcohol (IPA)	6.42	45	12680	0.68	ppbv	94
13) 1,1-Dichloroethene	7.14	61	10688	0.58	ppbv	94
14) Methylene Chloride	7.22	84	26179	2.54	ppbv	93
15) Carbon Disulfide	7.61	76	21010	0.68	ppbv #	100
16) trans-1,2-Dichloroethene	8.15	96	7919	0.70	ppbv	89
17) Methyl-tert-butyl ether	8.35	73	17111	0.52	ppbv #	97
18) 1,1-Dichloroethane	8.33	63	13275	0.68	ppbv	97
19) Vinyl Acetate	8.40	43	22239	0.69	ppbv	98
20) N-Hexane	9.31	57	9503	0.78	ppbv #	88
21) 2-Butanone (MEK)	8.64	43	14435	0.71	ppbv #	98
22) cis-1,2-Dichloroethene	9.13	61	10918	0.68	ppbv	94
23) Ethyl Acetate	9.24	43	18480	0.84	ppbv #	92
24) Chloroform	9.39	83	16464	0.55	ppbv	98
26) Tetrahydrofuran	9.76	42	6643m	0.57	ppbv	
27) 1,2-Dichloroethane	10.09	62	10596	0.47	ppbv #	96
28) 1,1,1-Trichloroethane	10.36	97	14197	0.50	ppbv	94
29) 1,1-Dichloropropene	12.96	75	11314m	0.51	ppbv	
30) Carbon Tetrachloride	10.93	117	14969	0.41	ppbv	92
31) Benzene	10.78	78	20830	0.68	ppbv	98
32) Cyclohexane	11.05	56	15837	0.84	ppbv #	65
33) 1,2-Dichloropropane	11.51	63	7826	0.68	ppbv	98
34) Trichloroethene	11.72	95	9435	0.56	ppbv	94
35) Bromodichloromethane	11.68	83	14648	0.47	ppbv	96
36) 1,4-Dioxane	11.66	88	4091	0.56	ppbv	
37) Isooctane	11.76	57	31703	0.74	ppbv	
38) N-Heptane	11.95	43	9835	0.73	ppbv	98
39) cis-1,3-Dichloropropene	12.48	75	12615	0.59	ppbv	98
40) 4-Methyl-2-Pentanone (MIBK)	12.47	43	12958	0.52	ppbv #	84
41) trans-1,3-Dichloropropene	12.96	75	14748	0.66	ppbv	92
42) 1,1,2-Trichloroethane	13.15	83	8603	0.66	ppbv	95
43) Toluene	13.45	91	22944	0.61	ppbv	98
44) 2-Hexanone	13.60	43	14614	0.55	ppbv #	95
46) Dibromochloromethane	13.87	129	14173	0.42	ppbv	97
47) 1,2-Dibromoethane (EDB)	14.12	107	14827	0.44	ppbv	96
48) Tetrachloroethene	14.55	166	12508	0.48	ppbv	94
49) Chlorobenzene	15.21	112	20818	0.51	ppbv	96
50) Ethylbenzene	15.56	91	35806	0.55	ppbv	97
51) m, p-Xylene	15.72	91	47480	1.60	ppbv	97
52) Bromoform	15.85	173	14765	0.44	ppbv #	93
53) Styrene	16.11	104	17588	0.50	ppbv	97

(#) = qualifier out of range (m) = manual integration
 0501005.D 030524AI.M Wed Mar 27 07:41:35 2024

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\0501005.D
 Acq On : 5 Mar 2024 10:14 am
 Sample : 0.5PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:40 2024

Vial: 5
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 10:13:18 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	31569	0.89	ppbv	99
55) o-Xylene	16.23	106	12562	0.59	ppbv #	91
57) 4-Ethyltoluene	17.60	105	36211	0.62	ppbv	95
58) 1,3,5-Trimethylbenzene	17.68	105	37601	0.72	ppbv	99
59) 1,2,4-Trimethylbenzene	18.21	105	28069	0.58	ppbv	98
60) 1,3-Dichlorobenzene	18.43	146	21137	0.57	ppbv	98
61) Benzyl Chloride	18.39	91	26554	0.57	ppbv	
62) 1,4-Dichlorobenzene	18.52	148	12503	0.53	ppbv	95
63) 1,2-Dichlorobenzene	18.98	146	15074	0.49	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	4882	0.18	ppbv	
65) Naphthalene	21.74	128	4101	0.16	ppbv	
66) Hexachloro-1,3-butadiene	22.29	225	9421	0.61	ppbv	

Quantitation Report

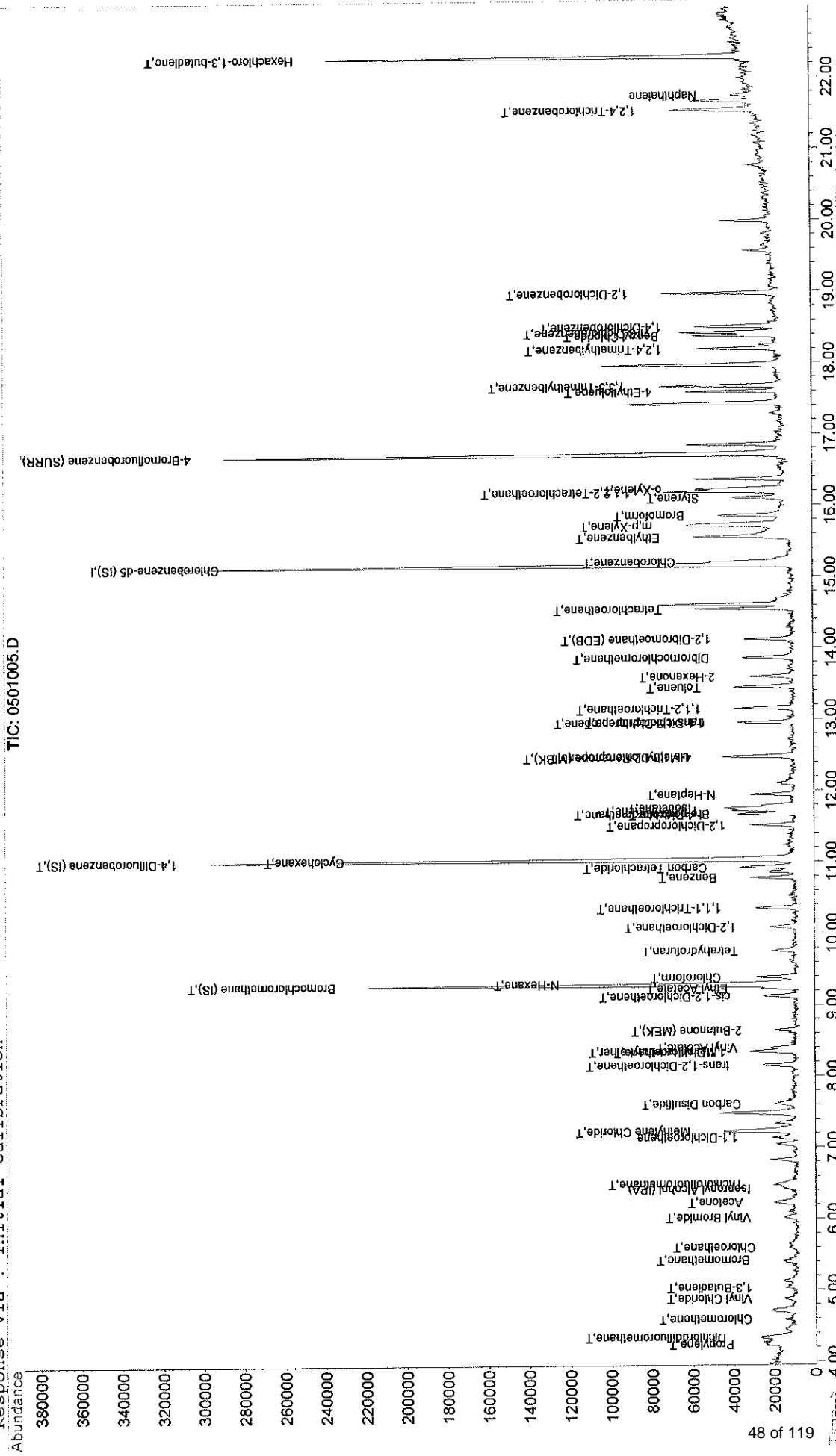
Data File : C:\HPCHEM\1\DATA\030524C\0501005.D
Acq On : 5 Mar 2024 10:14 am
Sample : 0.5PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 5 13:40 2024

Vial: 5
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 0501005.D



Data File : C:\HPCHEM\1\DATA\030524C\0701007.D
 Acq On : 5 Mar 2024 11:40 am
 Sample : 1PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:17 2024

Vial: 7
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 10:38:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	56733	5.00	ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.03	114	205117	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.16	117	170503	5.00	ppbv	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 4-Bromofluorobenzene (SURR)	16.71	95	83531	3.88	ppbv	0.00
Spiked Amount	5.000	Range 62 - 145	Recovery	=	77.60%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.25	39	5079	1.00	ppbv	82
3) Dichlorodifluoromethane	4.34	85	24657	0.69	ppbv	100
4) Chloromethane	4.61	50	9042	1.13	ppbv #	54
5) Vinyl Chloride	4.87	62	9383	1.00	ppbv	
6) 1,3-Butadiene	5.04	39	6127	1.15	ppbv	
7) Bromomethane	5.40	94	11242	1.06	ppbv #	97
8) Chloroethane	5.60	64	4680	1.20	ppbv	
9) Vinyl Bromide	6.03	106	9986	0.97	ppbv	
10) Trichlorofluoromethane	6.48	101	23114	0.69	ppbv #	89
11) Acetone	6.23	43	20598	0.90	ppbv #	96
12) Isopropyl Alcohol (IPA)	6.44	45	14774	0.79	ppbv #	86
13) 1,1-Dichloroethene	7.14	61	16982	0.96	ppbv	
14) Methylene Chloride	7.23	84	15615	1.06	ppbv	
15) Carbon Disulfide	7.61	76	33977	1.10	ppbv #	100
16) trans-1,2-Dichloroethene	8.15	96	10719	0.94	ppbv	98
17) Methyl-tert-butyl ether	8.35	73	26992m	0.86	ppbv	
18) 1,1-Dichloroethane	8.34	63	18690	0.95	ppbv	98
19) Vinyl Acetate	8.40	43	23071	0.72	ppbv	98
20) N-Hexane	9.33	57	10647	0.85	ppbv #	93
21) 2-Butanone (MEK)	8.64	43	19183	0.93	ppbv	96
22) cis-1,2-Dichloroethene	9.13	61	14458	0.89	ppbv	93
23) Ethyl Acetate	9.23	43	19277	0.84	ppbv	97
24) Chloroform	9.39	83	19936	0.70	ppbv #	98
26) Tetrahydrofuran	9.77	42	10023	0.98	ppbv #	89
27) 1,2-Dichloroethane	10.09	62	12999	0.70	ppbv	95
28) 1,1,1-Trichloroethane	10.36	97	15039	0.65	ppbv	89
29) 1,1-Dichloropropene	12.95	75	12358	0.64	ppbv	97
30) Carbon Tetrachloride	10.92	117	16176	0.55	ppbv	97
31) Benzene	10.78	78	22630	0.84	ppbv	98
32) Cyclohexane	11.05	56	8722	0.50	ppbv #	45
33) 1,2-Dichloropropane	11.52	63	9160	0.92	ppbv #	90
34) Trichloroethene	11.73	95	11179	0.79	ppbv	91
35) Bromodichloromethane	11.75	83	1688	0.07	ppbv	91
36) 1,4-Dioxane	11.67	88	5505	0.87	ppbv #	89
37) Isooctane	11.76	57	40010	1.07	ppbv #	69
38) N-Heptane	11.94	43	14803	1.26	ppbv	97
39) cis-1,3-Dichloropropene	12.48	75	15891	0.86	ppbv	93
40) 4-Methyl-2-Pentanone (MIBK)	12.47	43	19967	0.94	ppbv	97
41) trans-1,3-Dichloropropene	12.95	75	16223	0.84	ppbv	
42) 1,1,2-Trichloroethane	13.16	83	10361	0.94	ppbv	
43) Toluene	13.46	91	24266	0.76	ppbv	98
44) 2-Hexanone	13.60	43	16921	0.75	ppbv #	88
46) Dibromochloromethane	13.87	129	18824m	0.77	ppbv	
47) 1,2-Dibromoethane (EDB)	14.12	107	15359	0.63	ppbv	96
48) Tetrachloroethene	14.55	166	16366m	0.86	ppbv	
49) Chlorobenzene	15.21	112	22570	0.75	ppbv	90
50) Ethylbenzene	15.56	91	40599	0.82	ppbv	99
51) m,p-Xylene	15.73	91	45553	1.85	ppbv	96
52) Bromoform	15.86	173	16156	0.67	ppbv #	43
53) Styrene	16.11	104	10896	0.42	ppbv	87

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\0701007.D
 Acq On : 5 Mar 2024 11:40 am
 Sample : 1PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:17 2024

Vial: 7
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 10:38:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	29721	0.98	ppbv #	94
55) o-Xylene	16.23	106	11853	0.73	ppbv	92
57) 4-Ethyltoluene	17.59	105	27686	0.61	ppbv	98
58) 1,3,5-Trimethylbenzene	17.68	105	30392	0.75	ppbv	98
59) 1,2,4-Trimethylbenzene	18.20	105	19263	0.53	ppbv	98
60) 1,3-Dichlorobenzene	18.52	146	7201	0.26	ppbv	95
61) Benzyl Chloride	18.38	91	18070	0.49	ppbv	94
62) 1,4-Dichlorobenzene	18.51	148	4403	0.25	ppbv	97
63) 1,2-Dichlorobenzene	18.98	146	11554	0.45	ppbv	94
64) 1,2,4-Trichlorobenzene	21.55	180	5648	0.28	ppbv	
65) Naphthalene	21.75	128	7483	0.42	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	7968	0.69	ppbv	

Data File : C:\HPCHEM\1\DATA\030524C\0801008.D
 Acq On : 5 Mar 2024 12:23 pm
 Sample : 2PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:22 2024

Vial: 8
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 13:19:54 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	54830	5.00	ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.04	114	217009	5.00	ppbv	0.03
45) Chlorobenzene-d5 (IS)	15.17	117	146860	5.00	ppbv	0.01

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.72	95	78868	4.51	ppbv	0.01
Spiked Amount	5.000	Range 62 - 145	Recovery	=	90.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.24	39	10022	2.06	ppbv	
3) Dichlorodifluoromethane	4.34	85	56861	1.71	ppbv	98
4) Chloromethane	4.60	50	18074	2.29	ppbv	
5) Vinyl Chloride	4.87	62	20805	2.25	ppbv	
6) 1,3-Butadiene	5.06	39	10618	2.01	ppbv	93
7) Bromomethane	5.41	94	26492	2.56	ppbv #	13
8) Chloroethane	5.61	64	11368	2.83	ppbv	
9) Vinyl Bromide	6.02	106	8262	0.82	ppbv #	1
10) Trichlorofluoromethane	6.49	101	64213	2.08	ppbv	
11) Acetone	6.23	43	41196	1.88	ppbv	93
12) Isopropyl Alcohol (IPA)	6.43	45	37708	2.11	ppbv #	80
13) 1,1-Dichloroethene	7.14	61	31491	1.86	ppbv	
14) Methylene Chloride	7.23	84	34335	2.29	ppbv	
15) Carbon Disulfide	7.62	76	63896	2.09	ppbv	
16) trans-1,2-Dichloroethene	8.16	96	24121	2.18	ppbv	96
17) Methyl-tert-butyl ether	8.36	73	53834	1.84	ppbv	93
18) 1,1-Dichloroethane	8.34	63	47131	2.42	ppbv	98
19) Vinyl Acetate	8.41	43	71135	2.32	ppbv	99
20) N-Hexane	9.32	57	28458	2.38	ppbv	100
21) 2-Butanone (MEK)	8.65	43	50386	2.53	ppbv	98
22) cis-1,2-Dichloroethene	9.13	61	33997	2.19	ppbv	90
23) Ethyl Acetate	9.24	43	49573	2.25	ppbv	96
24) Chloroform	9.40	83	53159	2.05	ppbv	95
26) Tetrahydrofuran	9.77	42	26696	2.40	ppbv	95
27) 1,2-Dichloroethane	10.09	62	31741	1.72	ppbv	96
28) 1,1,1-Trichloroethane	10.36	97	41069	1.77	ppbv	97
29) 1,1-Dichloropropene	12.96	75	34234	1.77	ppbv	99
30) Carbon Tetrachloride	10.94	117	46274	1.63	ppbv	99
31) Benzene	10.78	78	51239m	1.86	ppbv	
32) Cyclohexane	11.06	56	37989	2.10	ppbv #	92
33) 1,2-Dichloropropane	11.52	63	22910	2.15	ppbv #	94
34) Trichloroethene	11.73	95	28113	1.92	ppbv	96
35) Bromodichloromethane	11.68	83	42818	1.79	ppbv	96
36) 1,4-Dioxane	11.67	88	11759	1.79	ppbv	
37) Isooctane	11.76	57	84931	2.07	ppbv	
38) N-Heptane	11.96	43	28590	2.17	ppbv	
39) cis-1,3-Dichloropropene	12.49	75	40353	2.09	ppbv	99
40) 4-Methyl-2-Pentanone (MIBK)	12.48	43	44189	1.98	ppbv	
41) trans-1,3-Dichloropropene	12.96	75	34234	1.73	ppbv	96
42) 1,1,2-Trichloroethane	13.16	83	23885	2.08	ppbv	99
43) Toluene	13.46	91	65061	1.98	ppbv	98
44) 2-Hexanone	13.60	43	45842	1.98	ppbv	97
46) Dibromochloromethane	13.87	129	38364	1.92	ppbv	92
47) 1,2-Dibromoethane (EDB)	14.12	107	42173	2.19	ppbv	99
48) Tetrachloroethene	14.56	166	30127m	1.94	ppbv	
49) Chlorobenzene	15.22	112	56062	2.32	ppbv	98
50) Ethylbenzene	15.56	91	82155	2.04	ppbv	
51) m,p-Xylene	15.74	91	90065	4.35	ppbv	
52) Bromoform	15.86	173	33710	1.78	ppbv	
53) Styrene	16.12	104	35217	1.76	ppbv	

(#) = qualifier out of range (m) = manual integration
 0801008.D 030524AI.M Wed Mar 27 07:41:45 2024

Data File : C:\HPCHEM\1\DATA\030524C\0801008.D
 Acq On : 5 Mar 2024 12:23 pm
 Sample : 2PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:22 2024

Vial: 8
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 13:19:54 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	49649	1.96	ppbv	
55) o-Xylene	16.24	106	27445	2.07	ppbv	
57) 4-Ethyltoluene	17.60	105	73534	2.05	ppbv	99
58) 1,3,5-Trimethylbenzene	17.69	105	72128	2.21	ppbv	98
59) 1,2,4-Trimethylbenzene	18.21	105	52398	1.83	ppbv	96
60) 1,3-Dichlorobenzene	18.43	146	37763	1.83	ppbv	
61) Benzyl Chloride	18.39	91	52556	1.89	ppbv	99
62) 1,4-Dichlorobenzene	18.51	148	20510	1.50	ppbv	
63) 1,2-Dichlorobenzene	18.98	146	34344	1.86	ppbv	99
64) 1,2,4-Trichlorobenzene	21.56	180	11318	0.82	ppbv	
65) Naphthalene	21.76	128	7470	0.55	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	26511	2.88	ppbv #	88

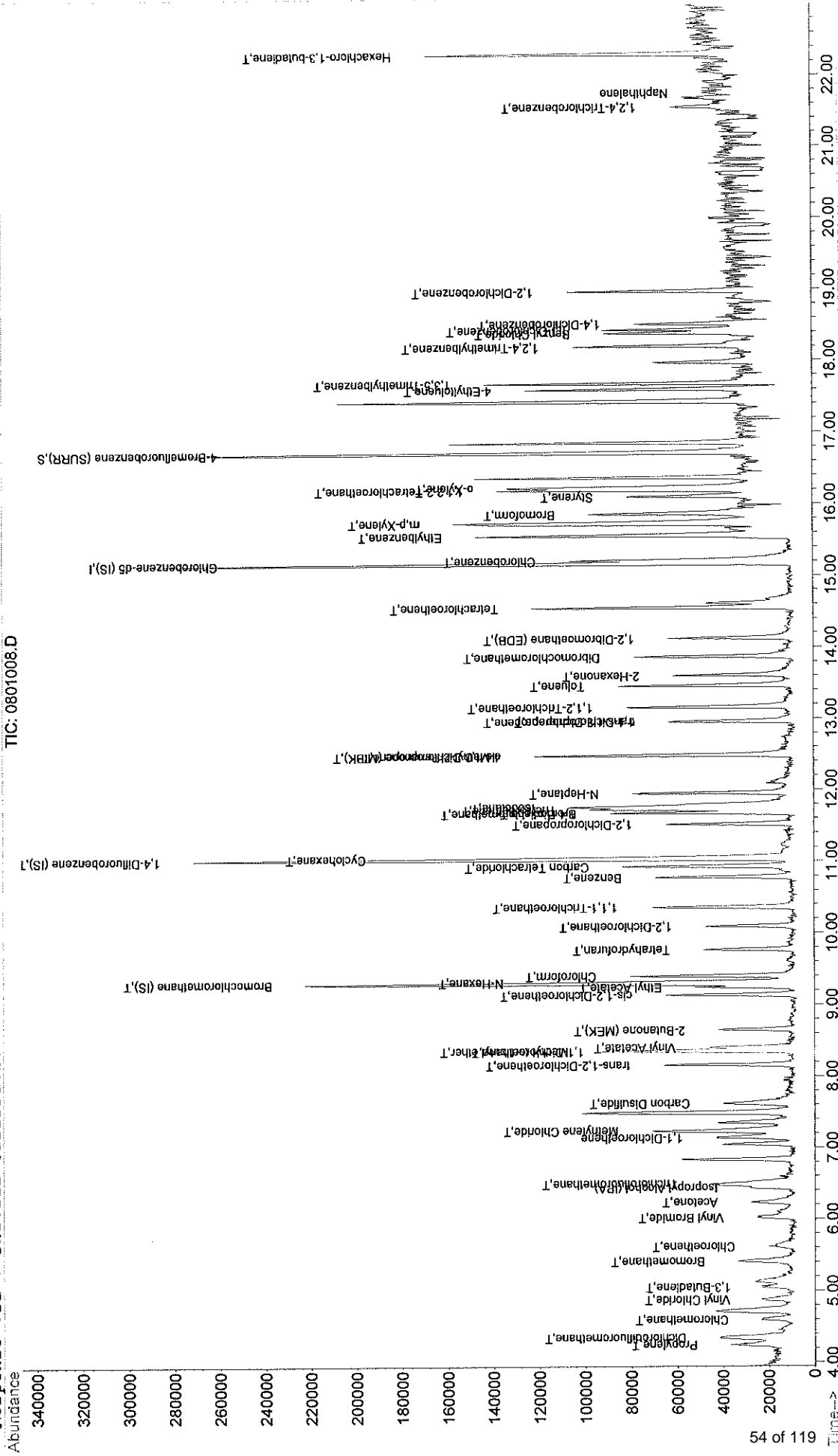
Quantitation Report

Data File : C:\HPCHEM\1\DATA\030524C\0801008.D
 Acq On : 5 Mar 2024 12:23 pm
 Sample : 2PPBV
 Misc : IO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 13:22 2024

Vial: 8
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524\0901009.D
 Acq On : 5 Mar 2024 1:04 pm
 Sample : 5PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 14:13 2024

Vial: 9
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 13:27:01 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.30	128	57346	5.00	ppbv	0.03
25) 1,4-Difluorobenzene (IS)	11.04	114	219922	5.00	ppbv	0.03
45) Chlorobenzene-d5 (IS)	15.18	117	155079	5.00	ppbv	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 4-Bromofluorobenzene (SURR)	16.72	95	102194	5.60	ppbv	0.01
Spiked Amount	5.000	Range 62 - 145	Recovery	=	112.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.24	39	22842	4.46	ppbv	
3) Dichlorodifluoromethane	4.35	85	126698	3.82	ppbv	
4) Chloromethane	4.61	50	46956	5.44	ppbv	
5) Vinyl Chloride	4.88	62	49679	5.19	ppbv	96
6) 1,3-Butadiene	5.06	39	30147	5.18	ppbv	90
7) Bromomethane	5.42	94	56037	5.39	ppbv	99
8) Chloroethane	5.61	64	25951	5.77	ppbv	97
9) Vinyl Bromide	6.04	106	47532	5.35	ppbv	93
10) Trichlorofluoromethane	6.49	101	117080	4.16	ppbv	97
11) Acetone	6.24	43	78459	2.80	ppbv	99
12) Isopropyl Alcohol (IPA)	6.45	45	76656	4.25	ppbv #	92
13) 1,1-Dichloroethene	7.15	61	81303	4.96	ppbv	99
14) Methylene Chloride	7.24	84	83454m	2.22	ppbv	
15) Carbon Disulfide	7.62	76	162136	5.08	ppbv #	100
16) trans-1,2-Dichloroethene	8.16	96	54695	4.63	ppbv	95
17) Methyl-tert-butyl ether	8.36	73	114806	4.06	ppbv #	98
18) 1,1-Dichloroethane	8.35	63	95625	4.61	ppbv	100
19) Vinyl Acetate	8.41	43	150139	4.64	ppbv	98
20) N-Hexane	9.33	57	64348	4.92	ppbv	96
21) 2-Butanone (MEK)	8.65	43	102297	4.59	ppbv	98
22) cis-1,2-Dichloroethene	9.14	61	73480	4.47	ppbv	96
23) Ethyl Acetate	9.25	43	114672	4.84	ppbv	99
24) Chloroform	9.40	83	116141	4.43	ppbv	97
26) Tetrahydrofuran	9.78	42	56279	4.86	ppbv	99
27) 1,2-Dichloroethane	10.10	62	70665	4.00	ppbv	99
28) 1,1,1-Trichloroethane	10.37	97	92471	4.43	ppbv	97
29) 1,1-Dichloropropene	12.97	75	77157	4.28	ppbv	98
30) Carbon Tetrachloride	10.93	117	98390	3.94	ppbv	98
31) Benzene	10.80	78	133709	5.10	ppbv	98
32) Cyclohexane	11.07	56	78537	2.86	ppbv	98
33) 1,2-Dichloropropane	11.53	63	52622	4.94	ppbv	99
34) Trichloroethene	11.73	95	64470	4.78	ppbv	98
35) Bromodichloromethane	11.68	83	93618	4.26	ppbv	97
36) 1,4-Dioxane	11.67	88	33586	5.05	ppbv	91
37) Isooctane	11.77	57	210694	4.93	ppbv	96
38) N-Heptane	11.96	43	77041	5.27	ppbv	94
39) cis-1,3-Dichloropropene	12.50	75	89094	4.61	ppbv	96
40) 4-Methyl-2-Pentanone (MIBK)	12.49	43	114849	5.16	ppbv	99
41) trans-1,3-Dichloropropene	12.97	75	77157	4.03	ppbv	98
42) 1,1,2-Trichloroethane	13.17	83	53443	4.85	ppbv	96
43) Toluene	13.47	91	150495	4.73	ppbv	99
44) 2-Hexanone	13.61	43	105255	4.64	ppbv	95
46) Dibromochloromethane	13.88	129	100630	5.33	ppbv	100
47) 1,2-Dibromoethane (EDB)	14.13	107	97958	5.05	ppbv #	99
48) Tetrachloroethene	14.56	166	78117	5.05	ppbv	93
49) Chlorobenzene	15.22	112	126291	5.07	ppbv	97
50) Ethylbenzene	15.57	91	210057	5.03	ppbv	95
51) m,p-Xylene	15.74	91	297673m	12.78	ppbv	
52) Bromoform	15.87	173	91966	4.93	ppbv #	100
53) Styrene	16.12	104	86427	4.10	ppbv	97

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\0901009.D
 Acq On : 5 Mar 2024 1:04 pm
 Sample : 5PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 14:13 2024

Vial: 9
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

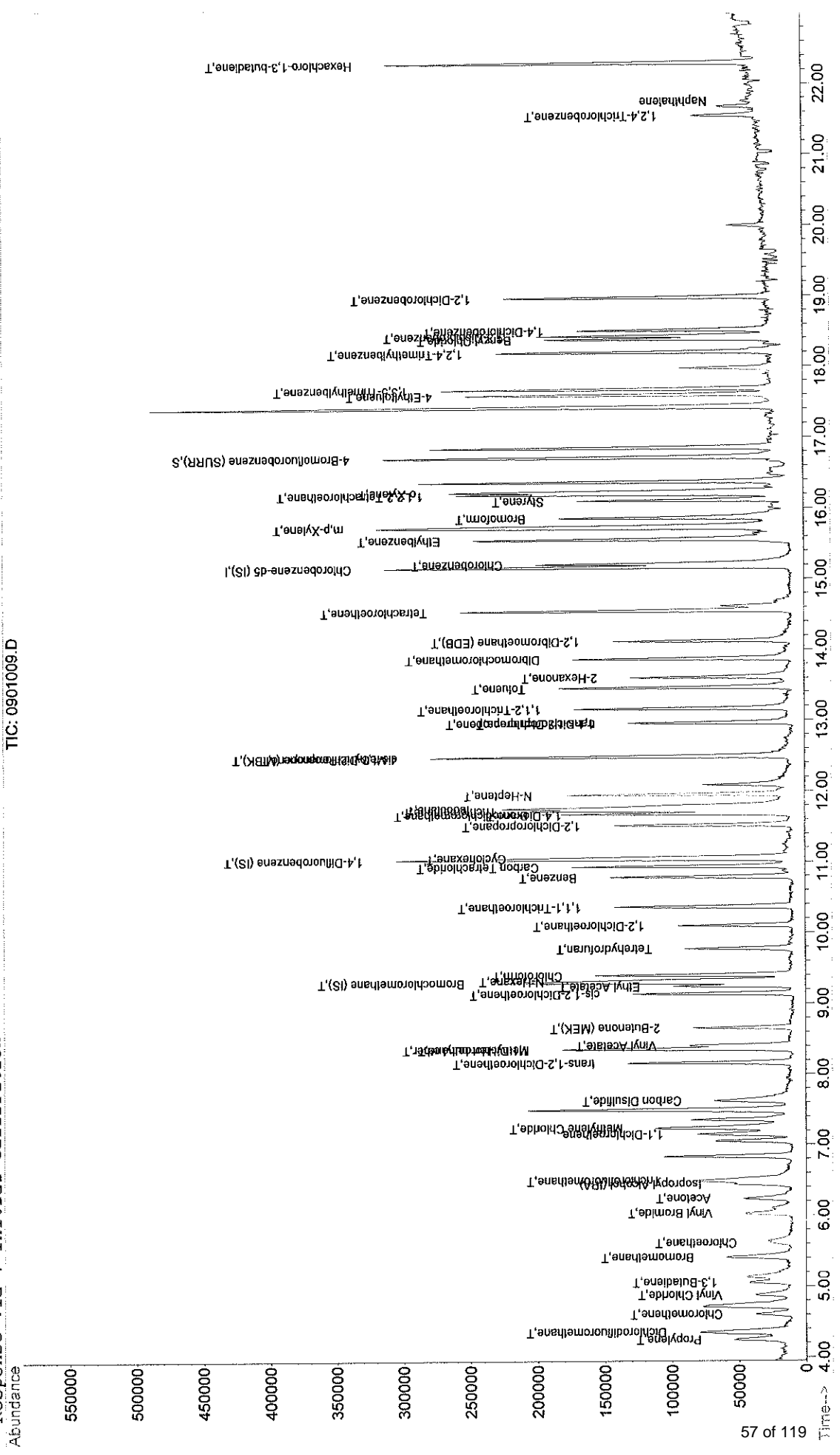
Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 13:27:01 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.20	83	145113	5.11	ppbv	99
55) o-Xylene	16.24	106	75782	5.24	ppbv	97
57) 4-Ethyltoluene	17.61	105	180816	4.64	ppbv	98
58) 1,3,5-Trimethylbenzene	17.69	105	155806	4.28	ppbv	99
59) 1,2,4-Trimethylbenzene	18.21	105	134548	4.57	ppbv	96
60) 1,3-Dichlorobenzene	18.44	146	80039	3.72	ppbv	95
61) Benzyl Chloride	18.40	91	140037	4.74	ppbv	97
62) 1,4-Dichlorobenzene	18.52	148	43336	3.08	ppbv	99
63) 1,2-Dichlorobenzene	18.98	146	86916	4.55	ppbv	97
64) 1,2,4-Trichlorobenzene	21.56	180	24778	2.03	ppbv	
65) Naphthalene	21.76	128	16455	1.52	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	55357	5.30	ppbv	94

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030524\0901009.D
Acq On : 5 Mar 2024 1:04 pm
Sample : 5PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 5 14:13 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\030524C\1001010.D
 Acq On : 5 Mar 2024 1:49 pm
 Sample : 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 14:15 2024

Vial: 10
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 14:15:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.27	128	59863	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	240918	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.17	117	209607	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.71	95	134580	5.58	ppbv	0.00
Spiked Amount	5.000	Range	62 - 145	Recovery	=	111.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.24	39	69203	12.78	ppbv	94
3) Dichlorodifluoromethane	4.34	85	339283	11.69	ppbv	99
4) Chloromethane	4.59	50	137329	13.44	ppbv	98
5) Vinyl Chloride	4.86	62	137292	10.43	ppbv	97
6) 1,3-Butadiene	5.04	39	80093	12.53	ppbv	90
7) Bromomethane	5.41	94	144458	12.62	ppbv	99
8) Chloroethane	5.60	64	71663	13.90	ppbv	98
9) Vinyl Bromide	6.01	106	125879	13.65	ppbv	95
10) Trichlorofluoromethane	6.47	101	292638	10.25	ppbv	96
11) Acetone	6.22	43	208291	7.19	ppbv	99
12) Isopropyl Alcohol (IPA)	6.42	45	206829	10.75	ppbv	99
13) 1,1-Dichloroethene	7.12	61	219116	10.59	ppbv	99
14) Methylene Chloride	7.22	84	149224	7.54	ppbv	95
15) Carbon Disulfide	7.60	76	438827	12.67	ppbv #	100
16) trans-1,2-Dichloroethene	8.14	96	143159	11.16	ppbv	96
17) Methyl-tert-butyl ether	8.34	73	327387	11.10	ppbv	100
18) 1,1-Dichloroethane	8.33	63	257783	11.39	ppbv	98
19) Vinyl Acetate	8.39	43	426540	11.91	ppbv	98
20) N-Hexane	9.30	57	177130	12.21	ppbv	94
21) 2-Butanone (MEK)	8.63	43	289137	11.81	ppbv	98
22) cis-1,2-Dichloroethene	9.12	61	194483	11.02	ppbv	99
23) Ethyl Acetate	9.22	43	318883	12.22	ppbv	99
24) Chloroform	9.38	83	299129	10.87	ppbv	98
26) Tetrahydrofuran	9.75	42	154439	11.55	ppbv	97
27) 1,2-Dichloroethane	10.08	62	190025	10.15	ppbv	98
28) 1,1,1-Trichloroethane	10.35	97	260798	11.64	ppbv	97
29) 1,1-Dichloropropene	12.95	75	227015	11.54	ppbv	99
30) Carbon Tetrachloride	10.92	117	277670	10.68	ppbv	99
31) Benzene	10.77	78	365994	12.54	ppbv	98
32) Cyclohexane	11.05	56	202184	8.82	ppbv	95
33) 1,2-Dichloropropane	11.50	63	145281	12.09	ppbv	99
34) Trichloroethene	11.72	95	168368	10.71	ppbv	99
35) Bromodichloromethane	11.67	83	278425	12.16	ppbv	99
36) 1,4-Dioxane	11.65	88	92349	12.13	ppbv	97
37) Isooctane	11.75	57	589680	11.92	ppbv #	94
38) N-Heptane	11.94	43	225927	13.13	ppbv	99
39) cis-1,3-Dichloropropene	12.48	75	242060	11.24	ppbv	98
40) 4-Methyl-2-Pentanone (MIBK)	12.47	43	335065	13.44	ppbv	99
41) trans-1,3-Dichloropropene	12.95	75	227015	10.87	ppbv	99
42) 1,1,2-Trichloroethane	13.14	83	138239	11.26	ppbv	99
43) Toluene	13.45	91	435795	12.24	ppbv	100
44) 2-Hexanone	13.59	43	306830	12.18	ppbv	99
46) Dibromochloromethane	13.86	129	287384	11.49	ppbv	98
47) 1,2-Dibromoethane (EDB)	14.12	107	272869	10.56	ppbv	98
48) Tetrachloroethene	14.55	166	204465	8.99	ppbv	97
49) Chlorobenzene	15.21	112	328704	9.56	ppbv	99
50) Ethylbenzene	15.55	91	599035	10.59	ppbv	99
51) m,p-Xylene	15.73	91	833441	24.81	ppbv	98
52) Bromoform	15.86	173	273722	11.33	ppbv #	98
53) Styrene	16.11	104	286378	10.40	ppbv	98

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\1001010.D Vial: 10
 Acq On : 5 Mar 2024 1:49 pm Operator: TJG
 Sample : 10PPBV Inst : GC/MS Ins
 Misc : TO-15 ANALYSIS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Mar 5 14:15 2024 Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 14:15:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	385142	9.70	ppbv	99
55) o-Xylene	16.23	106	200379	10.24	ppbv	96
57) 4-Ethyltoluene	17.59	105	556388	10.68	ppbv	98
58) 1,3,5-Trimethylbenzene	17.68	105	445645	9.11	ppbv	99
59) 1,2,4-Trimethylbenzene	18.20	105	424899	10.90	ppbv	99
60) 1,3-Dichlorobenzene	18.43	146	275665	10.66	ppbv	99
61) Benzyl Chloride	18.38	91	426629	10.64	ppbv	99
62) 1,4-Dichlorobenzene	18.51	148	152685	9.09	ppbv	94
63) 1,2-Dichlorobenzene	18.98	146	275695	11.09	ppbv	97
64) 1,2,4-Trichlorobenzene	21.55	180	83949	19.31	ppbv	99
65) Naphthalene	21.75	128	57168	12.48	ppbv	96
66) Hexachloro-1,3-butadiene	22.29	225	142033	9.87	ppbv	98

Quantitation Report

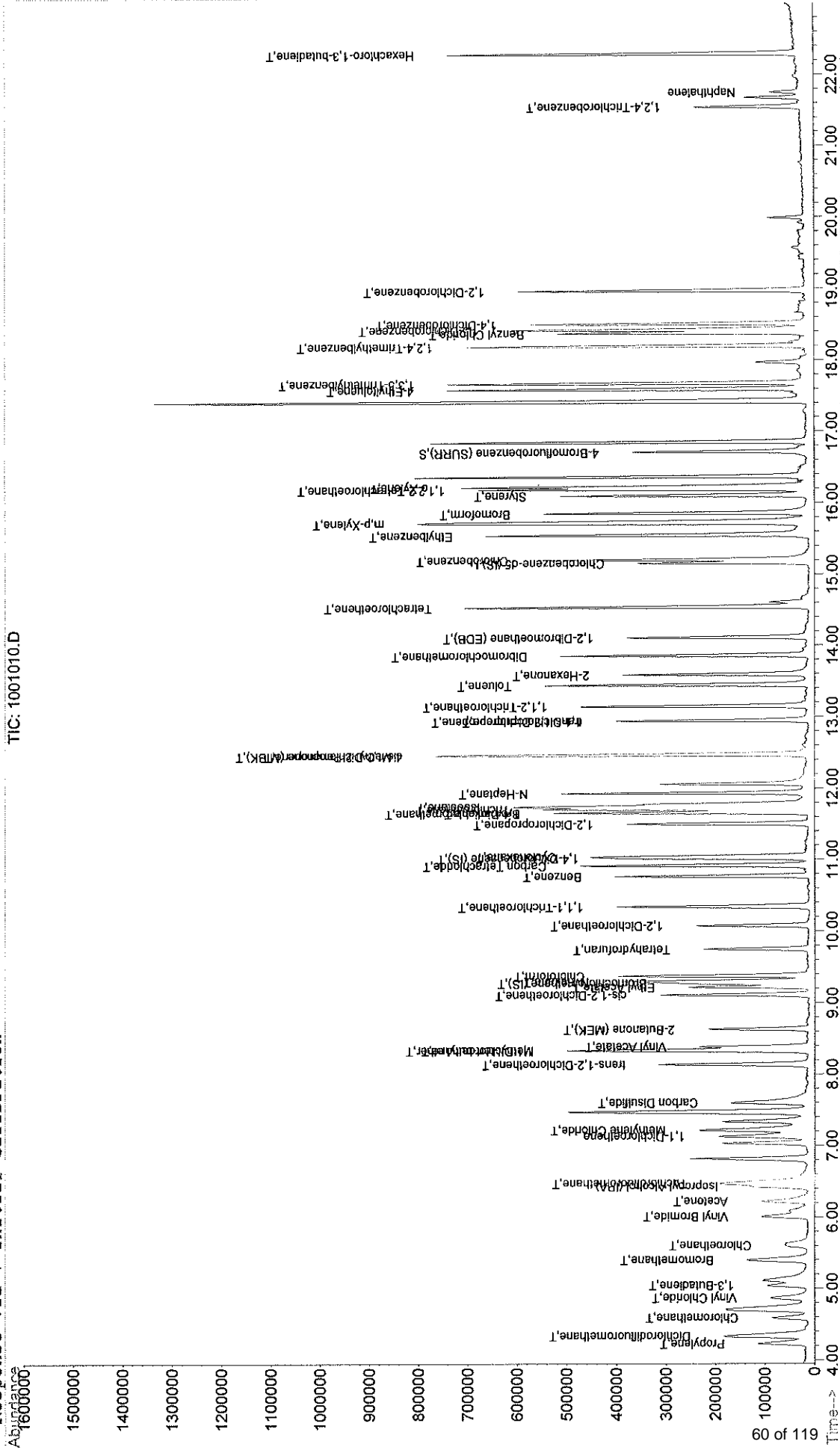
Data File : C:\HPCHEM\1\DATA\030524C\1001010.D
Acq On : 5 Mar 2024 1:49 pm
Sample : 10PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 5 14:15 2024

Vial: 10
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 1001010.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\1101011.D
 Acq On : 5 Mar 2024 2:38 pm
 Sample : 20PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 18:00 2024

Vial: 11
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 14:15:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.26	128	66720	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	277320	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.16	117	224518	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.71	95	141719	5.48	ppbv	0.00
Spiked Amount	5.000	Range 62 - 145	Recovery	=	109.60%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.23	39	145048	24.03	ppbv	98
3) Dichlorodifluoromethane	4.33	85	693092	21.43	ppbv	99
4) Chloromethane	4.58	50	271546	23.84	ppbv	
5) Vinyl Chloride	4.86	62	282676	19.27	ppbv	99
6) 1,3-Butadiene	5.03	39	155779	21.87	ppbv	
7) Bromomethane	5.39	94	294063	23.05	ppbv	97
8) Chloroethane	5.60	64	158463	27.58	ppbv	98
9) Vinyl Bromide	6.00	106	229765	22.36	ppbv	
10) Trichlorofluoromethane	6.47	101	649420	20.41	ppbv	97
11) Acetone	6.21	43	492364	15.24	ppbv	
12) Isopropyl Alcohol (IPA)	6.41	45	478311	22.30	ppbv	97
13) 1,1-Dichloroethene	7.12	61	473794	20.55	ppbv	99
14) Methylene Chloride	7.21	84	306386	13.89	ppbv	95
15) Carbon Disulfide	7.60	76	911514	23.61	ppbv #	100
16) trans-1,2-Dichloroethene	8.13	96	288337	20.16	ppbv	99
17) Methyl-tert-butyl ether	8.33	73	703151	21.38	ppbv #	99
18) 1,1-Dichloroethane	8.32	63	537757	21.32	ppbv	99
19) Vinyl Acetate	8.38	43	939105	23.52	ppbv	99
20) N-Hexane	9.30	57	367409m	22.72	ppbv	
21) 2-Butanone (MEK)	8.63	43	617571	22.64	ppbv	98
22) cis-1,2-Dichloroethene	9.11	61	415735	21.14	ppbv	99
23) Ethyl Acetate	9.21	43	706521	24.29	ppbv	99
24) Chloroform	9.37	83	629219	20.52	ppbv	100
26) Tetrahydrofuran	9.74	42	342821	22.28	ppbv	99
27) 1,2-Dichloroethane	10.07	62	393898	18.29	ppbv	97
28) 1,1,1-Trichloroethane	10.34	97	558888	21.67	ppbv	99
29) 1,1-Dichloropropene	12.94	75	477644	21.09	ppbv	99
30) Carbon Tetrachloride	10.91	117	621850	20.79	ppbv	98
31) Benzene	10.76	78	804131	23.93	ppbv	99
32) Cyclohexane	11.04	56	447110	16.94	ppbv	98
33) 1,2-Dichloropropane	11.50	63	319386	23.08	ppbv	99
34) Trichloroethene	11.71	95	368535	20.37	ppbv	98
35) Bromodichloromethane	11.66	83	620171	23.52	ppbv	99
36) 1,4-Dioxane	11.65	88	196814	22.45	ppbv	97
37) Isooctane	11.74	57	1303846	22.90	ppbv	98
38) N-Heptane	11.93	43	487288	24.59	ppbv	96
39) cis-1,3-Dichloropropene	12.47	75	501097	20.21	ppbv	97
40) 4-Methyl-2-Pentanone (MIBK)	12.46	43	723445	25.20	ppbv	99
41) trans-1,3-Dichloropropene	12.94	75	477644	19.86	ppbv	97
42) 1,1,2-Trichloroethane	13.14	83	307450	21.75	ppbv	97
43) Toluene	13.44	91	915363	22.33	ppbv	98
44) 2-Hexanone	13.59	43	727968	25.10	ppbv	96
46) Dibromochloromethane	13.86	129	637064	23.78	ppbv	99
47) 1,2-Dibromoethane (EDB)	14.11	107	586097	21.18	ppbv #	98
48) Tetrachloroethene	14.54	166	431780	17.73	ppbv	97
49) Chlorobenzene	15.20	112	676878	18.37	ppbv	99
50) Ethylbenzene	15.55	91	1236532	20.40	ppbv	98
51) m,p-Xylene	15.72	91	1819189	50.55	ppbv	99
52) Bromoform	15.85	173	601031	23.22	ppbv #	99
53) Styrene	16.10	104	629068	21.32	ppbv	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\1101011.D
 Acq On : 5 Mar 2024 2:38 pm
 Sample : 20PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 5 18:00 2024

Vial: 11
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Tue Mar 05 14:15:37 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	810233	19.05	ppbv	100
55) o-Xylene	16.23	106	438547	20.92	ppbv	97
57) 4-Ethyltoluene	17.59	105	1249137	22.38	ppbv	98
58) 1,3,5-Trimethylbenzene	17.68	105	975668	18.62	ppbv	100
59) 1,2,4-Trimethylbenzene	18.20	105	940350	22.53	ppbv	97
60) 1,3-Dichlorobenzene	18.42	146	591293	21.35	ppbv	99
61) Benzyl Chloride	18.38	91	988079	23.01	ppbv	100
62) 1,4-Dichlorobenzene	18.51	148	362273	20.13	ppbv	95
63) 1,2-Dichlorobenzene	18.97	146	595333	22.35	ppbv	99
64) 1,2,4-Trichlorobenzene	21.54	180	113026	24.28	ppbv	
65) Naphthalene	21.74	128	112939	23.01	ppbv	
66) Hexachloro-1,3-butadiene	22.29	225	289432	18.78	ppbv	98

Quantitation Report

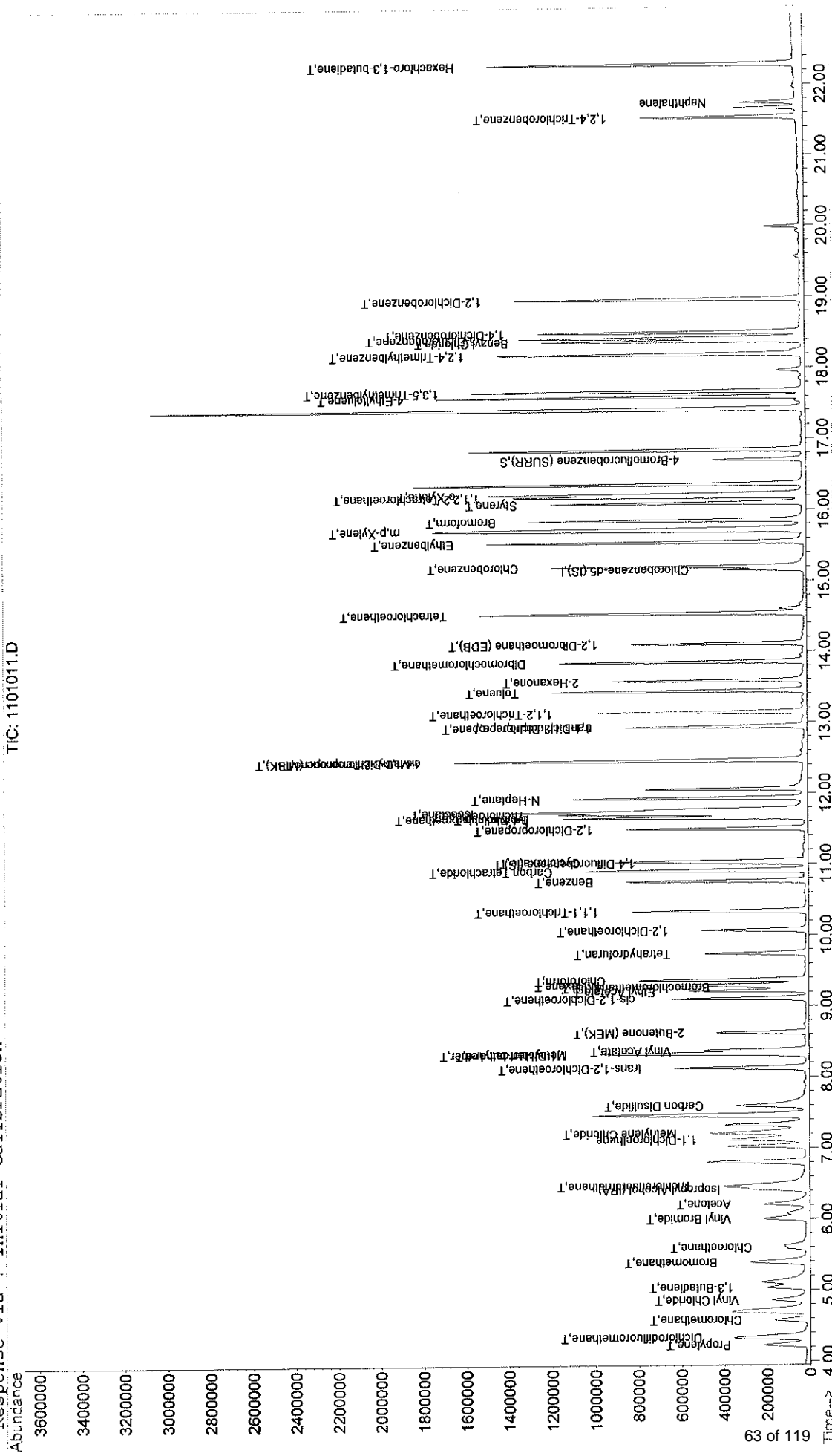
Data File : C:\HPCHEM\1\DATA\030524\1101011.D
Acq On : 5 Mar 2024 2:38 pm
Sample : 20PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 5 18:00 2024

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 1101011.D



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\030524C\1201012.D
 Acq On : 5 Mar 2024 3:22 pm
 Sample : 10PPBV ICAL VER.
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p

Vial: 12
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 T	Bromochloromethane (IS)	1.000	1.000	0.0	123	0.00
2 T	Propylene	0.540	0.578	-7.0	127	0.00
3 T	Dichlorodifluoromethane	2.656	2.733	-2.9	123	0.00
4 T	Chloromethane	1.169	1.163	0.5	129	0.00
5 T	Vinyl Chloride	1.109	1.088	1.9	121	0.00
6 T	1,3-Butadiene	0.550	0.626	-13.8	119	0.00
7 T	Bromomethane	1.066	1.163	-9.1	123	0.00
8 T	Chloroethane	0.582	0.593	-1.9	126	0.00
9 T	Vinyl Bromide	0.974	1.041	-6.9	126	0.00
10 T	Trichlorofluoromethane	2.351	2.553	-8.6	133	0.00
11 T	Acetone	1.545	1.651	-6.9	121	0.00
12	Isopropyl Alcohol (IPA)	1.554	1.578	-1.5	116	0.00
13	1,1-Dichloroethene	1.742	1.783	-2.4	124	0.00
14 T	Methylene Chloride	1.020	1.057	-3.6	124	0.01
15 T	Carbon Disulfide	3.208	3.518	-9.7	122	0.00
16 T	trans-1,2-Dichloroethene	1.163	1.157	0.5	123	0.00
17 T	Methyl-tert-butyl ether	2.535	2.624	-3.5	122	0.00
18 T	1,1-Dichloroethane	1.978	2.065	-4.4	122	0.00
19 T	Vinyl Acetate	2.823	2.911	-3.1	104	0.00
20 T	N-Hexane	1.184	1.315	-11.1	133	0.00
21 T	2-Butanone (MEK)	2.289	2.475	-8.1	130	0.00
22 T	cis-1,2-Dichloroethene	1.801	1.637	9.1	111	0.00
23 T	Ethyl Acetate	1.788	1.941	-8.6	119	0.00
24 T	Chloroform	1.998	2.329	-16.6	137	0.00
25 T	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	132	0.00
26 T	Tetrahydrofuran	0.310	0.318	-2.6	131	0.00
27 T	1,2-Dichloroethane	0.362	0.366	-1.1	122	0.00
28 T	1,1,1-Trichloroethane	0.437	0.490	-12.1	155	0.00
29 T	1,1-Dichloropropene	0.414	0.418	-1.0	142	0.00
30 T	Carbon Tetrachloride	0.535	0.530	0.9	121	0.00
31 T	Benzene	0.592	0.627	-5.9	130	0.00
32 T	Cyclohexane	0.407	0.394	3.2	124	0.00
33 T	1,2-Dichloropropane	0.307	0.290	5.5	127	0.00
34 T	Trichloroethene	0.323	0.323	0.0	122	0.00
35 T	Bromodichloromethane	0.515	0.517	-0.4	118	0.00
36 T	1,4-Dioxane	0.153	0.174	-13.7	147	0.00
37 T	Isooctane	1.171	1.148	2.0	124	0.00
38 T	N-Heptane	0.384	0.396	-3.1	139	0.00
39 T	cis-1,3-Dichloropropene	0.452	0.455	-0.7	120	0.00
40 T	4-Methyl-2-Pentanone (MIBK)	0.530	0.570	-7.5	148	0.00
41 T	trans-1,3-Dichloropropene	0.527	0.501	4.9	140	0.00
42 T	1,1,2-Trichloroethane	0.261	0.273	-4.6	126	0.00
43 T	Toluene	0.768	0.784	-2.1	124	0.00
44 T	2-Hexanone	0.489	0.527	-7.8	148	0.00
45 I	Chlorobenzene-d5 (IS)	1.000	1.000	0.0	118	0.00
46 T	Dibromochloromethane	0.552	0.541	2.0	115	0.00
47 T	1,2-Dibromoethane (EDB)	0.665	0.644	3.2	117	0.00
48 T	Tetrachloroethene	0.530	0.482	9.1	117	0.00
49 T	Chlorobenzene	0.780	0.828	-6.2	125	0.00
50 T	Ethylbenzene	1.370	1.455	-6.2	121	0.00
51 T	m,p-Xylene	0.917	1.041	-13.5	124	0.00
52 T	Bromoform	0.610	0.652	-6.9	118	0.00
53 T	Styrene	0.719	0.707	1.7	123	0.00
54 T	1,1,2,2-Tetrachloroethane	0.946	0.911	3.7	117	0.00
55 T	o-Xylene	0.510	0.468	8.2	116	0.00
56 S	4-Bromofluorobenzene (SURR)	0.559	0.540	3.4	117	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\030524C\1201012.D Vial: 12
 Acq On : 5 Mar 2024 3:22 pm Operator: TJJ
 Sample : 10PPBV ICAL VER. Inst : GC/MS Ins
 Misc : TO-15 ANALYSIS Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
57 T	4-Ethyltoluene	1.288	1.321	-2.6	118	0.00
58 T	1,3,5-Trimethylbenzene	1.030	1.038	-0.8	116	0.00
59 T	1,2,4-Trimethylbenzene	1.050	1.023	2.6	120	0.00
60 T	1,3-Dichlorobenzene	0.646	0.657	-1.7	118	0.00
61 T	Benzyl Chloride	0.878	0.902	-2.7	112	0.00
62 T	1,4-Dichlorobenzene	0.310	0.297	4.2	120	0.02
63 T	1,2-Dichlorobenzene	0.553	0.574	-3.8	122	0.00
64 T	1,2,4-Trichlorobenzene	0.093	0.099	-6.5	120	0.00
65	Naphthalene	0.112	0.122	-8.9	106	0.00
66 T	Hexachloro-1,3-butadiene	0.351	0.334	4.8	117	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\1201012.D
 Acq On : 5 Mar 2024 3:22 pm
 Sample : 10PPBV ICAL VER.
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 27 7:42 2024

Vial: 12
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	76080	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	317696	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.17	117	248358	5.00	ppbv	0.00

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.71 95 134049 4.83 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 96.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.23	39	87974	10.71	ppbv	96
3) Dichlorodifluoromethane	4.34	85	415855	10.29	ppbv	100
4) Chloromethane	4.59	50	177036	9.95	ppbv	98
5) Vinyl Chloride	4.86	62	165603	9.82	ppbv	98
6) 1,3-Butadiene	5.04	39	95184	11.38	ppbv	98
7) Bromomethane	5.40	94	176980	10.91	ppbv	98
8) Chloroethane	5.60	64	90303	10.20	ppbv	97
9) Vinyl Bromide	6.01	106	158414	10.68	ppbv	98
10) Trichlorofluoromethane	6.48	101	388511	10.86	ppbv	95
11) Acetone	6.22	43	251172	10.69	ppbv	
12) Isopropyl Alcohol (IPA)	6.43	45	240151	10.15	ppbv	
13) 1,1-Dichloroethene	7.12	61	271234	10.23	ppbv	98
14) Methylene Chloride	7.23	84	160849	10.36	ppbv	
15) Carbon Disulfide	7.60	76	535368	10.97	ppbv #	100
16) trans-1,2-Dichloroethene	8.14	96	176020	9.95	ppbv	99
17) Methyl-tert-butyl ether	8.34	73	399216	10.35	ppbv #	99
18) 1,1-Dichloroethane	8.33	63	314220	10.44	ppbv	100
19) Vinyl Acetate	8.39	43	442978	10.31	ppbv	
20) N-Hexane	9.31	57	200092	11.10	ppbv	
21) 2-Butanone (MEK)	8.63	43	376599	10.81	ppbv	98
22) cis-1,2-Dichloroethene	9.12	61	249013	9.09	ppbv	97
23) Ethyl Acetate	9.22	43	295340m	10.86	ppbv	
24) Chloroform	9.38	83	354345	11.65	ppbv	100
26) Tetrahydrofuran	9.76	42	202020	10.25	ppbv	98
27) 1,2-Dichloroethane	10.08	62	232281	10.10	ppbv	97
28) 1,1,1-Trichloroethane	10.35	97	311424	11.21	ppbv	99
29) 1,1-Dichloropropene	12.95	75	265508	10.10	ppbv	100
30) Carbon Tetrachloride	10.92	117	337002	9.92	ppbv	100
31) Benzene	10.77	78	398278m	10.60	ppbv	
32) Cyclohexane	11.05	56	250309	9.69	ppbv	98
33) 1,2-Dichloropropane	11.50	63	184499	9.47	ppbv	99
34) Trichloroethene	11.72	95	205046	9.98	ppbv	98
35) Bromodichloromethane	11.67	83	328718	10.04	ppbv	98
36) 1,4-Dioxane	11.66	88	110476	11.35	ppbv	99
37) Isooctane	11.75	57	729518	9.80	ppbv #	96
38) N-Heptane	11.94	43	251654	10.32	ppbv	
39) cis-1,3-Dichloropropene	12.48	75	289396	10.07	ppbv	97
40) 4-Methyl-2-Pentanone (MIBK)	12.47	43	361963	10.76	ppbv	
41) trans-1,3-Dichloropropene	12.95	75	318076	9.50	ppbv	
42) 1,1,2-Trichloroethane	13.15	83	173753	10.47	ppbv	99
43) Toluene	13.45	91	498062	10.20	ppbv	98
44) 2-Hexanone	13.60	43	334630	10.77	ppbv	
46) Dibromochloromethane	13.86	129	268705	9.80	ppbv	
47) 1,2-Dibromoethane (EDB)	14.12	107	319641	9.67	ppbv	100
48) Tetrachloroethene	14.55	166	239431	9.09	ppbv	98
49) Chlorobenzene	15.21	112	411151	10.62	ppbv	99
50) Ethylbenzene	15.56	91	722612	10.62	ppbv	98
51) m,p-Xylene	15.73	91	1034618	22.73	ppbv	100
52) Bromoform	15.86	173	323992	10.70	ppbv #	98
53) Styrene	16.10	104	351331	9.84	ppbv	99

(#) = qualifier out of range (m) = manual integration
 1201012.D 030524AI.M Wed Mar 27 07:42:30 2024

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030524C\1201012.D
 Acq On : 5 Mar 2024 3:22 pm
 Sample : 10PPBV ICAL VER.
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 27 7:42 2024

Vial: 12
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	452290	9.63	ppbv	99
55) o-Xylene	16.23	106	232423	9.18	ppbv	94
57) 4-Ethyltoluene	17.60	105	656067	10.26	ppbv	97
58) 1,3,5-Trimethylbenzene	17.68	105	515831	10.08	ppbv	99
59) 1,2,4-Trimethylbenzene	18.20	105	508156	9.75	ppbv	97
60) 1,3-Dichlorobenzene	18.43	146	326173	10.17	ppbv	99
61) Benzyl Chloride	18.39	91	447818	10.27	ppbv	
62) 1,4-Dichlorobenzene	18.52	148	147537	9.58	ppbv	
63) 1,2-Dichlorobenzene	18.97	146	285155	10.38	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	49019	10.58	ppbv	
65) Naphthalene	21.75	128	60710	10.87	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	165833	9.52	ppbv	99

Quantitation Report

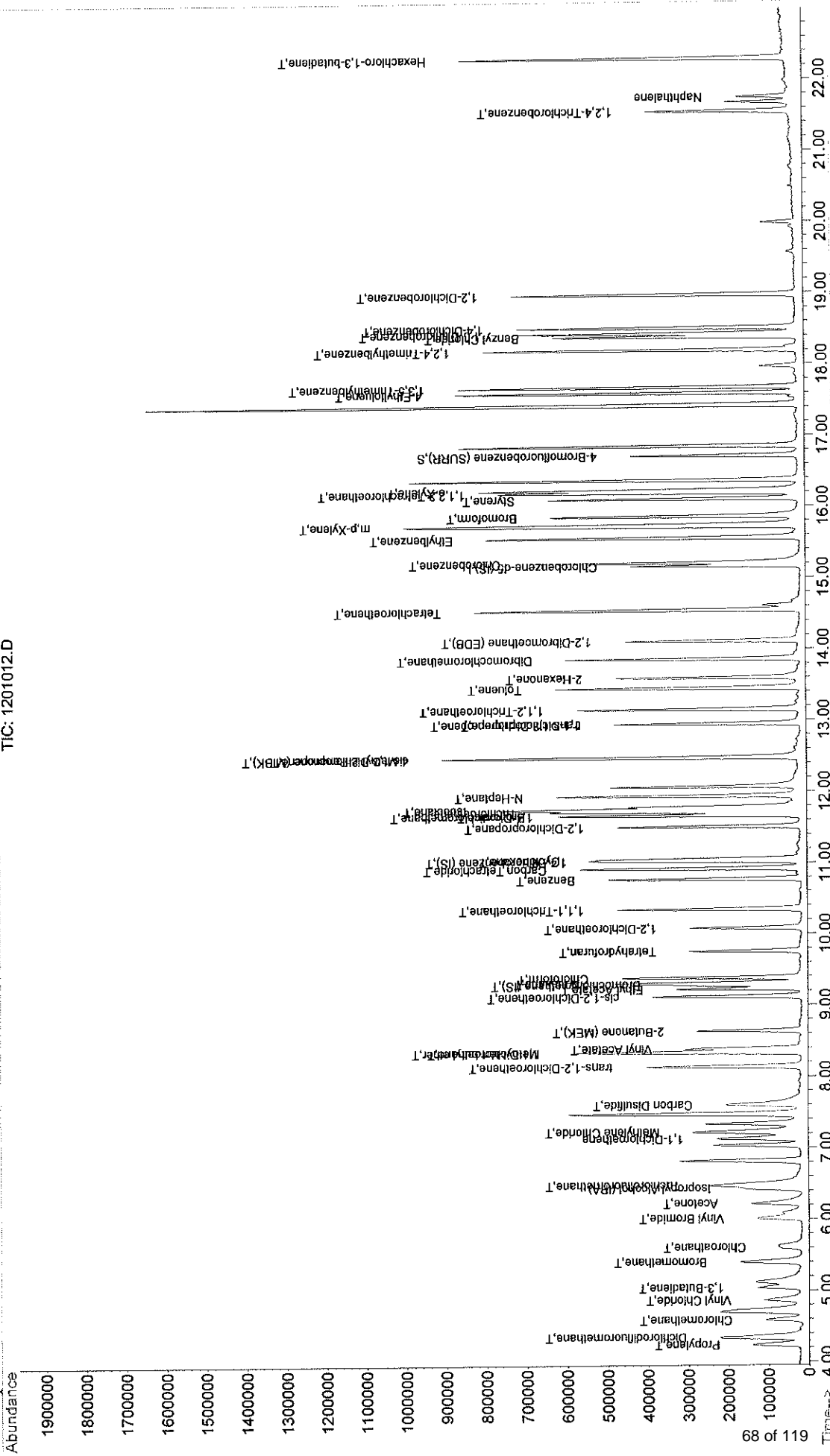
Data File : C:\HPCHEM\1\DATA\030524AI\1201012.D
 Acq On : 5 Mar 2024 3:22 pm
 Sample : 10PPBV ICAL VER.
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 27 7:42 2024

Vial: 12
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration

TIC: 1201012.D





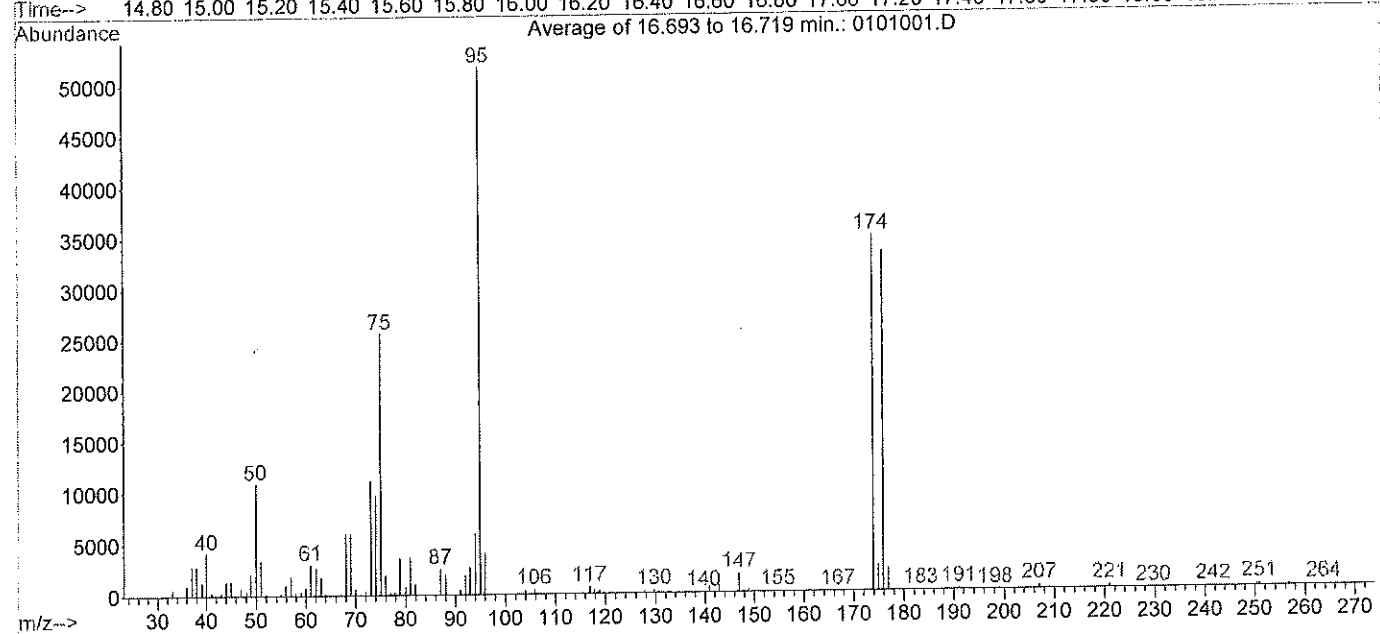
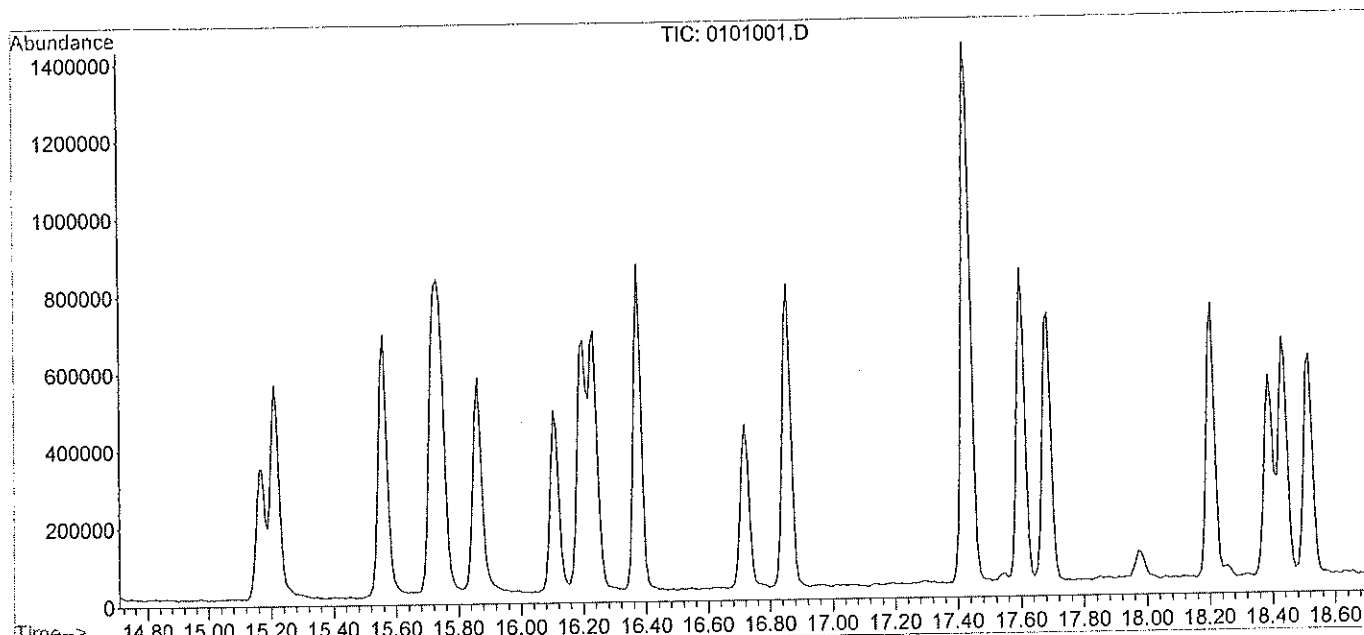
TO-15 VOC
Continuing Calibration Data

- Tune Data
- Continuing Calibration Verification Summary
- Continuing Calibration Verification (CCV) Quant Report
- Internal Standard Area Summary

BFB

Data File : C:\HPCHEM\1\DATA\030624\0101001.D
Acq On : 6 Mar 2024 2:51 pm
Sample : BFB/CCV 10PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION

Vial: 1
Operator: TJJ
Inst : GC/MS Ins
Multiplr: 1.00



Spectrum Information: Average of 16.693 to 16.719 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	10880	PASS
75	95	30	60	49.6	25612	PASS
95	95	100	100	100.0	51671	PASS
96	95	2	9	7.8	4052	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	67.4	34845	PASS
175	174	5	9	7.1	2475	PASS
176	174	95	101	95.5	33261	PASS
177	176	5	9	6.6	2183	PASS

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\030624\0101001.D
 Acq On : 6 Mar 2024 2:51 pm
 Sample : BFB/CCV 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p

Vial: 1
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 T Bromochloromethane (IS)	1.000	1.000	0.0	110	0.00
2 T Propylene	0.540	0.520	3.7	101	0.00
3 T Dichlorodifluoromethane	2.656	2.553	3.9	102	0.00
4 T Chloromethane	1.169	1.077	7.9	106	0.01
5 T Vinyl Chloride	1.109	1.073	3.2	106	0.00
6 T 1,3-Butadiene	0.550	0.564	-2.5	95	0.01
7 T Bromomethane	1.066	1.067	-0.1	100	0.00
8 T Chloroethane	0.582	0.537	7.7	101	0.00
9 T Vinyl Bromide	0.974	1.023	-5.0	110	0.00
10 T Trichlorofluoromethane	2.351	2.205	6.2	102	0.00
11 T Acetone	1.545	1.437	7.0	93	0.00
12 Isopropyl Alcohol (IPA)	1.554	1.478	4.9	97	0.00
13 1,1-Dichloroethene	1.742	1.561	10.4	96	0.00
14 T Methylene Chloride	1.020	1.068	-4.7	112	0.00
15 T Carbon Disulfide	3.208	3.219	-0.3	99	0.00
16 T trans-1,2-Dichloroethene	1.163	1.230	-5.8	116	0.00
17 T Methyl-tert-butyl ether	2.535	2.620	-3.4	108	0.00
18 T 1,1-Dichloroethane	1.978	1.864	5.8	98	0.00
19 T Vinyl Acetate	2.823	2.827	-0.1	90	0.00
20 T N-Hexane	1.184	1.262	-6.6	114	0.00
21 T 2-Butanone (MEK)	2.289	2.132	6.9	100	0.00
22 T cis-1,2-Dichloroethene	1.801	1.843	-2.3	111	0.00
23 T Ethyl Acetate	1.788	1.796	-0.4	97	0.00
24 T Chloroform	1.998	2.146	-7.4	112	0.00
25 T 1,4-Difluorobenzene (IS)	1.000	1.000	0.0	102	0.00
26 T Tetrahydrofuran	0.310	0.310	0.0	99	0.00
27 T 1,2-Dichloroethane	0.362	0.354	2.2	92	0.00
28 T 1,1,1-Trichloroethane	0.437	0.412	5.7	101	0.00
29 T 1,1-Dichloropropene	0.414	0.413	0.2	109	0.00
30 T Carbon Tetrachloride	0.535	0.532	0.6	94	0.00
31 T Benzene	0.592	0.561	5.2	90	0.00
32 T Cyclohexane	0.407	0.395	2.9	96	0.00
33 T 1,2-Dichloropropane	0.307	0.301	2.0	102	0.00
34 T Trichloroethene	0.323	0.338	-4.6	99	0.00
35 T Bromodichloromethane	0.515	0.512	0.6	91	0.00
36 T 1,4-Dioxane	0.153	0.149	2.6	97	0.00
37 T Isooctane	1.171	1.132	3.3	95	0.00
38 T N-Heptane	0.384	0.415	-8.1	113	0.00
39 T cis-1,3-Dichloropropene	0.452	0.472	-4.4	96	0.00
40 T 4-Methyl-2-Pentanone (MIBK)	0.530	0.578	-9.1	117	0.00
41 T trans-1,3-Dichloropropene	0.527	0.509	3.4	111	0.00
42 T 1,1,2-Trichloroethane	0.261	0.280	-7.3	100	0.00
43 T Toluene	0.768	0.753	2.0	93	0.00
44 T 2-Hexanone	0.489	0.475	2.9	103	0.00
45 I Chlorobenzene-d5 (IS)	1.000	1.000	0.0	101	0.01
46 T Dibromochloromethane	0.552	0.532	3.6	97	0.00
47 T 1,2-Dibromoethane (EDB)	0.665	0.644	3.2	100	0.01
48 T Tetrachloroethene	0.530	0.507	4.3	105	0.00
49 T Chlorobenzene	0.780	0.813	-4.2	105	0.00
50 T Ethylbenzene	1.370	1.387	-1.2	98	0.00
51 T m,p-Xylene	0.917	0.956	-4.3	97	0.00
52 T Bromoform	0.610	0.644	-5.6	100	0.00
53 T Styrene	0.719	0.695	3.3	103	0.00
54 T 1,1,2,2-Tetrachloroethane	0.946	0.925	2.2	102	0.00
55 T o-Xylene	0.510	0.499	2.2	106	0.00
56 S 4-Bromofluorobenzene (SURRE)	0.559	0.573	-2.5	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\030624\0101001.D
 Acq On : 6 Mar 2024 2:51 pm
 Sample : BFB/CCV 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p

Vial: 1
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
57 T	4-Ethyltoluene	1.288	1.246	3.3	95	0.00
58 T	1,3,5-Trimethylbenzene	1.030	1.096	-6.4	104	0.02
59 T	1,2,4-Trimethylbenzene	1.050	1.081	-3.0	108	0.00
60 T	1,3-Dichlorobenzene	0.646	0.693	-7.3	107	0.02
61 T	Benzyl Chloride	0.878	0.826	5.9	87	0.00
62 T	1,4-Dichlorobenzene	0.310	0.326	-5.2	113	0.02
63 T	1,2-Dichlorobenzene	0.553	0.588	-6.3	107	0.00
64 T	1,2,4-Trichlorobenzene	0.093	0.092	1.1	95	0.00
65	Naphthalene	0.112	0.105	6.3	78	0.02
66 T	Hexachloro-1,3-butadiene	0.351	0.356	-1.4	106	0.00

Data File : C:\HPCHEM\1\DATA\030624\0101001.D
 Acq On : 6 Mar 2024 2:51 pm
 Sample : BFB/CCV 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:39 2024

Vial: 1
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	67553	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	246481	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.17	117	211951	5.00	ppbv	0.01

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.72 95 121410 5.12 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 102.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.23	39	70224	9.63	ppbv	91
3) Dichlorodifluoromethane	4.34	85	344922	9.61	ppbv	99
4) Chloromethane	4.60	50	145494	9.21	ppbv	97
5) Vinyl Chloride	4.87	62	144965	9.68	ppbv	95
6) 1,3-Butadiene	5.05	39	76180	10.26	ppbv	93
7) Bromomethane	5.40	94	144110	10.00	ppbv	98
8) Chloroethane	5.60	64	72522	9.23	ppbv	95
9) Vinyl Bromide	6.01	106	138226	10.50	ppbv	97
10) Trichlorofluoromethane	6.47	101	297924	9.38	ppbv	99
11) Acetone	6.22	43	194134	9.30	ppbv	98
12) Isopropyl Alcohol (IPA)	6.42	45	199665	9.51	ppbv	99
13) 1,1-Dichloroethene	7.13	61	210908	8.96	ppbv	96
14) Methylene Chloride	7.21	84	144327	10.47	ppbv	94
15) Carbon Disulfide	7.60	76	434932	10.03	ppbv #	100
16) trans-1,2-Dichloroethene	8.14	96	166177	10.58	ppbv	
17) Methyl-tert-butyl ether	8.34	73	353985	10.34	ppbv	
18) 1,1-Dichloroethane	8.33	63	251797	9.42	ppbv	100
19) Vinyl Acetate	8.39	43	381953	10.02	ppbv	98
20) N-Hexane	9.31	57	170543	10.66	ppbv	98
21) 2-Butanone (MEK)	8.63	43	288060	9.31	ppbv	
22) cis-1,2-Dichloroethene	9.11	61	249052	10.24	ppbv	
23) Ethyl Acetate	9.22	43	242627	10.04	ppbv	
24) Chloroform	9.38	83	289922	10.74	ppbv	100
26) Tetrahydrofuran	9.75	42	152661	9.98	ppbv	
27) 1,2-Dichloroethane	10.08	62	174411	9.77	ppbv	98
28) 1,1,1-Trichloroethane	10.34	97	203205	9.43	ppbv	
29) 1,1-Dichloropropene	12.95	75	203684	9.99	ppbv	98
30) Carbon Tetrachloride	10.92	117	262055	9.94	ppbv	98
31) Benzene	10.77	78	276643	9.49	ppbv	
32) Cyclohexane	11.05	56	194508	9.70	ppbv	95
33) 1,2-Dichloropropane	11.51	63	148562	9.83	ppbv	
34) Trichloroethene	11.71	95	166394	10.44	ppbv	99
35) Bromodichloromethane	11.66	83	252363	9.94	ppbv	99
36) 1,4-Dioxane	11.66	88	73267	9.70	ppbv	
37) Isooctane	11.76	57	558218	9.67	ppbv	99
38) N-Heptane	11.94	43	204499	10.81	ppbv	98
39) cis-1,3-Dichloropropene	12.48	75	232775	10.44	ppbv	95
40) 4-Methyl-2-Pentanone (MIBK)	12.47	43	284772	10.91	ppbv	96
41) trans-1,3-Dichloropropene	12.95	75	251142	9.67	ppbv	
42) 1,1,2-Trichloroethane	13.15	83	137903	10.71	ppbv	99
43) Toluene	13.45	91	371158	9.80	ppbv	
44) 2-Hexanone	13.60	43	233938	9.70	ppbv	
46) Dibromochloromethane	13.87	129	225383	9.63	ppbv	
47) 1,2-Dibromoethane (EDB)	14.12	107	273104	9.68	ppbv	
48) Tetrachloroethene	14.55	166	215035	9.56	ppbv	94
49) Chlorobenzene	15.21	112	344697	10.43	ppbv	97
50) Ethylbenzene	15.56	91	587910	10.12	ppbv	96
51) m,p-Xylene	15.73	91	810677m	20.87	ppbv	
52) Bromoform	15.86	173	273180	10.57	ppbv #	100
53) Styrene	16.10	104	294541	9.67	ppbv	

(#) = qualifier out of range (m) = manual integration
 0101001.D 030524AI.M Mon Mar 11 15:39:32 2024

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\0101001.D
 Acq On : 6 Mar 2024 2:51 pm
 Sample : BFB/CCV 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:39 2024

Vial: 1
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.20	83	392156	9.78	ppbv	98
55) o-Xylene	16.23	106	211622	9.80	ppbv	97
57) 4-Ethyltoluene	17.60	105	528268	9.68	ppbv	
58) 1,3,5-Trimethylbenzene	17.69	105	464392	10.64	ppbv	99
59) 1,2,4-Trimethylbenzene	18.21	105	458164	10.30	ppbv	99
60) 1,3-Dichlorobenzene	18.44	146	293672	10.72	ppbv	99
61) Benzyl Chloride	18.39	91	350337	9.42	ppbv	
62) 1,4-Dichlorobenzene	18.52	148	138122	10.51	ppbv	
63) 1,2-Dichlorobenzene	18.97	146	249334	10.63	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	38848	9.82	ppbv	
65) Naphthalene	21.76	128	44471	9.33	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	151035	10.16	ppbv	97

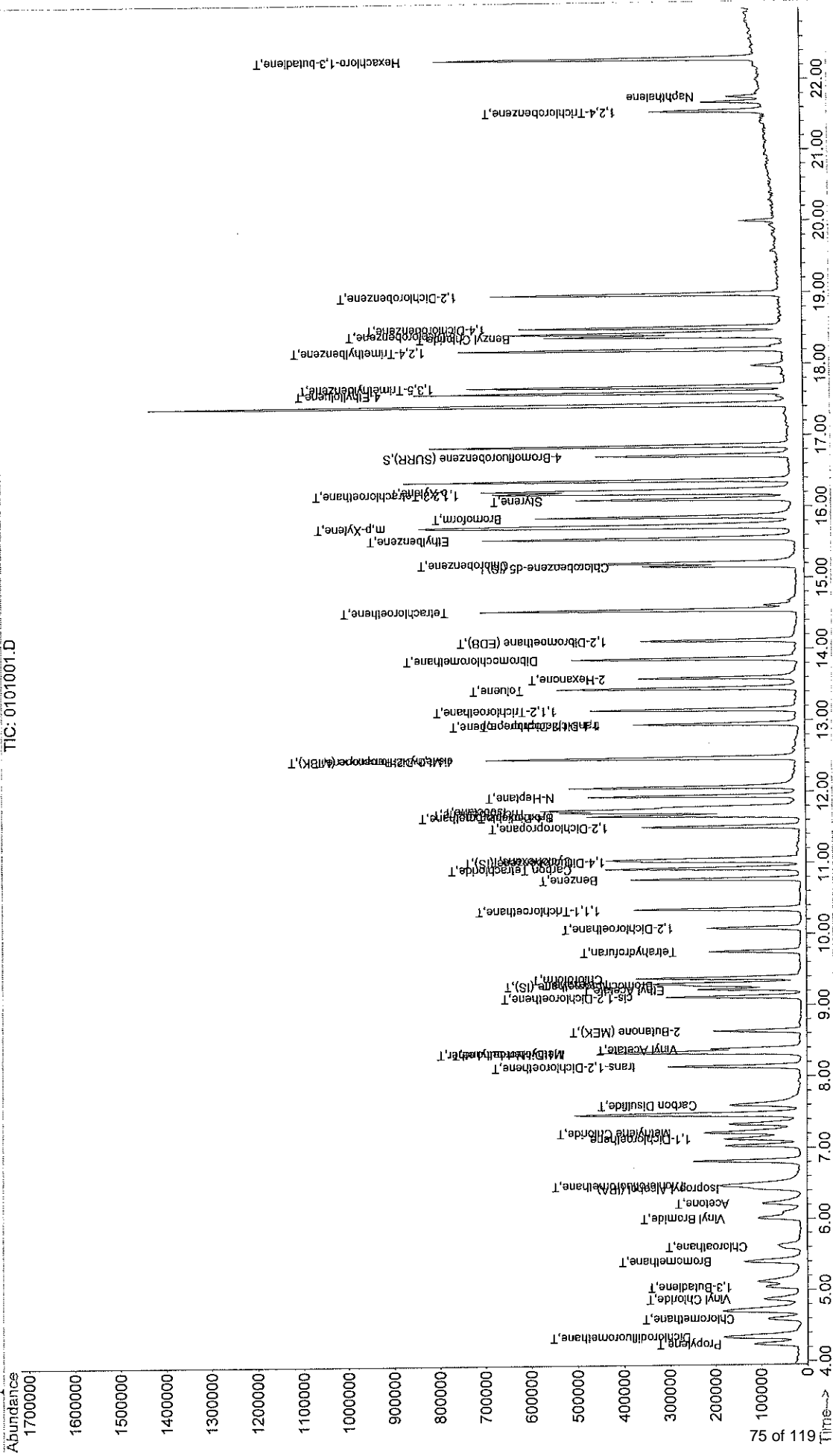
Data File : C:\HPCHEM\1\DATA\030624\0101001.D
Acq On : 6 Mar 2024 2:51 pm
Sample : BFB/CCV 10PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:39 2024

Vial: 1
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 0101001.D



GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\030624\0101001.D
 Tune Time : 6 Mar 2024 2:51 pm

Daily Calibration File : C:\HPCHEM\1\DATA\030624\0101001.D

File	Sample	Surrogate Recovery %	67553	246481	211951
			Internal Standard Responses		
0201002.D	LCS 10PP	97	82922	296189	250448
0301003.D	LCSD 10P	101	90380	334028	271812
0601006.D	METHOD B	97	93202	357906	291453
1501015.D	24-639	107	93984	408340	318338
1701017.D	24-640	105	94420	398617	326337
1801018.D	24-641	97	87031	372213	295068
1901019.D	24-642	99	86028	326717	281379
2001020.D	24-643	101	81297	341844	275494
2301003.D	24-644	103	94926	383994	298305
2401004.D	24-650 O	99	77888	330597	248776
2501005.D	24-645	99	82394	369782	297968
2601006.D	24-645:4	109	118470	463861	356345
2701007.D	24-645:1	92	110597	441771	244420
2801008.D	24-646	107	72087	292473	244300
2901009.D	24-647	101	73145	308825	258116
3001010.D	24-648	102	80742	334590	287630
3101011.D	24-649	102	81405	337513	274509

t - fails 24hr time check * - fails criteria

Created: Mon Mar 11 15:51:32 2024 GC
 MS Ins



TO-15 VOC
Quality Control Data

- Method Blank (MB)
- Laboratory Control Standard (LCS)

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\0201002.D
 Acq On : 6 Mar 2024 3:35 pm
 Sample : LCS 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:43 2024

Vial: 2
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	82922	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	296189	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	250448	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.71	95	136002	4.86	ppbv	0.00
Spiked Amount	5.000	Range	62 - 145	Recovery	=	97.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.24	39	88220	9.85	ppbv	96
3) Dichlorodifluoromethane	4.33	85	425967	9.67	ppbv	100
4) Chloromethane	4.60	50	188972	9.75	ppbv	98
5) Vinyl Chloride	4.88	62	177536	9.66	ppbv	99
6) 1,3-Butadiene	5.05	39	99686	10.94	ppbv	98
7) Bromomethane	5.41	94	184872	10.46	ppbv	96
8) Chloroethane	5.61	64	97920	10.15	ppbv	98
9) Vinyl Bromide	6.02	106	172189	10.65	ppbv	98
10) Trichlorofluoromethane	6.48	101	388204	9.96	ppbv	97
11) Acetone	6.22	43	274758	10.72	ppbv	98
12) Isopropyl Alcohol (IPA)	6.43	45	281464	10.92	ppbv #	80
13) 1,1-Dichloroethene	7.14	61	280049	9.69	ppbv	99
14) Methylene Chloride	7.23	84	173272	10.24	ppbv	
15) Carbon Disulfide	7.61	76	544912	10.24	ppbv #	100
16) trans-1,2-Dichloroethene	8.15	96	178165	9.24	ppbv	98
17) Methyl-tert-butyl ether	8.35	73	409688	9.75	ppbv #	98
18) 1,1-Dichloroethane	8.34	63	325361	9.92	ppbv	100
19) Vinyl Acetate	8.40	43	469694m	10.03	ppbv	
20) N-Hexane	9.32	57	186736	9.51	ppbv	
21) 2-Butanone (MEK)	8.65	43	358698	9.45	ppbv	100
22) cis-1,2-Dichloroethene	9.12	61	296663	9.93	ppbv	
23) Ethyl Acetate	9.23	43	290087	9.78	ppbv	
24) Chloroform	9.39	83	365325	11.02	ppbv	100
26) Tetrahydrofuran	9.76	42	193617	10.54	ppbv	98
27) 1,2-Dichloroethane	10.09	62	225792	10.53	ppbv	99
28) 1,1,1-Trichloroethane	10.35	97	262297	10.13	ppbv	
29) 1,1-Dichloropropene	12.95	75	253776	10.35	ppbv	99
30) Carbon Tetrachloride	10.93	117	326327	10.30	ppbv	98
31) Benzene	10.78	78	347074	9.90	ppbv	
32) Cyclohexane	11.06	56	249649	10.36	ppbv	99
33) 1,2-Dichloropropane	11.51	63	182294	10.04	ppbv	98
34) Trichloroethene	11.72	95	201445	10.52	ppbv	99
35) Bromodichloromethane	11.67	83	312340	10.24	ppbv	99
36) 1,4-Dioxane	11.66	88	93289	10.28	ppbv	
37) Isooctane	11.76	57	721046	10.39	ppbv	95
38) N-Heptane	11.95	43	219465	9.65	ppbv	
39) cis-1,3-Dichloropropene	12.48	75	276043	10.30	ppbv	98
40) 4-Methyl-2-Pentanone (MIBK)	12.48	43	310248	9.89	ppbv	
41) trans-1,3-Dichloropropene	12.95	75	302983	9.71	ppbv	
42) 1,1,2-Trichloroethane	13.15	83	149675	9.67	ppbv	
43) Toluene	13.45	91	423537	9.30	ppbv	
44) 2-Hexanone	13.60	43	296041	10.22	ppbv	
46) Dibromochloromethane	13.86	129	266677	9.65	ppbv	
47) 1,2-Dibromoethane (EDB)	14.12	107	321440	9.65	ppbv	97
48) Tetrachloroethene	14.55	166	260839	9.82	ppbv	
49) Chlorobenzene	15.21	112	396222	10.15	ppbv	98
50) Ethylbenzene	15.55	91	718786	10.47	ppbv	97
51) m,p-Xylene	15.73	91	958497m	20.88	ppbv	
52) Bromoform	15.86	173	305673	10.01	ppbv #	98
53) Styrene	16.10	104	348903	9.69	ppbv	99

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\0201002.D
 Acq On : 6 Mar 2024 3:35 pm
 Sample : LCS 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:43 2024

Vial: 2
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	451300	9.52	ppbv	99
55) o-Xylene	16.23	106	244699	9.59	ppbv	
57) 4-Ethyltoluene	17.59	105	683627	10.60	ppbv	98
58) 1,3,5-Trimethylbenzene	17.68	105	561759	10.89	ppbv	100
59) 1,2,4-Trimethylbenzene	18.20	105	551260	10.49	ppbv	98
60) 1,3-Dichlorobenzene	18.43	146	344278	10.64	ppbv	99
61) Benzyl Chloride	18.38	91	426167	9.69	ppbv	
62) 1,4-Dichlorobenzene	18.51	148	154893	9.97	ppbv	
63) 1,2-Dichlorobenzene	18.97	146	287727	10.38	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	50408	10.78	ppbv	
65) Naphthalene	21.75	128	53712	9.53	ppbv	
66) Hexachloro-1,3-butadiene	22.29	225	169172	9.63	ppbv	

Quantitation Report

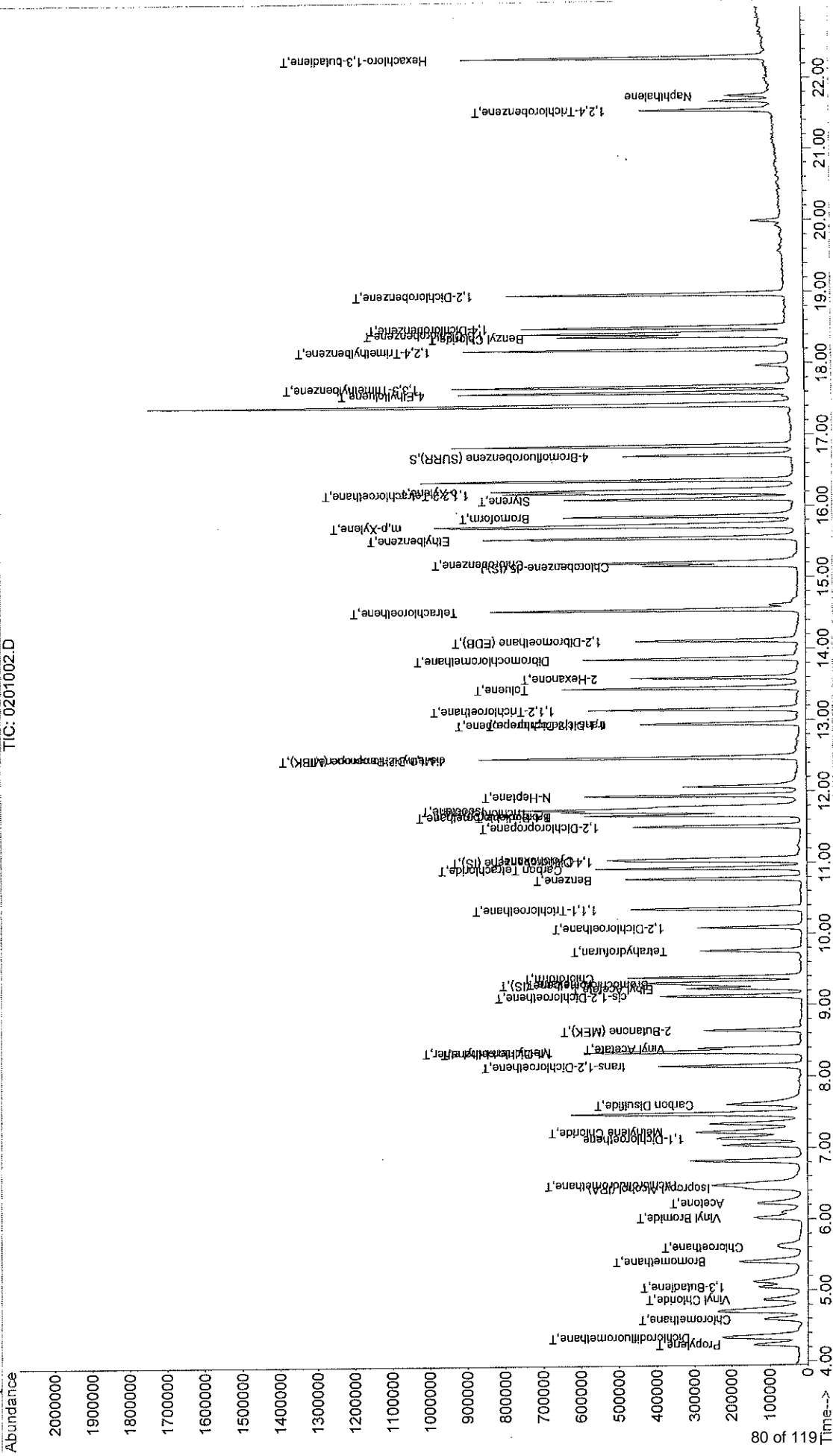
Data File : C:\HPCHEM\1\DATA\030624\0201002.D
Acq On : 6 Mar 2024 3:35 pm
Sample : LCS 10PPBV
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:43 2024

Vial: 2
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 0201002.D



Data File : C:\HPCHEM\1\DATA\030624\0301003.D
 Acq On : 6 Mar 2024 4:18 pm
 Sample : LCSD 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:46 2024

Vial: 3
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	90380	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	334028	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	271812	5.00	ppbv	0.00

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.71 95 154118 5.07 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 101.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.23	39	98852	10.13	ppbv	96
3) Dichlorodifluoromethane	4.34	85	465402	9.69	ppbv	100
4) Chloromethane	4.59	50	208205	9.85	ppbv	100
5) Vinyl Chloride	4.87	62	199419	9.95	ppbv	100
6) 1,3-Butadiene	5.04	39	104507	10.52	ppbv	
7) Bromomethane	5.40	94	203145	10.54	ppbv	98
8) Chloroethane	5.60	64	108008	10.27	ppbv	99
9) Vinyl Bromide	6.01	106	185687	10.54	ppbv	99
10) Trichlorofluoromethane	6.48	101	423331	9.96	ppbv	96
11) Acetone	6.22	43	300178	10.75	ppbv #	97
12) Isopropyl Alcohol (IPA)	6.42	45	304808	10.85	ppbv	100
13) 1,1-Dichloroethene	7.13	61	305108	9.69	ppbv	100
14) Methylene Chloride	7.22	84	185386	10.05	ppbv	
15) Carbon Disulfide	7.61	76	609456	10.51	ppbv #	100
16) trans-1,2-Dichloroethene	8.14	96	199897	9.51	ppbv	
17) Methyl-tert-butyl ether	8.35	73	455683	9.95	ppbv	100
18) 1,1-Dichloroethane	8.34	63	355561	9.94	ppbv	100
19) Vinyl Acetate	8.39	43	494429	9.69	ppbv	
20) N-Hexane	9.31	57	212156	9.91	ppbv	
21) 2-Butanone (MEK)	8.64	43	416168	10.06	ppbv	
22) cis-1,2-Dichloroethene	9.12	61	325469	10.00	ppbv	
23) Ethyl Acetate	9.23	43	336791	10.42	ppbv	
24) Chloroform	9.39	83	393121	10.88	ppbv	99
26) Tetrahydrofuran	9.75	42	208744	10.07	ppbv	
27) 1,2-Dichloroethane	10.09	62	236768	9.79	ppbv	
28) 1,1,1-Trichloroethane	10.35	97	302626	10.36	ppbv	
29) 1,1-Dichloropropene	12.95	75	288422	10.43	ppbv	99
30) Carbon Tetrachloride	10.92	117	354780	9.93	ppbv	98
31) Benzene	10.77	78	384357	9.73	ppbv	
32) Cyclohexane	11.05	56	274933	10.12	ppbv	99
33) 1,2-Dichloropropane	11.51	63	188773	9.21	ppbv	99
34) Trichloroethene	11.71	95	228440	10.58	ppbv	98
35) Bromodichloromethane	11.67	83	353191	10.26	ppbv	98
36) 1,4-Dioxane	11.65	88	98988	9.67	ppbv	
37) Isooctane	11.75	57	758088	9.69	ppbv	99
38) N-Heptane	11.94	43	249435	9.73	ppbv	
39) cis-1,3-Dichloropropene	12.48	75	316112	10.46	ppbv	99
40) 4-Methyl-2-Pentanone (MIBK)	12.47	43	346154	9.78	ppbv	
41) trans-1,3-Dichloropropene	12.95	75	334443	9.50	ppbv	
42) 1,1,2-Trichloroethane	13.15	83	184919	10.60	ppbv	99
43) Toluene	13.45	91	561119	10.93	ppbv	97
44) 2-Hexanone	13.60	43	305073	9.34	ppbv	
46) Dibromochloromethane	13.86	129	292352	9.74	ppbv	
47) 1,2-Dibromoethane (EDB)	14.12	107	332290	9.19	ppbv	100
48) Tetrachloroethene	14.55	166	285890	9.91	ppbv	
49) Chlorobenzene	15.21	112	447699	10.56	ppbv	98
50) Ethylbenzene	15.55	91	768772	10.32	ppbv	100
51) m,p-Xylene	15.73	91	1093963	21.96	ppbv	100
52) Bromoform	15.86	173	325256	9.81	ppbv #	98
53) Styrene	16.11	104	360952	9.24	ppbv	99

Data File : C:\HPCHEM\1\DATA\030624\0301003.D
 Acq On : 6 Mar 2024 4:18 pm
 Sample : LCSD 10PPBV
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:46 2024

Vial: 3
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

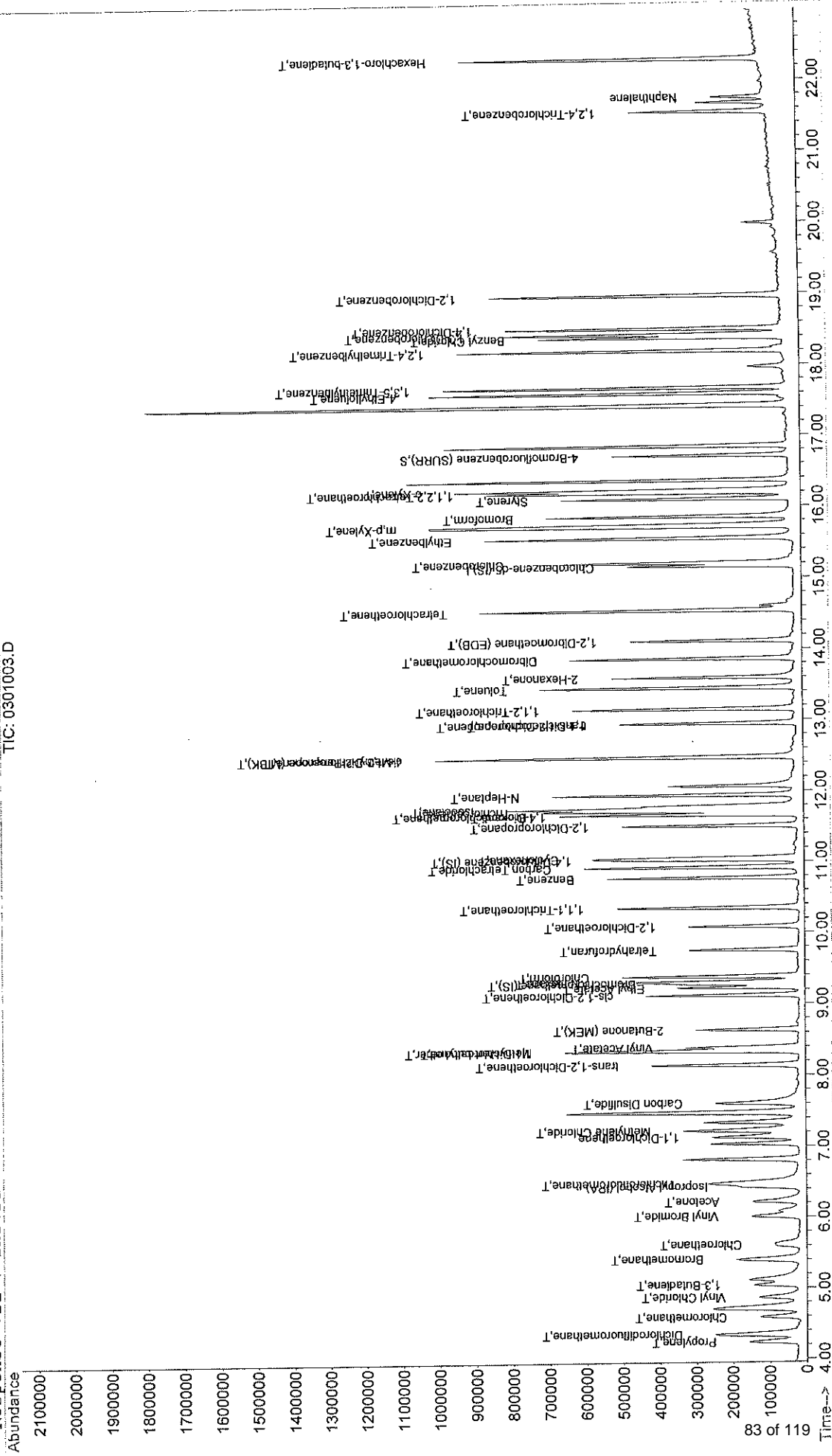
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	16.19	83	493691	9.60	ppbv	99
55) o-Xylene	16.23	106	267798	9.67	ppbv	95
57) 4-Ethyltoluene	17.59	105	749605	10.71	ppbv	98
58) 1,3,5-Trimethylbenzene	17.68	105	591396	10.56	ppbv	99
59) 1,2,4-Trimethylbenzene	18.20	105	568915	9.97	ppbv	99
60) 1,3-Dichlorobenzene	18.42	146	368176	10.48	ppbv	97
61) Benzyl Chloride	18.38	91	490530	10.28	ppbv	
62) 1,4-Dichlorobenzene	18.51	148	178658	10.60	ppbv	
63) 1,2-Dichlorobenzene	18.98	146	308715	10.26	ppbv	
64) 1,2,4-Trichlorobenzene	21.55	180	49017	9.66	ppbv	
65) Naphthalene	21.75	128	63719m	10.42	ppbv	
66) Hexachloro-1,3-butadiene	22.30	225	183512	9.62	ppbv	

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\0301003.D
 Acq On : 6 Mar 2024 4:18 pm
 Sample : LCSD 10PPBV
 Misc : IO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:46 2024

Vial: 3
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00
 Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\0601006.D
 Acq On : 6 Mar 2024 6:26 pm
 Sample : METHOD BLANK
 Misc : TO-15 ANALYSIS

Vial: 6
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Mar 11 15:46 2024

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	93202	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.03	114	357906	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.16	117	291453	5.00	ppbv	0.00

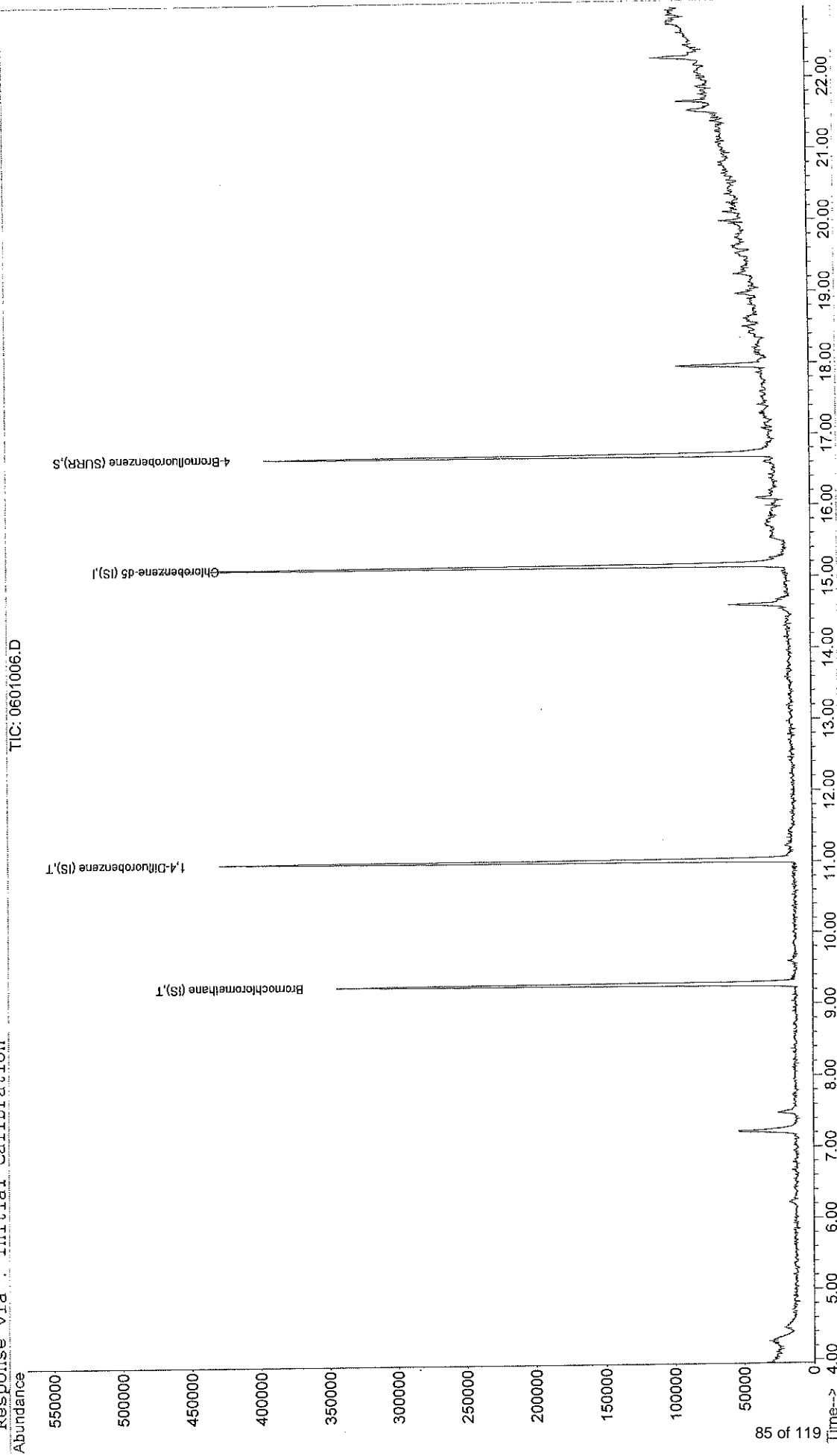
System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.70 95 158540 4.86 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 97.20%

Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\0601006.D
Acq On : 6 Mar 2024 6:26 pm
Sample : METHOD BLANK
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:46 2024
Vial: 6
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration





TO-15 VOC

- Raw Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\1501015.D
 Acq On : 7 Mar 2024 12:55 am
 Sample : 24-639
 Misc : TO-15 ANALYSIS

Vial: 15
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Mar 11 15:22 2024

Quant Results File: 030524AI.RES

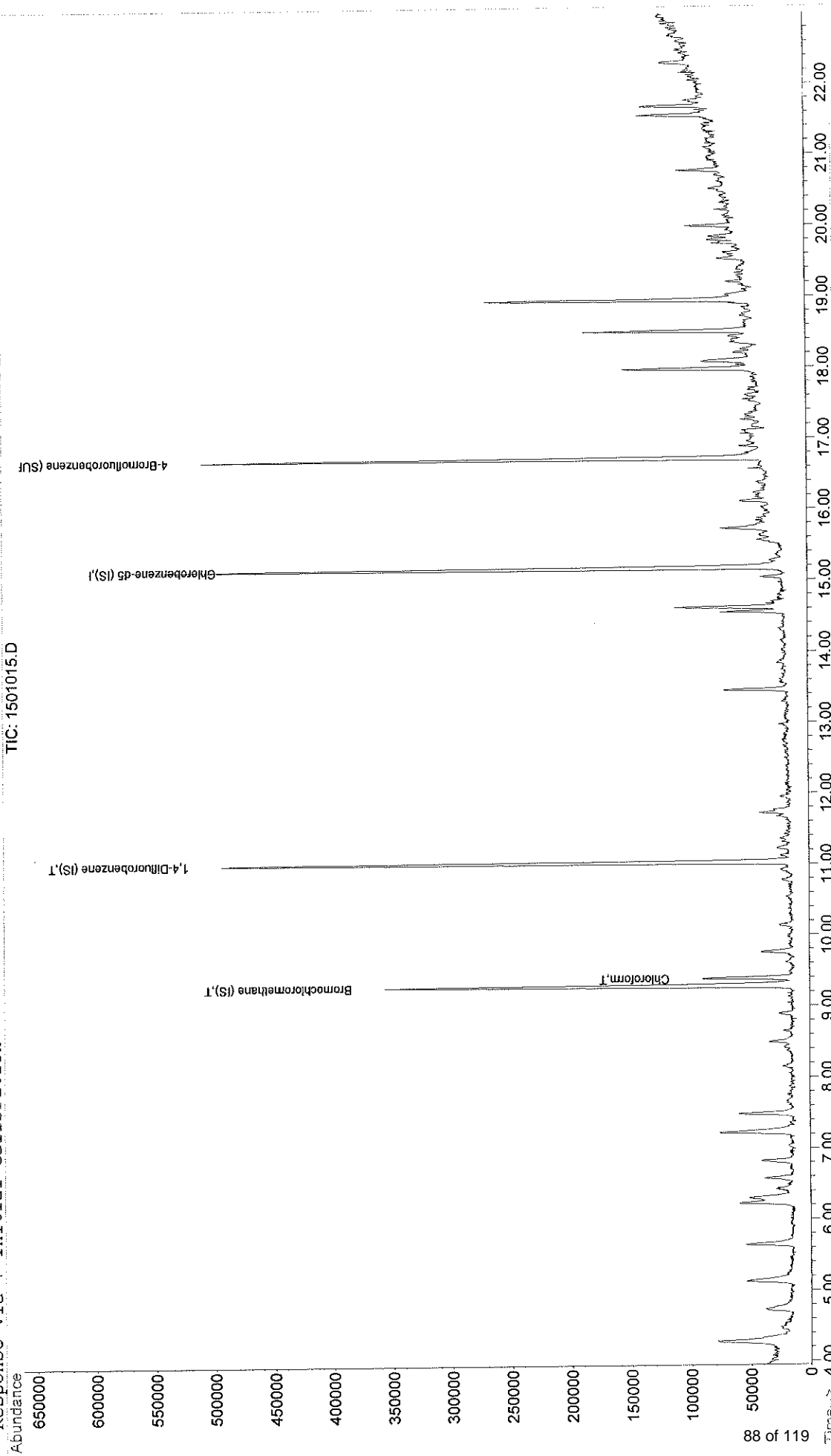
Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	93984	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	408340	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	318338	5.00	ppbv	0.01
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR)	16.72	95	190808	5.36	ppbv	0.00
Spiked Amount	5.000	Range	62 - 145	Recovery	=	107.20%
Target Compounds						
24) Chloroform	9.39	83	63795	1.70	ppbv	Qvalue 98

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\1501015.D
Acq On : 7 Mar 2024 12:55 am
Sample : 24-639
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:22 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\030624\1701017.D
 Acq On : 7 Mar 2024 2:21 am
 Sample : 24-640
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:22 2024

Vial: 17
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.27	128	94420	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	398617	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.15	117	326337	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR)	16.70	95	192282	5.27	ppbv	0.00
Spiked Amount	5.000	Range	62 - 145	Recovery	=	105.40%
Target Compounds						
24) Chloroform	9.38	83	56852	1.51	ppbv	Qvalue 94

Quantitation Report

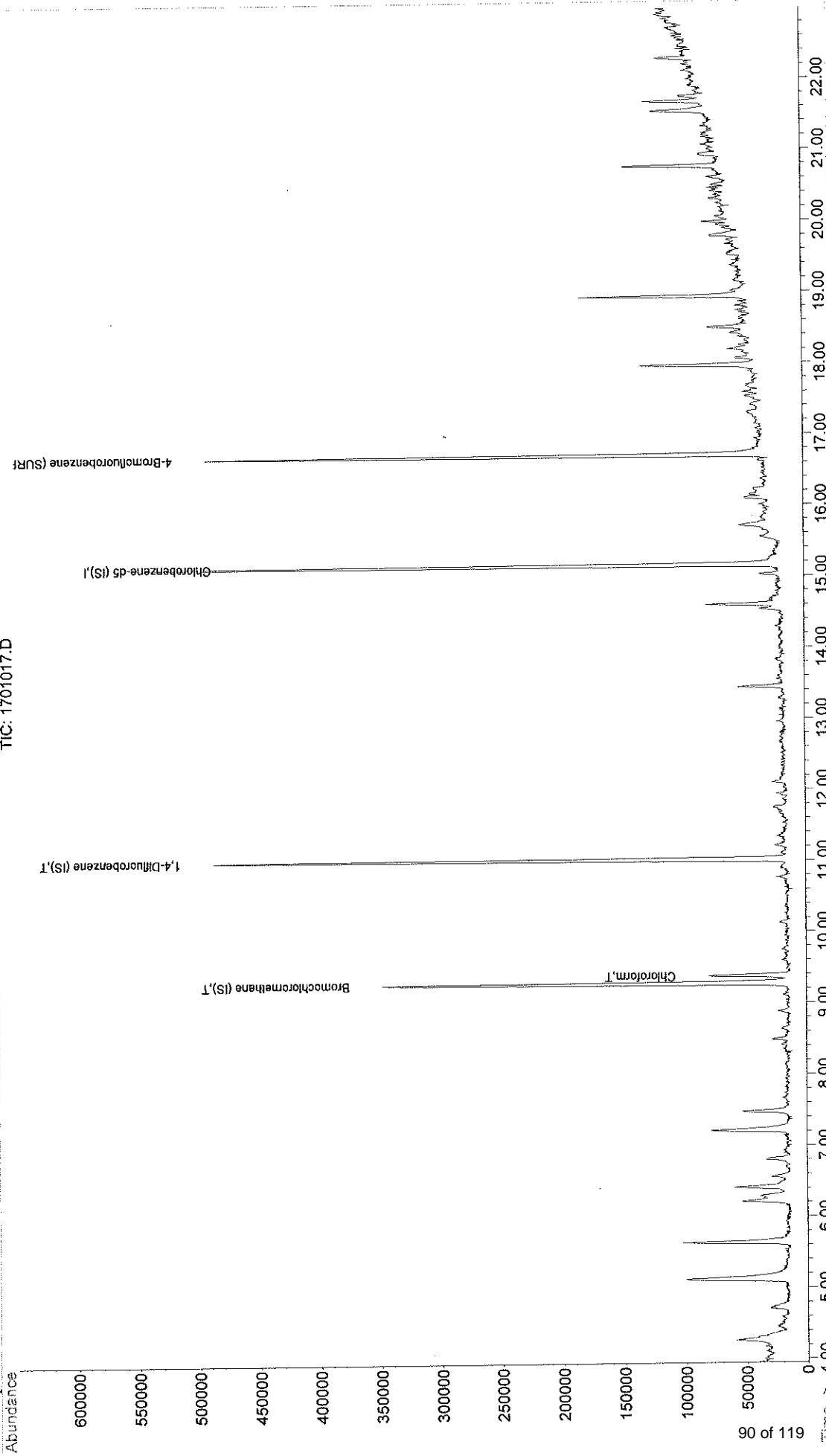
Data File : C:\HPCHEM\1\DATA\030624\1701017.D
Acq On : 7 Mar 2024 2:21 am
Sample : 24-640
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:22 2024

Vial: 17
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 1701017.D



Data File : C:\HPCHEM\1\DATA\030624\1801018.D
 Acq On : 7 Mar 2024 3:04 am
 Sample : 24-641
 Misc : TO-15 ANALYSIS

Vial: 18
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Mar 11 15:23 2024

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.27	128	87031	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.01	114	372213	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.15	117	295068	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR)	16.70	95	160207	4.86	ppbv	0.00
Spiked Amount	5.000	Range	62 - 145	Recovery	=	97.20%

Target Compounds

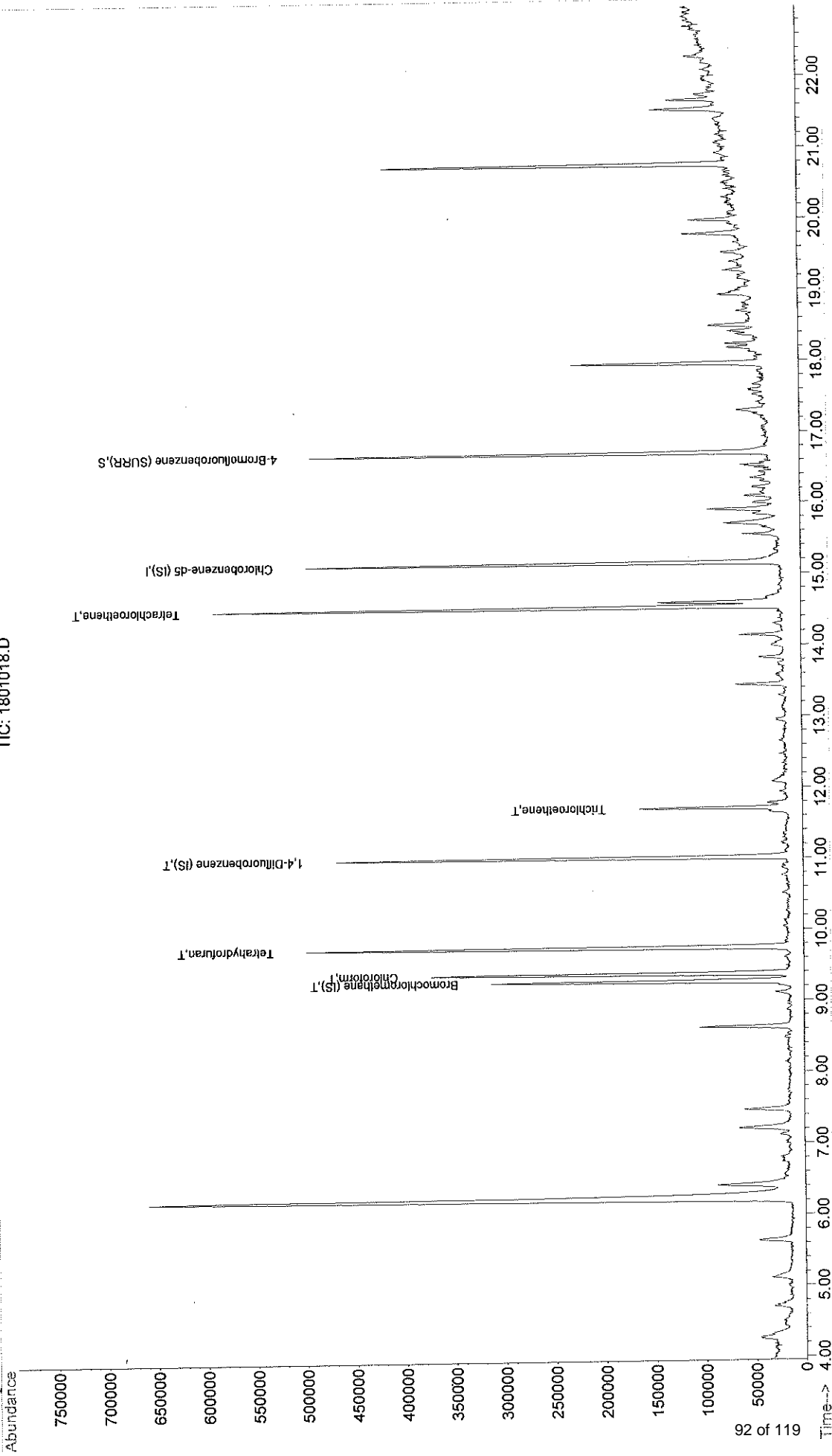
	R.T.	QIon	Response	Conc	Units	Qvalue
24) Chloroform	9.37	83	293393	8.44	ppbv	99
26) Tetrahydrofuran	9.75	42	352785	15.28	ppbv	99
34) Trichloroethene	11.71	95	48129	2.00	ppbv	95
48) Tetrachloroethene	14.54	166	168780	5.39	ppbv	98

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\1801018.D
Acq On : 7 Mar 2024 3:04 am
Sample : 24-641
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:23 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 1801018.D



Data File : C:\HPCHEM\1\DATA\030624\1901019.D
 Acq On : 7 Mar 2024 3:47 am
 Sample : 24-642
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:24 2024

Vial: 19
 Operator: TJJ
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.27	128	86028	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	326717	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.16	117	281379	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR)	16.71	95	156398	4.97	ppbv	0.00
Spiked Amount	5.000	Range	62 - 145	Recovery	=	99.40%
Target Compounds						
34) Trichloroethene	11.71	95	3652	0.17	ppbv	Qvalue

Quantitation Report

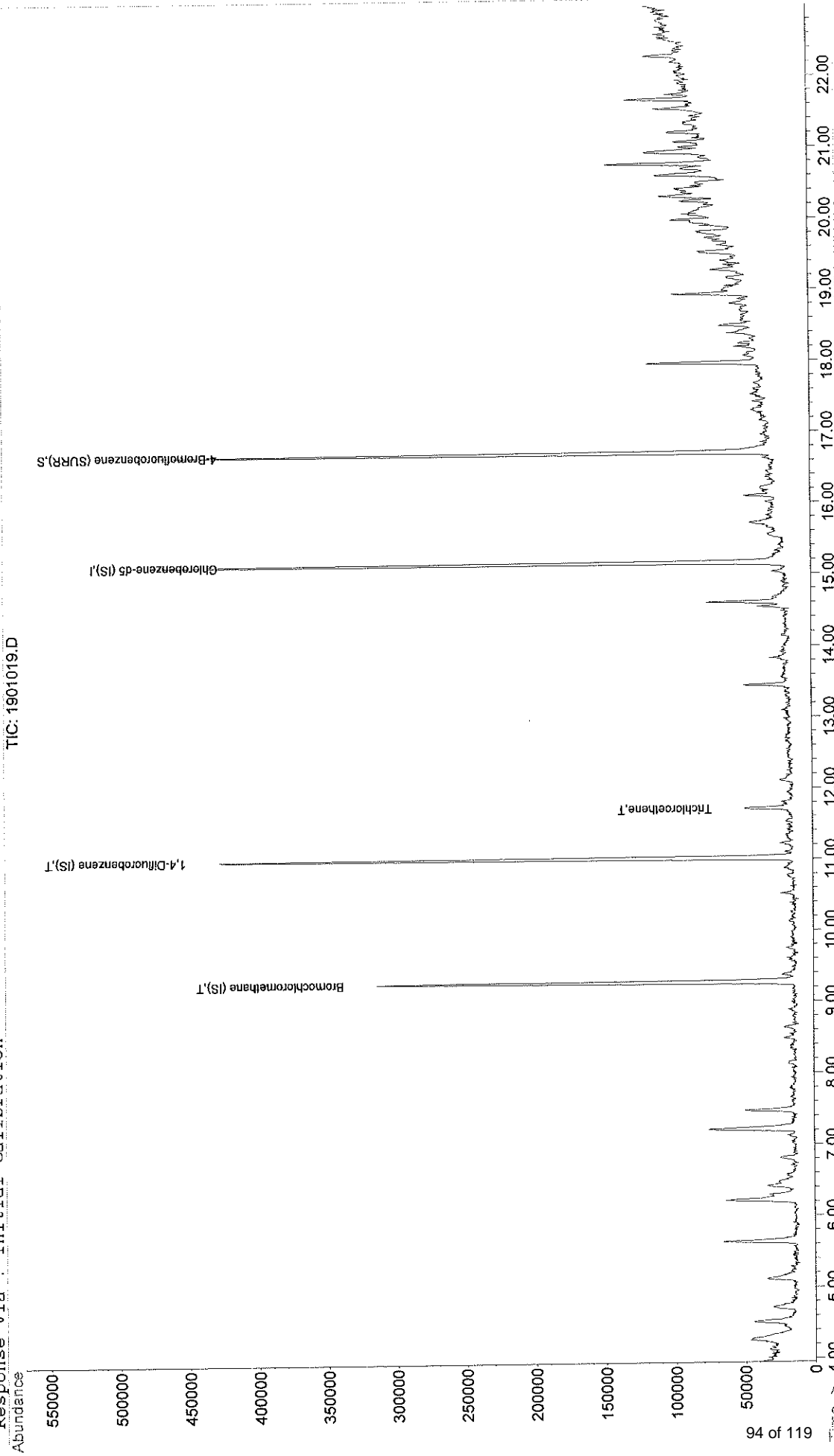
Data File : C:\HPCHEM\1\DATA\030624\1901019.D
Acq On : 7 Mar 2024 3:47 am
Sample : 24-642
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:24 2024

Vial: 19
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method IO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 1901019.D



Data File : C:\HPCHEM\1\DATA\030624\2001020.D
 Acq On : 7 Mar 2024 4:31 am
 Sample : 24-643
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:25 2024

Vial: 20
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	81297	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.03	114	341844	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	275494	5.00	ppbv	0.00

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.72 95 155706 5.05 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 101.00%

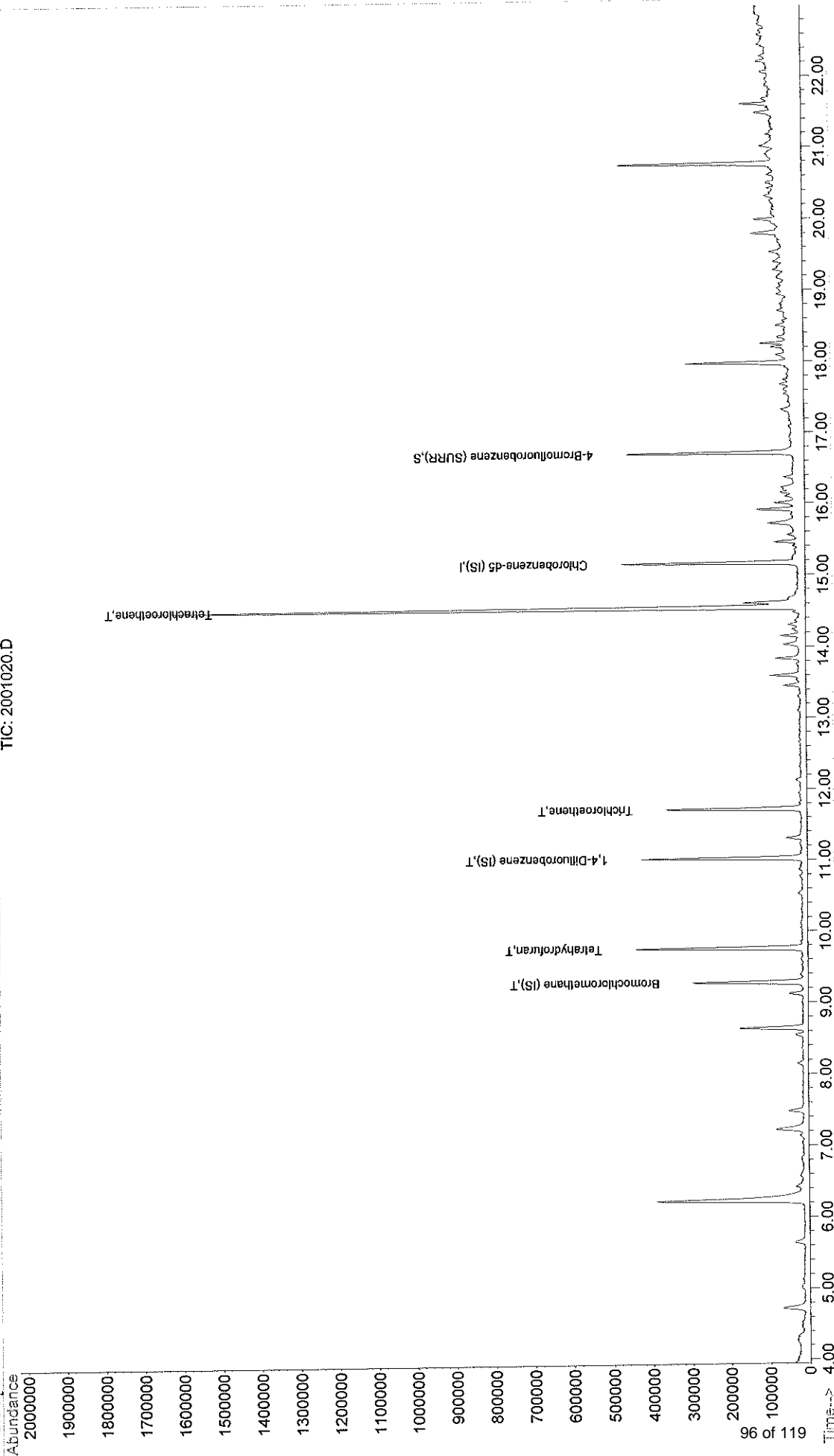
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
26) Tetrahydrofuran	9.76	42	306103	14.43	ppbv	94
34) Trichloroethene	11.71	95	144866	6.55	ppbv	
48) Tetrachloroethene	14.55	166	503154	17.21	ppbv	97

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2001020.D
Acq On : 7 Mar 2024 4:31 am
Sample : 24-643
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:25 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method IO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 2001020.D



Data File : C:\HPCHEM\1\DATA\030624\2301003.D
 Acq On : 7 Mar 2024 6:41 am
 Sample : 24-644
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:25 2024

Vial: 23
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	94926	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.03	114	383994	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	298305	5.00	ppbv	0.00

System Monitoring Compounds

56) 4-Bromofluorobenzene (SURR) 16.72 95 171179 5.13 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 102.60%

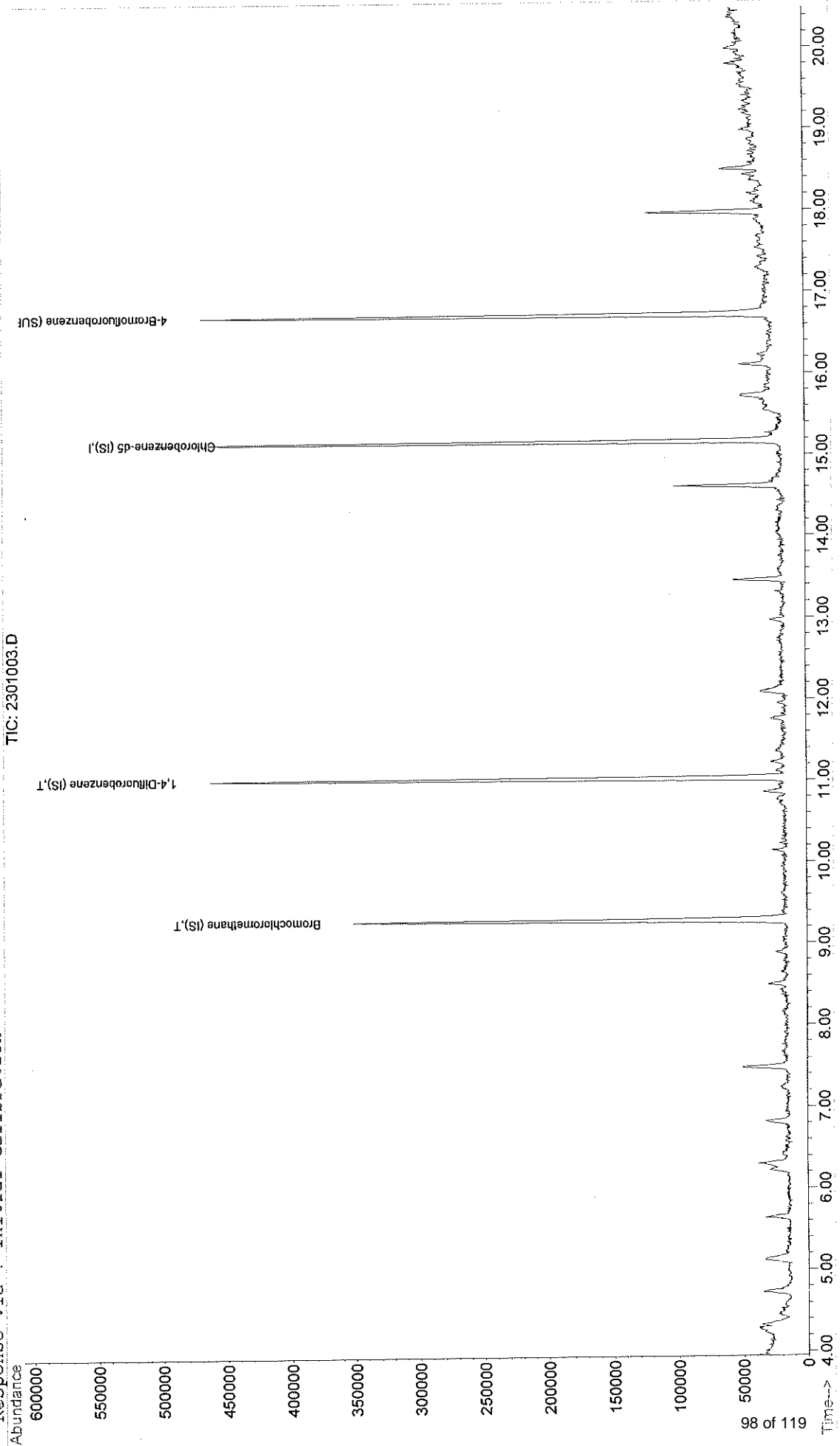
Target Compounds

Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2301003.D
Acq On : 7 Mar 2024 6:41 am
Sample : 24-644
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:25 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\2501005.D
 Acq On : 7 Mar 2024 8:04 am
 Sample : 24-645
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:27 2024

Vial: 25
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.27	128	82394	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	369782	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.16	117	297968	5.00	ppbv	0.00

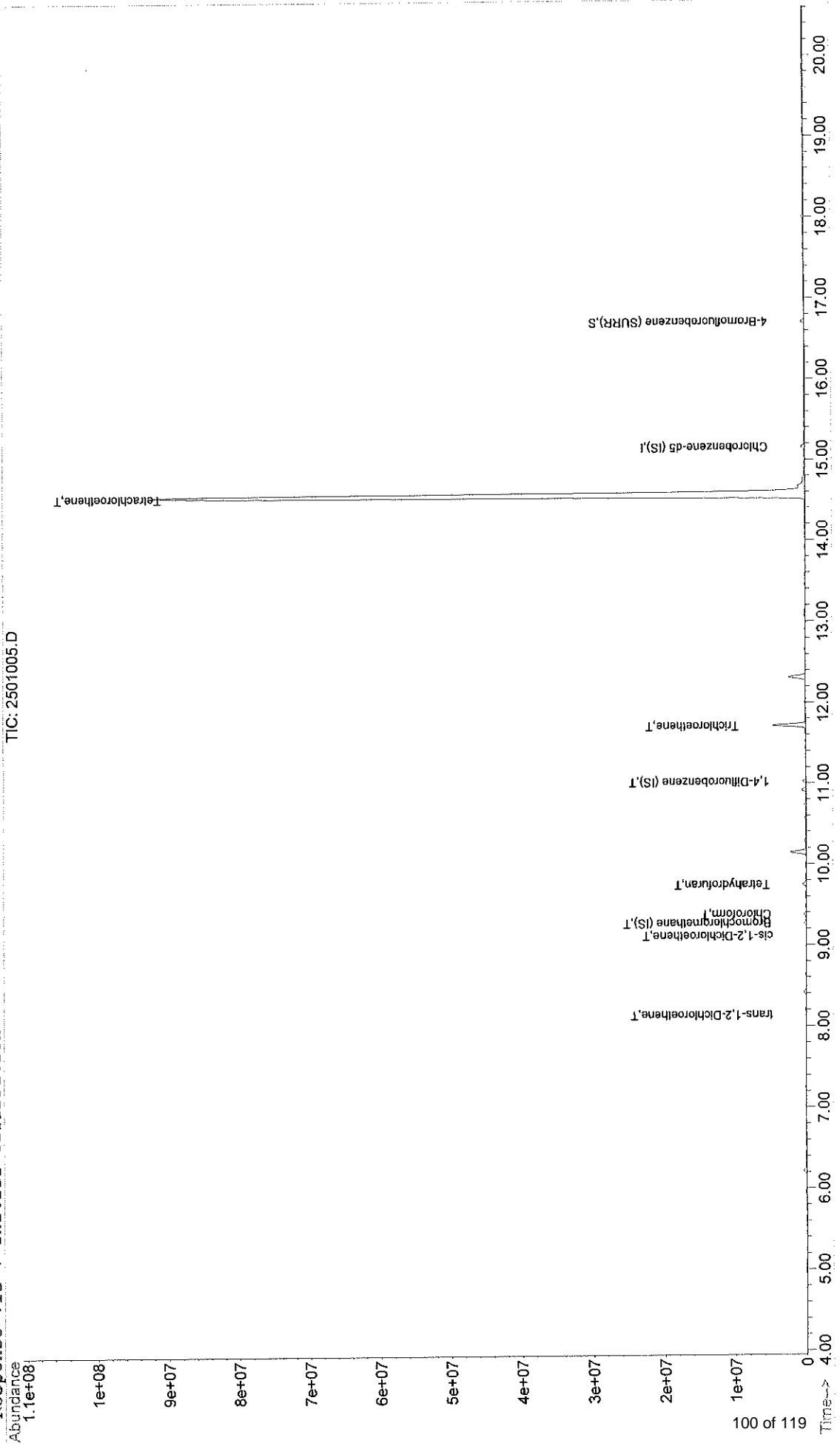
System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.70 95 164502m 4.94 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 98.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
16) trans-1,2-Dichloroethene	8.13	96	28581	1.49	ppbv	97
22) cis-1,2-Dichloroethene	9.11	61	24816	0.84	ppbv	96
24) Chloroform	9.38	83	233529	7.09	ppbv	99
26) Tetrahydrofuran	9.75	42	332441	14.49	ppbv	96
34) Trichloroethene	11.72	95	1871720m	78.29	ppbv	
48) Tetrachloroethene	14.55	166	30266390m	957.41	ppbv	

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2501005.D
Acq On : 7 Mar 2024 8:04 am
Sample : 24-645
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:27 2024
Vial: 25
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\030624\2601006.D
 Acq On : 7 Mar 2024 8:42 am
 Sample : 24-645:40
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:26 2024

Vial: 26
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	118470	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	463861	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	356345	5.00	ppbv	0.01

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.72 95 216622 5.44 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 108.80%

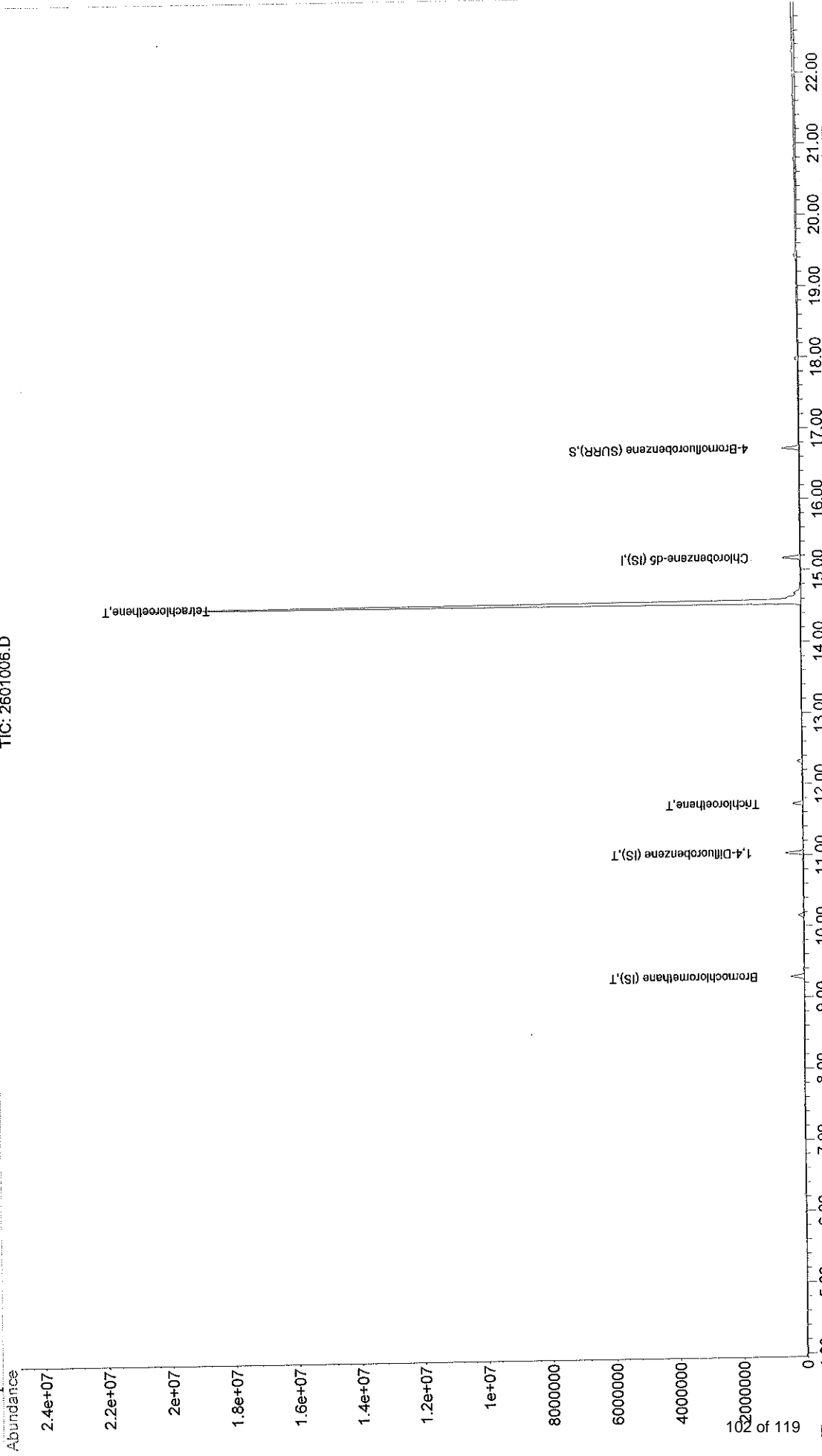
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
34) Trichloroethene	11.73	95	150297	5.01	ppbv	
48) Tetrachloroethene	14.56	166	6019971	159.23	ppbv	98

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2601006.D
Acq On : 7 Mar 2024 8:42 am
Sample : 24-645:40
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:26 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 2601006.D



Data File : C:\HPCHEM\1\DATA\030624\2701007.D
 Acq On : 7 Mar 2024 9:22 am
 Sample : 24-645:1600
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:28 2024

Vial: 27
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 09:35:22 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	110597	5.00	ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.03	114	441771	5.00	ppbv	0.02
45) Chlorobenzene-d5 (IS)	15.17	117	244420	5.00	ppbv	0.02

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.72 95 125737 4.61 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 92.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
48) Tetrachloroethene	14.56	166	96209	3.71	ppbv	

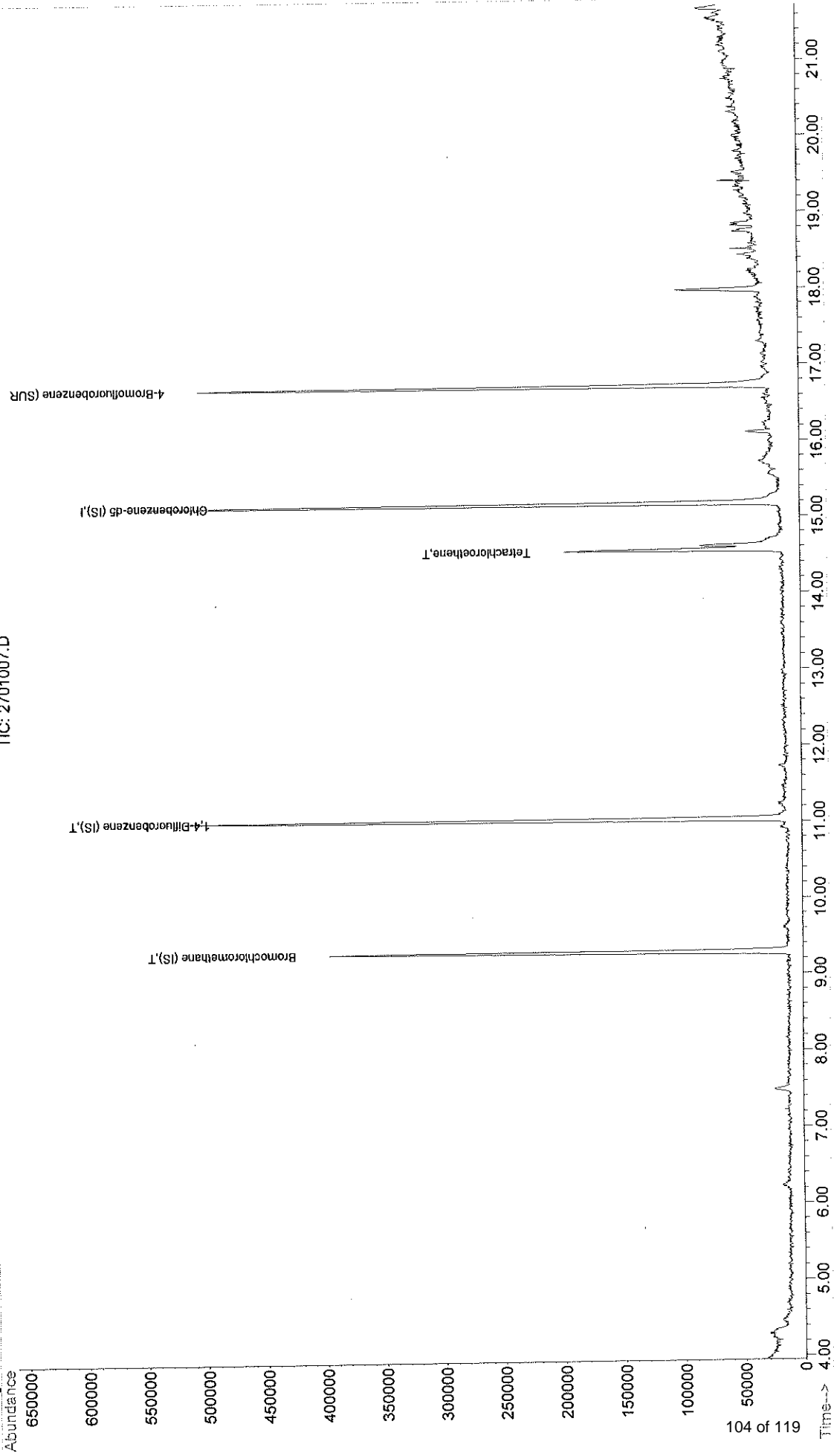
Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2701007.D
Acq On : 7 Mar 2024 9:22 am
Sample : 24-645:1600
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:28 2024

Vial: 27
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 2701007.D



Data File : C:\HPCHEM\1\DATA\030624\2801008.D
 Acq On : 7 Mar 2024 10:15 am
 Sample : 24-646
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:28 2024

Vial: 28
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.27	128	72087	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.02	114	292473	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.15	117	244300	5.00	ppbv	0.00

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.70 95 145986 5.34 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 106.80%

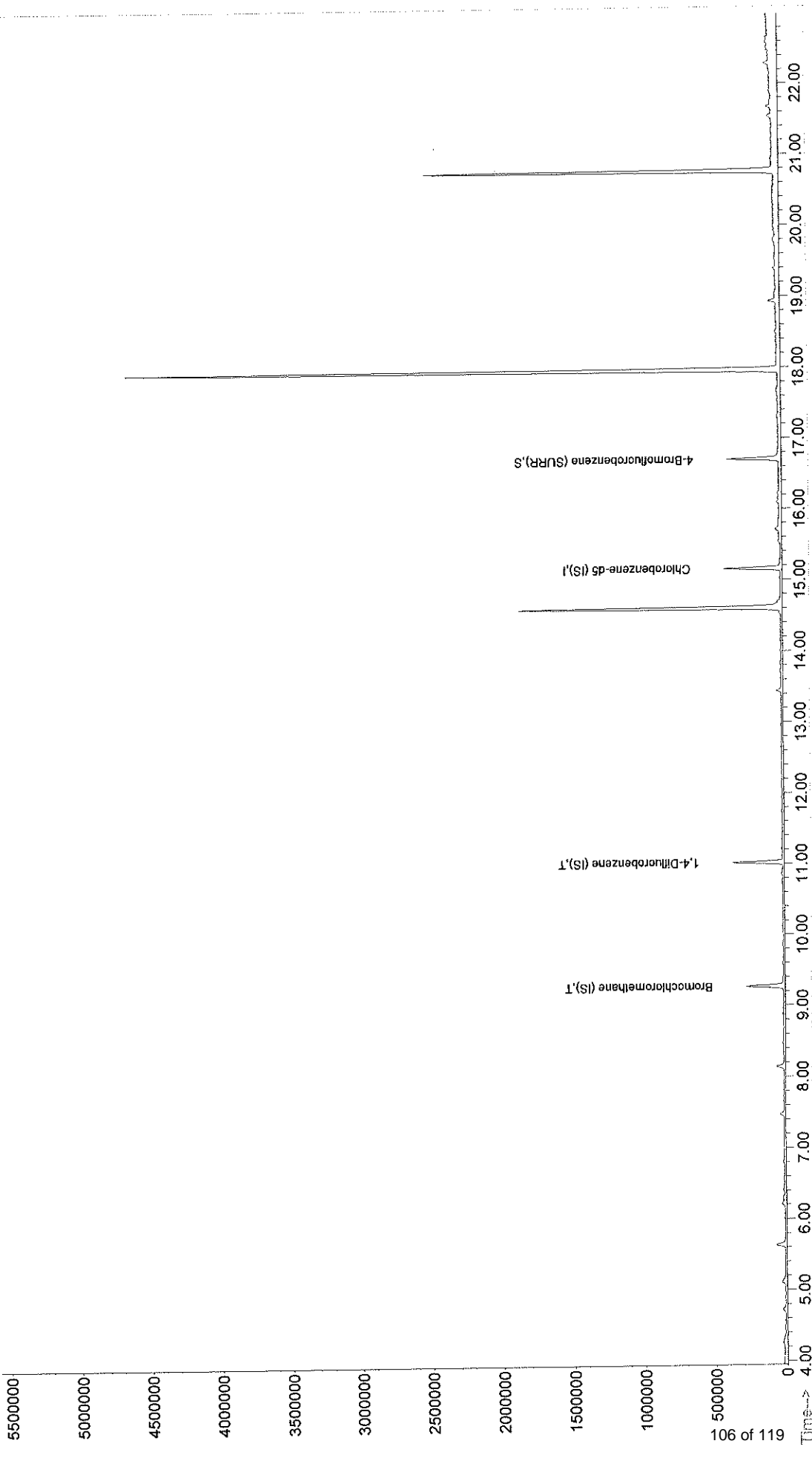
Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2801008.D
Acq On : 7 Mar 2024 10:15 am
Sample : 24-646
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:28 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

Abundance
TIC: 2801008.D



Data File : C:\HPCHEM\1\DATA\030624\2901009.D
 Acq On : 7 Mar 2024 11:06 am
 Sample : 24-647
 Misc : TO-15 ANALYSIS

Vial: 29
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Mar 11 15:28 2024

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	73145	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.03	114	308825	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.18	117	258116	5.00	ppbv	0.02

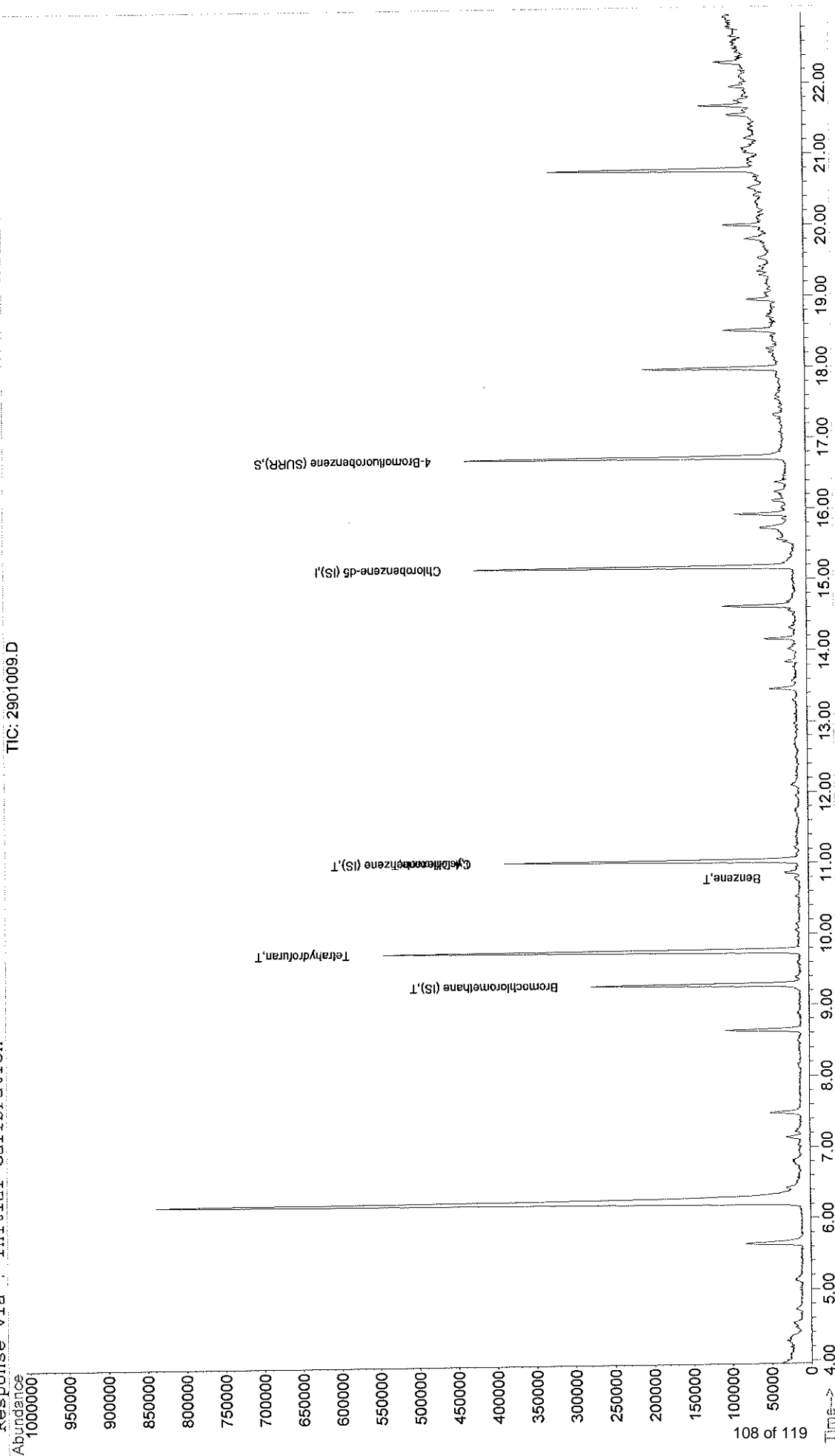
System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.72 95 145949 5.06 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 101.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
26) Tetrahydrofuran	9.76	42	372192	19.43	ppbv	96
31) Benzene	10.78	78	6348	0.17	ppbv	94
32) Cyclohexane	11.03	56	15625	0.62	ppbv #	48

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2901009.D
Acq On : 7 Mar 2024 11:06 am
Sample : 24-647
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:28 2024
Vial: 29
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method IO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration



TIC: 2901009.D

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\3001010.D
 Acq On : 7 Mar 2024 11:49 am
 Sample : 24-648
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:29 2024

Vial: 30
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	80742	5.00	ppbv	0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	334590	5.00	ppbv	0.01
45) Chlorobenzene-d5 (IS)	15.17	117	287630	5.00	ppbv	0.01

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.72 95 164409 5.11 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 102.20%

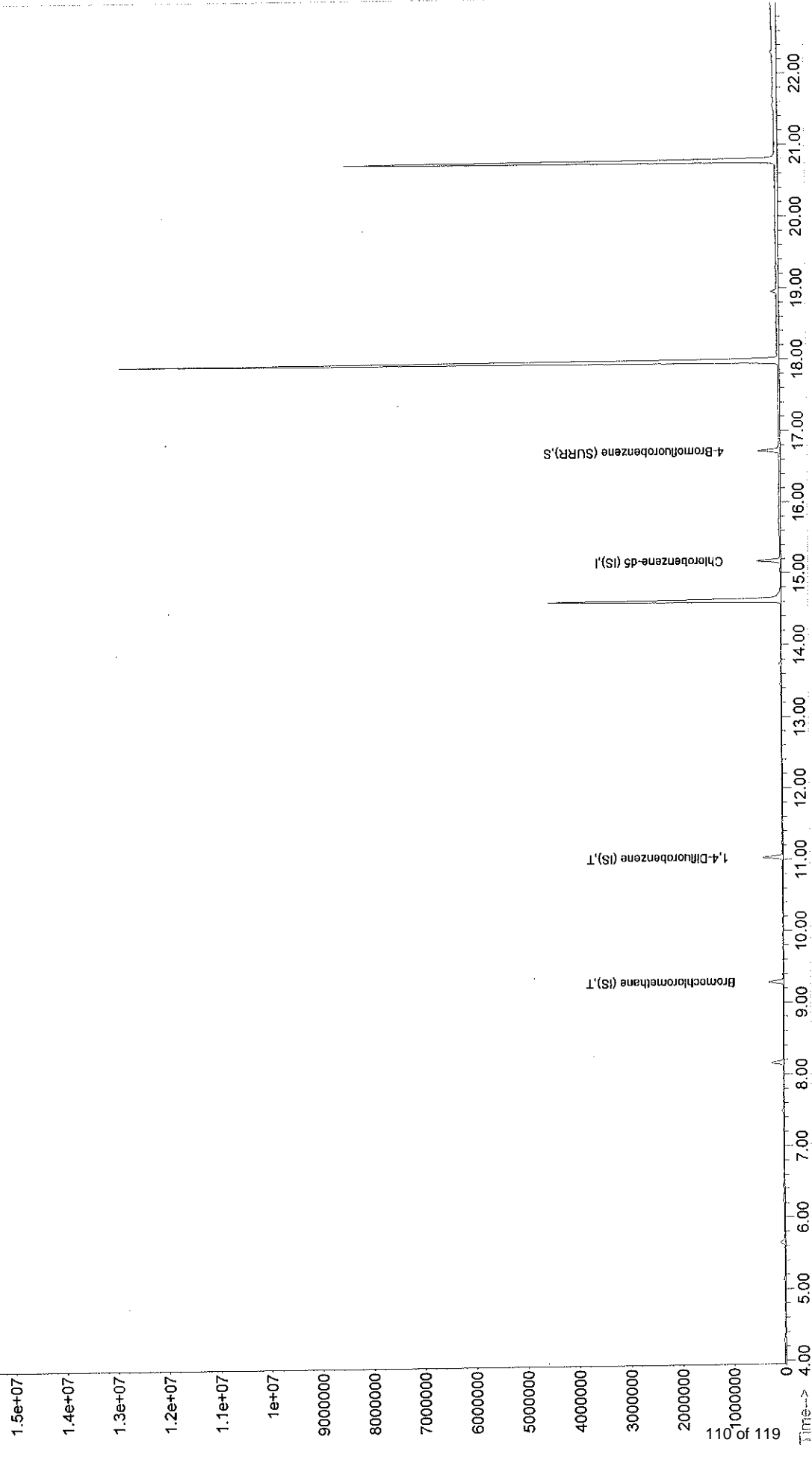
Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\3001010.D
Acq On : 7 Mar 2024 11:49 am
Sample : 24-648
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:29 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 3001010.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030624\3101011.D Vial: 31
 Acq On : 7 Mar 2024 12:37 pm Operator: TJG
 Sample : 24-649 Inst : GC/MS Ins
 Misc : TO-15 ANALYSIS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:29 2024 Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.25	128	81405	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.00	114	337513	5.00	ppbv	-0.01
45) Chlorobenzene-d5 (IS)	15.15	117	274509	5.00	ppbv	0.00

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.70 95 156380 5.09 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 101.80%

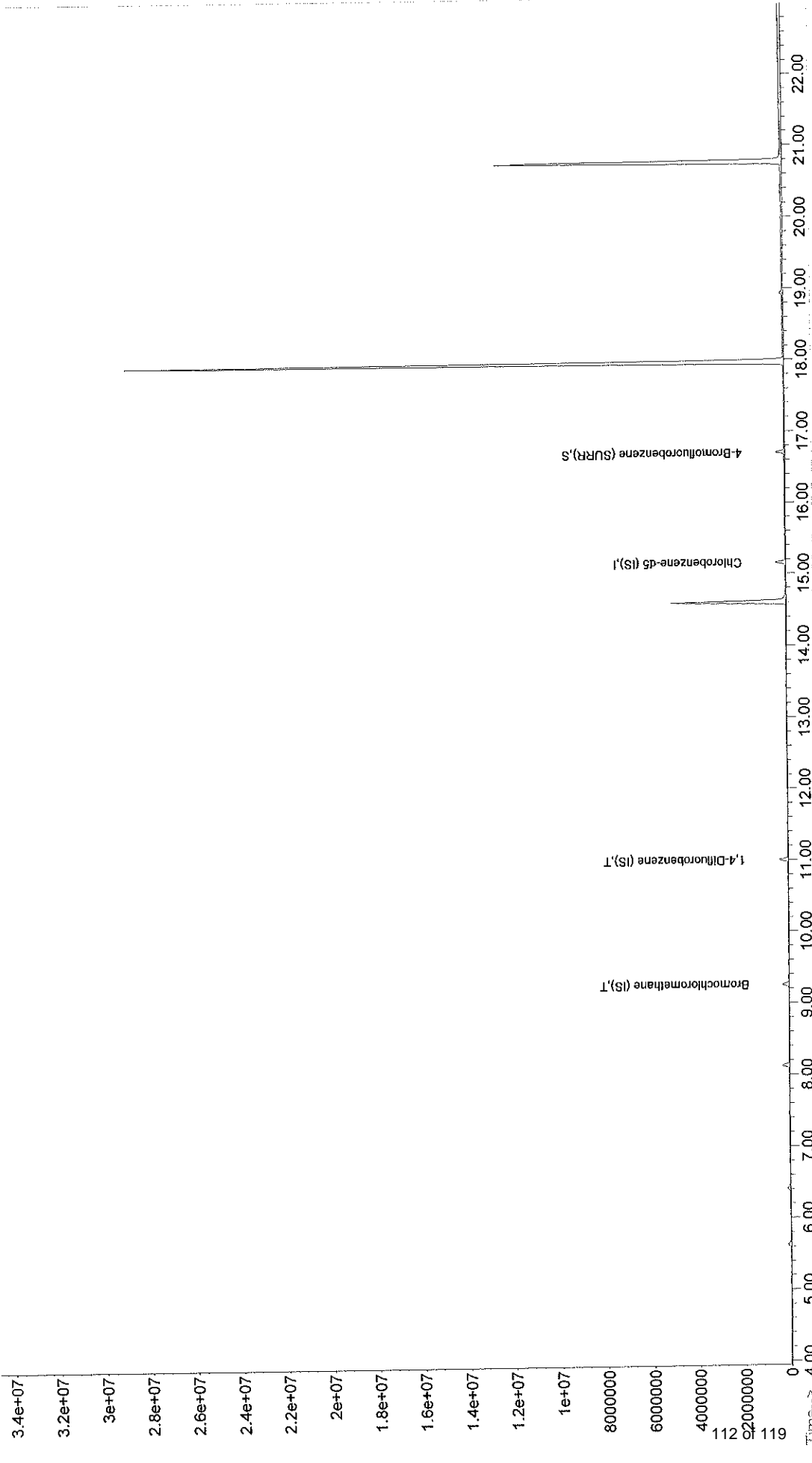
Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\3101011.D
Acq On : 7 Mar 2024 12:37 pm
Sample : 24-649
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 11 15:29 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration

TIC: 3101011.D



Data File : C:\HPCHEM\1\DATA\030624\2401004.D
 Acq On : 7 Mar 2024 7:21 am
 Sample : 24-650 OA
 Misc : TO-15 ANALYSIS
 MS Integration Params: rteint.p
 Quant Time: Mar 11 15:31 2024

Vial: 24
 Operator: TJG
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: 030524AI.RES

Quant Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Mar 07 12:12:11 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.29	128	77888	5.00	ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.03	114	330597	5.00	ppbv	0.02
45) Chlorobenzene-d5 (IS)	15.17	117	248776	5.00	ppbv	0.00

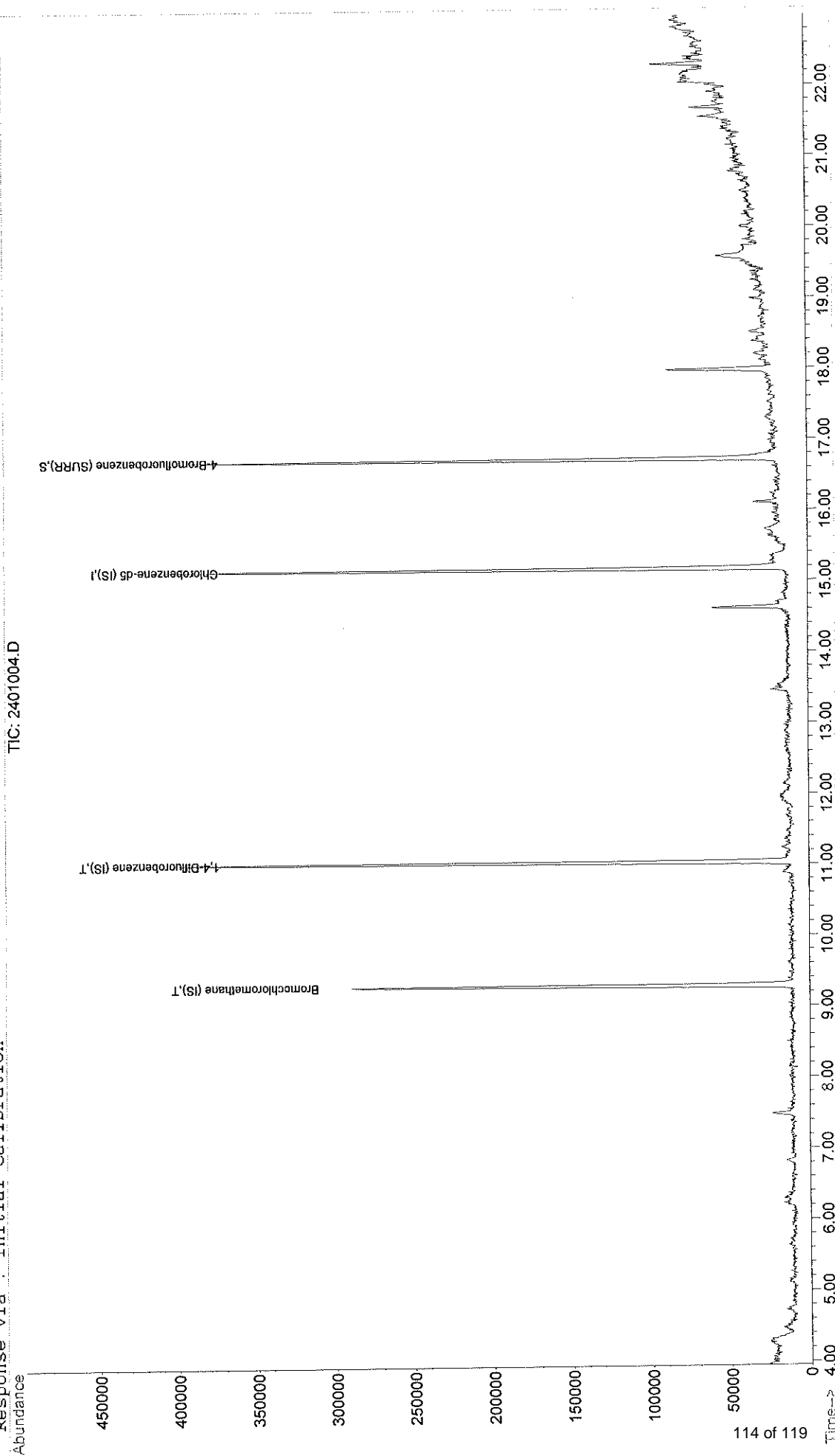
System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.72 95 138284 4.97 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 99.40%

Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\030624\2401004.D
Acq On : 7 Mar 2024 7:21 am
Sample : 24-650 OA
Misc : TO-15 ANALYSIS
MS Integration Params: rreint.p
Quant Time: Mar 11 15:31 2024
Quant Results File: 030524AI.RES

Method : C:\HPCHEM\1\METHODS\030524AI.M (RTE Integrator)
Title : Method IO-15 CALIBRATION
Last Update : Thu Mar 07 12:12:11 2024
Response via : Initial Calibration





TO-15 Certified Canister

- Cleaned Canister
Verification Data

Data File : C:\HPCHEM\1\DATA\022824\3501025.D Vial: 35
 Acq On : 29 Feb 2024 12:53 pm Operator: TJG
 Sample : CSI-4697 BATCH Inst : GC/MS Ins
 Misc : TO-15 ANALYSIS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Mar 27 6:26 2024 Quant Results File: 020124AI.RES

Quant Method : C:\HPCHEM\1\METHODS\020124AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Thu Feb 29 12:51:24 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	53561	5.00	ppbv	-0.01
25) 1,4-Difluorobenzene (IS)	11.03	114	210959	5.00	ppbv	-0.02
45) Chlorobenzene-d5 (IS)	15.17	117	172768	5.00	ppbv	-0.01

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR) 16.72 95 112502 4.77 ppbv -0.02
 Spiked Amount 5.000 Range 62 - 145 Recovery = 95.40%

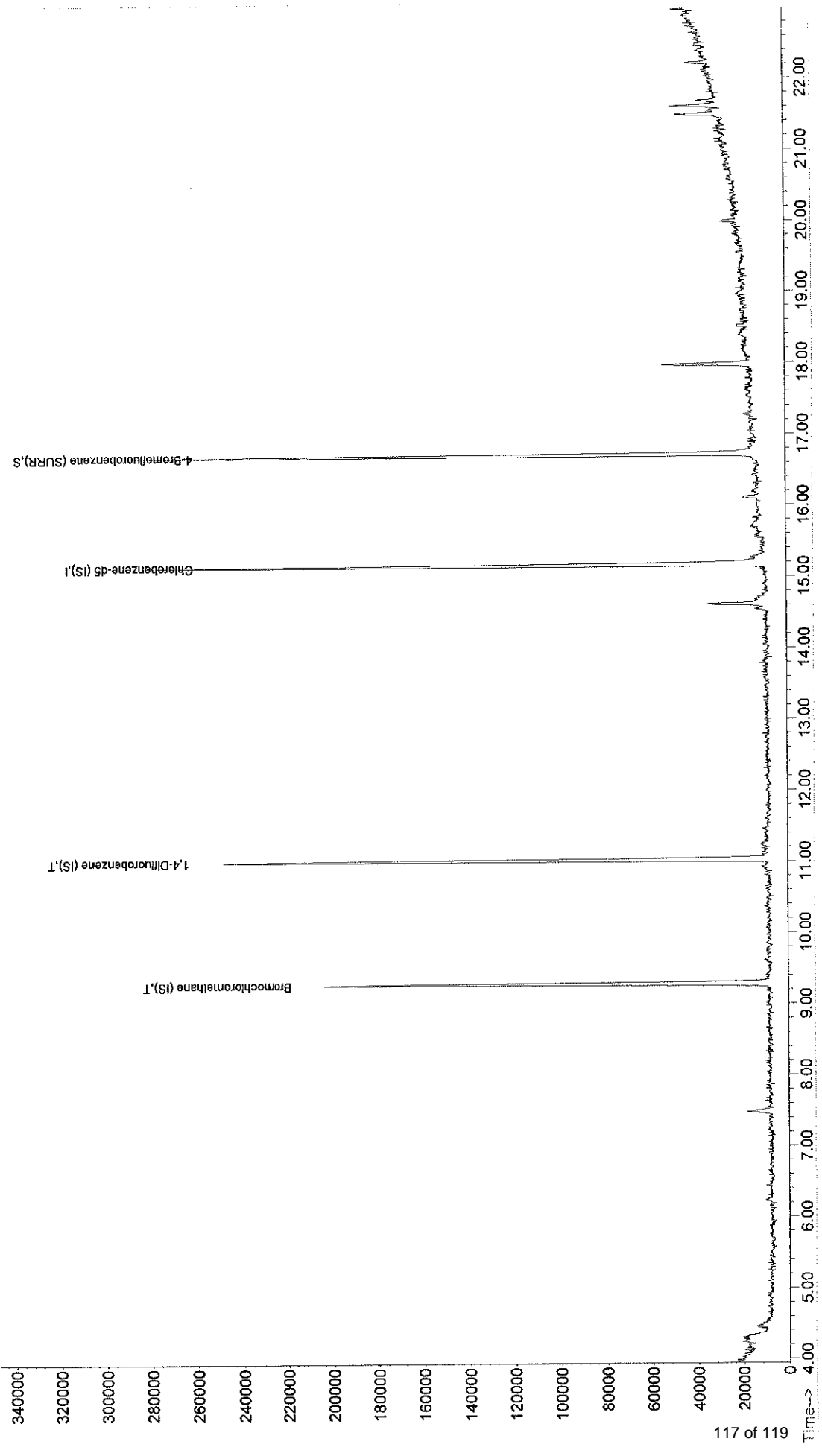
Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\022824\3501025.D
Acq On : 29 Feb 2024 12:53 pm
Sample : CSI-4697 BATCH
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 27 6:26 2024
Quant Results File: 020124AI.RES

Method : C:\HPCHEM\1\METHODS\031424AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Sun Mar 17 18:31:02 2024
Response via : Initial Calibration

TIC: 3501025.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\022824\0701008.D Vial: 7
 Acq On : 28 Feb 2024 3:39 pm Operator: TJG
 Sample : CSI-17896 BATCH Inst : GC/MS Ins
 Misc : TO-15 ANALYSIS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Mar 27 6:27 2024 Quant Results File: 031424AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031424AI.M (RTE Integrator)
 Title : Method TO-15 CALIBRATION
 Last Update : Sun Mar 17 18:31:02 2024
 Response via : Initial Calibration
 DataAcq Meth : ENTECH1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.28	128	64083	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.03	114	255064	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	15.16	117	206336	5.00	ppbv	0.00

System Monitoring Compounds
 56) 4-Bromofluorobenzene (SURR 16.71 95 142618 4.78 ppbv 0.00
 Spiked Amount 5.000 Range 62 - 145 Recovery = 95.60%

Target Compounds Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\022824\0701008.D
Acq On : 28 Feb 2024 3:39 pm
Sample : CSI-17896 BATCH
Misc : TO-15 ANALYSIS
MS Integration Params: rteint.p
Quant Time: Mar 27 6:27 2024
Quant Results File: 031424AI.RES

Method : C:\HPCHEM\1\METHODS\031424AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Sun Mar 17 18:31:02 2024
Response via : Initial Calibration

