We Energies
231 W. Michigan Street
Milwaukee, WI 53203

www.we-energies.com

June 23, 2023

Ms. Jennifer Meyer
Environmental Program Associate
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
1027 W. St. Paul Avenue
Milwaukee, WI 53233

Subject: **VAPOR MITIGATION SYSTEM CONSTRUCTION DOCUMENTATION REPORT AND OPERATION AND MAINTENANCE PLAN**
3100 West North Avenue, Milwaukee, Wisconsin
WDNR BRRTS # 02-41-583015
WDNR FID # 241311510

Dear Ms. Meyer,

Please find attached the Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan (Report) for the subject site.

This Report is being submitted via WDNR's online RR Program Submittal Portal. Pursuant to WDNR's current submittal policy, a hard copy of the Report is not being submitted.

Please feel free to contact me at your convenience at (414) 587-4467 (cell) or via email at frank.dombrowski@wecenergygroup.com if you have any questions.

Sincerely,

Frank Dombrowski
Principal Environmental Consultant
WEC Energy Group – Business Services

Attachment

Cc: Project File
Jeremiah Johnson, Geosyntec Consultants
Linda Stanek, WDNR

Prepared for

Wisconsin Electric Power Company
(d.b.a, We Energies)

VAPOR MITIGATION SYSTEM CONSTRUCTION DOCUMENTATION REPORT AND OPERATION AND MAINTENANCE PLAN

Metro North Service Center
3100 West North Avenue
Milwaukee, Wisconsin 53208
WDNR BRRTS # 02-41-583015
WDNR FID # 241311510

Prepared by

Geosyntec consultants

10600 N. Port Washington Road, Suite 100
Mequon, Wisconsin 53092
Project Number CHE8094OQ

June 23, 2023

VAPOR MITIGATION SYSTEM
CONSTRUCTION DOCUMENTATION REPORT AND OPERATION AND MAINTENANCE PLAN

Metro North Service Center
3100 West North Avenue
Milwaukee, Wisconsin 53208
WDNR BRRTS # 02-41-583015
WDNR FID # 241311510

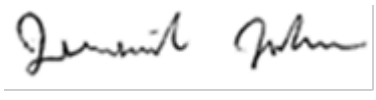
Prepared for

Wisconsin Electric Power Company
(d.b.a, We Energies)
333 West Everett Street
Milwaukee, WI 53203

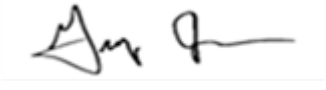
Prepared by

Geosyntec Consultants
10600 N. Port Washington Road, Suite 100
Mequon, Wisconsin 53092
Project Number CHE8094OQ

June 23, 2023



Jeremiah Johnson, P.G.
Senior Geologist
(Licensed P.G. in WI)



Greg Johnson, P.G., P.H., P.E.
Senior Engineer
(Licensed P.E. in WI, P.H. in WI, P.G. in IL, WI)

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1. INTRODUCTION

This *Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan* was prepared by Geosyntec Consultants (Geosyntec) on behalf of Wisconsin Electric Power Company (d.b.a, We Energies) for Metro North Service Center (MNSC) located at 3100 West North Avenue, Milwaukee, Wisconsin 53208 (Site).

This submittal documents construction and commissioning of the vapor mitigation system (VMS) at the Site and provides an operation and monitoring plan (O&M Plan) for the VMS. The Site VMS is an active submembrane depressurization system installed in the southwest portion of the Site building. The VMS includes a submembrane venting system [venting layer with three (3) riser pipes, blowers, and exhaust stacks] and a barrier (membrane) layer above the venting layer.

The purpose of this submittal is to satisfy the requirements of NR 724.15 and NR 724.13(2) of the Wisconsin Administrative Code. The NR 712.09 submittal certification is provided in **Appendix 1**.

This submittal follows the following correspondence with the Wisconsin Department of Natural Resources (WDNR) pertaining to the VMS:

- *Site Investigation and Remedial Action Options Report*, April 30, 2020.
- *Remedial Action Design Report*, June 29, 2020.
- *Vapor Mitigation System Commissioning Plan*, January 26, 2022.
- *Construction Permit Exemption - NR 406.04(1)(m)* request, May 2, 2022.
- WDNR *Request for an exemption from construction permitting under the Specific Categories of Exempt Sources in s. NR 406.04(1)(m)2., Wis. Adm. Code, for the construction of a vapor mitigation system* (exemption approval), May 16, 2022.

This submittal includes the following sections:

- Section 1: Introduction
- Section 2: General and Background Information
- Section 3: Construction
- Section 4: Construction Quality Assurance Testing
- Section 5: Commissioning
- Section 6: Air Permit Exemption
- Section 7: Operation and Maintenance Plan
- Section 8: References

2. GENERAL AND BACKGROUND INFORMATION

This section provides Site contact, location, and description information and a summary Site investigation and remedial action activities. Detailed background information is documented in the April 30, 2020 *Site Investigation and Remedial Action Options Report*, and in the June 29, 2020 *Remedial Action Design Report*.

2.1 Contact Information

The following table summarizes the contact information for the responsible party (RP) and consultant. The table also includes a listing of VMS RP contractors.

Responsible Party	We Energies Frank Dombrowski, Principal Environmental Consultant WEC Energy Group - Business Services Environmental Dept. - Land Quality Group 333 Everett Street, Milwaukee, WI 53203 Email: frank.dombrowski@wecenergygroup.com Phone: 414.221.2156
Consultant	Geosyntec Consultants Jeremiah Johnson, P.G., Senior Geologist 10600 North Port Washington Rd. Suite 100, Mequon, WI 53092 Email: jpjohnson@geosyntec.com Phone: 262.377.9828
Contractors	Remediation - NorthStar I&E, Inc. (NorthStar) VMS Installation - Midwest Barrier Solutions (NorthStar subcontractor) Survey - TerraTec Engineering, LLC (TerraTec) Laboratory - Pace Analytical Services, LLC (Pace) Laboratory - Eurofins TestAmerica

2.2 Site Location

The Site is identified by the property address of 3100 West North Avenue, Milwaukee, Wisconsin and Parcel (Taxkey) Number 3261641000.

The Site is located in the southwest ¼ of the southeast ¼ of Section 13, Township 7 North, Range 21 East, and at Wisconsin Transverse Mercator (WTM) coordinates 686676, 289696 on WDNR's RR Sites Map. The Site location is depicted on **Figure 1**.

2.3 Site Description

The Site is a 6.28-acre parcel developed with an approximately 81,300 square foot (sf) single-story building consisting of office space, a storage area and a garage area with a

vehicle service bay. Recent building reconstruction/renovation activities included demolition and reconstruction of the southwest portion of the building and expansion of the garage area (eastern portion of the building). The VMS was constructed in the reconstructed southwest portion of the building. The Site layout is depicted on **Figure 2**.

2.4 Site Investigation and Remedial Action Summary

2.4.1 Site Investigation

Site investigation activities are documented in the April 30, 2020 *Site Investigation and Remedial Action Options Report*. The following is a generalized summary of the Site investigation findings:

- Primary Source: a former dry cleaner (former building) was approximately located in the southwest portion of the current Site building area. This former dry cleaner, which operated prior to We Energies' ownership of the property, is considered the primary source of soil, groundwater and soil vapor impacts at the Site.
- Contaminant of Concern: tetrachloroethene (PCE) is the primary Site contaminant.
- Unsaturated Soil: unsaturated PCE soil impacts were substantially limited to the source area with the most significant soil impacts encountered at depths ranging from approximately 3 to 8 feet below ground surface (bgs).
- Groundwater: pre-source remedial action PCE groundwater concentrations greater than the NR 140 enforcement standard (ES) were limited to the source area and PCE concentrations significantly decrease with depth.
- Soil Vapor: pre-source area remedial action soil vapor concentrations (in soil vapor probes adjacent to utility laterals) greater than WDNR soil gas vapor risk screening levels (VRSLs) were limited to the vicinity of the source area and generally decreased with distance from the source area.

The Site investigation included two (2) indoor air sampling events conducted in January and August 2019. Seven (7) indoor air samples were collected during each sampling event and submitted to Pace for analysis of PCE and PCE degradation products [trichloroethene (TCE), cis- and trans-1,2-dichloroethene (DCE), and vinyl chloride] by EPA-Method TO-15. PCE was detected in each of the indoor air samples at concentrations ranging from 41.6 to 85.3 micrograms per cubic meter (ug/m^3) in the January 2019 sampling event and ranging from 64.4 to 118 ug/m^3 in the August 2019 sampling event. Each of the detected PCE concentrations was less than the WDNR indoor air vapor action level (VAL) for large commercial/industrial buildings of 180 ug/m^3. No other VOCs were detected in the indoor air samples.

2.4.2 Source Area Remedial Action

Source area unsaturated soil and shallow groundwater remedial action was completed in 2021 pursuant to the June 29, 2020 *Remedial Action Design Report*. Source area remedial action activities are documented in the June 23, 2023 *Source Area Remedial Action Construction Documentation Report*. As documented in that report, approximately 4,630 tons of PCE-impacted soil was removed from the source area (i.e., pre-treated, excavated and disposed in off-Site licensed disposal facilities).

2.4.3 Post-Source Area Remedial Action Groundwater Monitoring

Post-source remedial action groundwater monitoring wells were installed in April 2022 pursuant to the June 29, 2020 *Remedial Action Design Report*. To date, post-source area remedial action groundwater monitoring has been conducted in August/September 2022, December 2022 and May 2023 in accordance with an August 12, 2022 *Groundwater Monitoring Plan*.

3. CONSTRUCTION

This section provides a summary of the VMS construction. Construction activities were coordinated with building reconstruction work.

The VMS was installed in 2021 by Midwest Barrier Solutions. VMS installation photographs are provided in **Appendix 2** and a completed Interstate Technology and Regulatory Council (ITRC) Vapor Intrusion Mitigation System Post-Installation Verification Checklist is included in **Appendix 3**. VMS product information is included in the O&M Plan (**Appendix 7**).

3.1 General Description

The VMS was installed in the reconstructed southwest portion of the building, generally above the original Site source area (following source area remedial action).

The VMS generally includes a submembrane venting system (venting layer with riser pipes, blowers, and exhaust stacks), an approximate 19,200 sf barrier (membrane) layer above the venting layer, and sub-slab vapor probes. The VMS as-built layout and as-built details are depicted on **Figure 3** and **Figure 4**, respectively.

3.2 Venting System

The venting system consists of a venting layer, riser pipes, blowers and stacks and associated instrumentation as follows:

- Venting Layer. The venting layer consists of a 6-inch coarse granular layer with incorporated GEOVENT™ conveyance units (1-foot wide by 1-inch thick, three-dimensional vent core wrapped in a non-woven, needle-punched filter fabric). The as-built GEOVENT™ conveyance unit layout is depicted on **Figure 3**. Refer to Photographs 1 and 2 (**Appendix 2**) for venting layer installation.
- Riser Pipes. The venting layer is connected to three (3) 4-inch diameter polyvinyl chloride (PVC) riser pipes. The riser pipe locations are designated extraction points EP-1, EP-2 and EP-3 on **Figure 3**.
- Blowers and Stacks. The three (3) riser pipes extend to individual blowers [Obar GBR76 SOE (16" WC @ Max Flow 155 CFM)] installed on the roof. The blowers are connected to the building power supply through a dedicated electrical breaker and each blower has a power disconnect switch. Exhaust stacks extend from the top of each blower. The exhaust stacks were originally constructed to extend to a height of approximately 5 feet above the roof line. The stacks were extended an additional 5 feet in January 2023 as a preventative

measure due to the proximity of roof top heating, ventilation, and air conditioning (HVAC) units with return air dampers. The exhaust stack locations are depicted on **Figures 2 and 3**. Refer to Photographs 17, 18, 19 and 20 (**Appendix 2**) for blower, stack and electrical panel/breaker installation.

- Instrumentation. Each riser pipe is fitted with instrumentation for balancing flow (ball valve), measuring vacuum (Magnehelic® differential pressure gauge), flow monitoring (measurement port) and discharge sampling (sampling port). An alarm (RadonAway™ Checkpoint IIa 28001-2) is installed at each riser to provide an auditory indication that the blower has stopped generating vacuum. Refer to Photograph 16 (**Appendix 2**) for riser pipe instrumentation.

3.3 Barrier (Membrane) Layer

A barrier (membrane) layer was installed over the venting layer. The barrier layer consists of a 20-mil VI-20™ polyethylene geomembrane overlain by a minimum 60-mil LIQUID BOOT® spray-applied barrier. The extent of the barrier layer is depicted on **Figures 2 and 3**. Refer to Photographs 5 through 10 (**Appendix 2**) for barrier layer installation.

The geomembrane seams were overlapped a minimum of 6 inches. The geomembrane was cut tight around penetrations and along the perimeter edges. A thin tack coat of LIQUID BOOT® was sprayed over the seams, around the penetrations and along the perimeter edges prior to full LIQUID BOOT® application. Penetrations were sealed (around and up the penetrations).

Following quality control testing (refer to Section 4.0), a barrier protection layer (UltraShield™ G-1000 polypropylene, non-woven geotextile) was placed over the barrier layer (to protect the barrier layer from damage during subsequent slab construction). Refer to Photograph 14 (**Appendix 2**) for barrier protection layer installation.

3.4 Vapor Probes

Sub-slab vapor probes were installed at five (5) locations (VP-1 to VP-5) for the purpose of pressure field extension (PFE) (i.e., zone of influence/communication) testing to demonstrate PFE (differential negative pressure) over the VMS area. The vapor probe locations are depicted on **Figure 3**. A vapor probe detail is depicted on **Figure 4**. Refer to Photographs 3, 4 and 15 (**Appendix 2**) for vapor probe installation.

3.5 Utility Trench Plug Construction

A low-permeability trench plug was installed by NorthStar for a water line entering the re-constructed portion of the building (VMS area). The approximate location of the trench plug is depicted on **Figure 3**. Refer to Photographs 21 and 22 (**Appendix 2**) for utility trench plug construction.

The trench plug is approximately 3 feet in length and extends from the bottom of the utility trench to approximately 6 feet bgs.

The trench plug was constructed of controlled low-strength materials (CLSM) (flowable cementitious fill) and bentonite.

4. CONSTRUCTION QUALITY ASSURANCE TESTING

This section provides a summary of the VMS construction quality assurance (CQA) testing scope and results.

4.1 Membrane Thickness Testing

Destructive testing of the cured barrier layer was conducted by Midwest Barrier Solutions to confirm a minimum thickness of 80 mils (20-mil geomembrane overlain by a minimum 60-mil LIQUID BOOT®). Twenty-three (23) samples were collected, and the thickness was measured with a mil-reading caliper. The number of samples met the minimum design specified frequency of one (1) test per 2,000 sf. The measured thicknesses ranged from 80 to 110 mils, confirming the minimum thickness had been met. Refer to Photographs 11 and 12 (**Appendix 2**) for membrane thickness testing implementation.

Sample holes were patched with 20-mil geomembrane overlapping the void by a minimum of 2 inches (a thin tack coat of LIQUID BOOT® was applied under the 20-mil geomembrane patch) and then applying LIQUID BOOT® to a 60-mil minimum thickness, extending at least 3 inches beyond the 20-mil geomembrane patch.

4.2 Membrane Leak Testing

Smoke leak testing of the barrier layer was conducted by Midwest Barrier Solutions following LIQUID BOOT® installation and curing to confirm sealing around penetrations and edges. Twelve (12) smoke tests were conducted which met the minimum design specified frequency of one (1) test per 2,000 sf. Penetration and edge seal leaks observed during the smoke testing were addressed by supplemental LIQUID BOOT® application. Refer to Photograph 13 (**Appendix 2**) for membrane leak testing implementation.

5. COMMISSIONING

The VMS commissioning was completed in 2022 and 2023 in accordance with the January 26, 2022 *Vapor Mitigation System Commissioning Plan*. VMS commissioning consisted of performance verification monitoring and establishing operational baseline conditions.

5.1 Performance Verification Monitoring

5.1.1 Pressure Field Extension (PFE) Testing

PFE testing was conducted using the five (5) installed vapor probes (VP-1 to VP-5) depicted on **Figure 3**. PFE testing was conducted using a TEC DG-8 Digital Pressure Gauge with an accuracy of 0.001 inch-H_2O.

Vapor probe vacuum measurements were initially performed during VMS startup; however, during this startup phase of commissioning, apparent remnant construction-related water was observed at EP-1 and/or EP-3 (monitoring events between February 9 and March 16, 2022). These initial vapor probe measurement data are provided in **Table 1**. The water dissipated after this approximately initial month of commissioning. At this point, PFE testing, and extraction point (EP-1 to EP-3) flow and vacuum balancing, were initiated.

Eleven (11) PFE testing events were conducted during the performance verification monitoring period between March 18, 2022 and February 17, 2023. Each of these PFE testing events demonstrated that the target differential negative pressure of at least 0.004 inch-H_2O was achieved at each of the vapor probes. These data are presented in **Table 1**.

5.1.2 Indoor Air Sampling

Four (4) indoor air sampling events were conducted during the performance verification monitoring period to confirm that indoor air concentrations were less than WDNR vapor action levels (VALs). The sampling events were conducted in June and December 2022 and January and February 2023. The 2023 sampling events were conducted due to anomalous results for the December 2022 sampling event.

Six (6) indoor air samples (IA-01 to IA-06) and one (1) outdoor ambient air sample (OA-07) were collected during each sampling event. The approximate sample locations[1] are depicted on **Figure 5**.

The air samples were collected over an 8-hour period using 6-liter Summa® canisters with laboratory-supplied flow controllers (to provide an 8-hour time-weighted average concentration). The Summa® canisters were deployed approximately 3 to 5 feet above the floor/ground surface. One (1) duplicate indoor air sample was collected during each sampling event.

The samples were submitted under standard chain-of-custody protocols for laboratory analysis of select chlorinated VOCs (PCE, TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride) by EPA-Method TO-15.

The June and December 2022 samples were submitted to Pace for analysis. Replicate samples were collected from each location during the January and February 2023 sampling events for analysis by separate laboratories (Pace and Eurofins TestAmerica).

The air sampling results are summarized in **Table 2** and the laboratory reports are provided in **Appendix 4**.

PCE was the primary chlorinated VOC detected in indoor air[2]. PCE was detected at concentrations ranging from 0.44 to 14.0 micrograms per cubic meter (ug/m^3) with the exception of the anomalous December 2022 sampling results[3]. These results are at least an order of magnitude less than the WDNR indoor air VAL of 180 ug/m^3.

[1] The indoor air samples were collected at consistent locations for each sampling event. Outdoor air sample locations varied based on wind direction (placed on upwind side of building) as noted on **Figure 5**.

[2] Only sporadic low concentrations of TCE, cis-1,2-DCE, and trans-1,2-DCE were detected in indoor air samples. Vinyl chloride was not detected in any of the indoor air samples.

[3] For the December 2022 sampling event, PCE was detected in two (2) indoor air samples (IA-03 and IA-05) at concentrations just exceeding the WDNR VAL (refer to **Table 2**). These results are anomalous compared to the initial (June 2022) sampling results and subsequent (January and February 2023) sampling results which were typically two orders of magnitude less. As noted in Section 3.2, each VMS stack was extended an additional 5 feet in January 2023 as a preventative measure due to the proximity of roof top HVAC units with return air dampers (in the event the anomalous results were due to short-term impact to the HVAC units from system stack exhaust). Subsequent confirmation indoor air sampling (February 2023) documented substantially lower PCE concentrations.

5.1.3 Alarm Testing

Each blower alarm will be tested in accordance with the manufacturer's procedure to verify operations.

5.2 Operational Baseline Conditions

5.2.1 Air Flow and Vacuum

Operational baseline conditions were established during VMS commissioning concurrently with performance verification monitoring period. These operational monitoring data are provided in **Table 1**. Air flow was measured at the measurement port on each riser pipe with a Dwyer Model 471B Digital Thermo Anemometer and blower vacuum was measured by the differential pressure gauge mounted on each riser pipe. Based on these data, the following typical operational baseline conditions were established for the VMS:

Extraction Point	Blower Setting	Air Flow Range (scfm)	Vacuum Range (inch-H_2O)
EP-1	10	1500 to 1550	-7.5 to -8.0
EP-2	10	1450 to 1500	-7.5 to -8.0
EP-3	10	1400 to 1500	-9.0 to -9.2
Notes: scfm - standard cubic feet per minute			

5.2.1 VOC Discharge

VMS VOC discharge air samples were collected from each extraction point (EP-1, EP-2 and EP-3) on March 18, 2022 to establish baseline conditions (and to support a request for an air permit exemption; refer to Section 6.0). A duplicate sample was also collected from EP-2 (EP-2 DUP).

The air emissions samples were collected by connecting a 1-liter Summa® canister with Nylaflow™ tubing connected to the sampling port on each riser pipe. The samples were submitted to Pace under standard chain-of-custody protocols for laboratory analysis of VOCs by EPA-Method TO-15.

During sampling, the air flow velocity and vacuum were measured. The air flow velocity was measured using a Dwyer Model 471B Digital Thermo Anemometer at the measurement port installed on each riser pipe. Vacuum was measured by the differential pressure gauge mounted on each riser pipe.

The laboratory report is provided in **Appendix 5**. **Table 3** provides a summary of the detected VOCs, detected concentrations[4], measured flow velocity, measured vacuum, calculated volumetric flow rate and calculated mass flux (emissions) for each riser pipe and the calculated total emissions for the system (EP-1 + EP-2 + EP-3).

As provided in **Table 3**, the calculated total system VOC emissions was 0.00075 pounds per hour (lb/hr) or 6.6 pounds per year (lb/yr). PCE makes up most of the VOC emissions. The calculated total system PCE emissions was 0.00047 lb/hr (4.14 lb/yr).

[4] For EP-2, the highest concentration between the EP-2 and EP-2 DUP samples is provided in **Table 3** and subsequently used for the EP-2 emissions calculation.

6. AIR PERMIT EXEMPTION

A request for an exemption from an air pollution construction permit for the VMS pursuant to NR 406.04(1)(m) was submitted to WDNR on May 2, 2022. The WDNR subsequently granted the exemption in a May 16, 2022 letter. A copy of the WDNR letter and associated WDNR review and analysis memorandum are included in **Appendix 6**.

The exemption was applicable based on the discharge sampling results, air emissions calculations and NR 406.04 and NR 445.07 emissions thresholds summarized in **Table 3**.

As documented in **Table 3**, the calculated total system VOC emissions (0.00075 lb/hr) was four orders of magnitude less than the NR 406.04 threshold for organic compounds of not more than 5.7 lb/hr. In addition, the calculated total system PCE emissions (0.00047 lb/hr or 4.14 lb/yr) were four and two orders of magnitude less than the NR 445.07 PCE thresholds (for stacks heights less than 25 feet) of 9.11 lb/hr and 301 lb/yr, respectively. The total system emissions for other detected VOCs were at least four orders of magnitude less than NR 445.07 emissions thresholds.

7. OPERATION AND MAINTENANCE PLAN

A VMS O&M Plan is provided in **Appendix 7**. The O&M Plan was prepared pursuant to NR 724.13 and in general accordance with the "Vapor Mitigation System Operation and Maintenance Plan Checklist" included in WDNR guidance RR-981 "Maintenance Plans for Vapor Mitigation Systems/Vapor Intrusion Response Actions/Vapor Barriers". The VMS O&M Plan includes a general system description and purpose, as-built conditions, baseline conditions, inspection and testing, maintenance, annual discharge sampling (to assess NR 438 reporting levels), notifications and contacts.

8. REFERENCES

Geosyntec (2019). *Site Investigation Work Plan*, Metro North Service Center, 3100 West North Avenue, Milwaukee, Wisconsin; prepared for We Energies; March 12, 2019.

Geosyntec (2020a). *Site Investigation and Remedial Action Options Report*, Metro North Service Center, 3100 West North Avenue, Milwaukee, Wisconsin; prepared for We Energies; April 30, 2020.

Geosyntec (2020b). *Remedial Action Design Report*, Metro North Service Center, 3100 West North Avenue, Milwaukee, Wisconsin; prepared for We Energies; June 29, 2020.

Geosyntec (2022a). *Vapor Mitigation System Commissioning Plan*, Metro North Service Center, 3100 West North Avenue, Milwaukee, Wisconsin; prepared for We Energies; January 26, 2022.

Geosyntec (2022b). *Groundwater Monitoring Plan*, Metro North Service Center, 3100 West North Avenue, Milwaukee, Wisconsin; prepared for We Energies; August 12, 2022.

Geosyntec (2023). *Source Area Remedial Action Construction Documentation Report*, Metro North Service Center, 3100 West North Avenue, Milwaukee, Wisconsin; prepared for We Energies; June 23, 2023.

USGS (2018). Milwaukee, Wisconsin, 7.5 Minute Series (Topographic) Quadrangle Map, 2018.

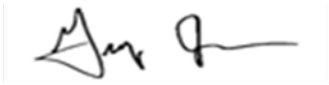
APPENDIX 1

NR 712.09 Submittal Certification

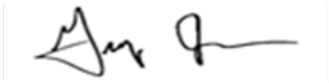
NR 712.09 Submittal certification.

Document Name	VAPOR MITIGATION SYSTEM CONSTRUCTION DOCUMENTATION REPORT AND OPERATION AND MAINTENANCE PLAN
Document Date	June 23, 2023
Site Name	Metro North Service Center
WDNR BRRTS #	02-41-583015

"I, Greg Johnson, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

 Greg Johnson, P.H., P.G., P.E. Senior Engineer P.E. #: 29898-006	 6/23/2023
Signature, title and P.E. number	P.E. stamp

"I, Greg Johnson, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

	6/23/2023
Signature and title	Date

"I, Jeremiah Johnson, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

	6/23/2023
Signature and title	Date

APPENDIX 2

Photographs

GEOSYNTEC CONSULTANTS
Photographic Record

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 1 **Date:** 2/23/2021 **Direction:** NA **Comments:** venting layer (granular layer and GEOVENT™) installation	
Photograph 2 **Date:** 7/28/2021 **Direction:** NA **Comments:** venting layer (granular layer and GEOVENT™) installation	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

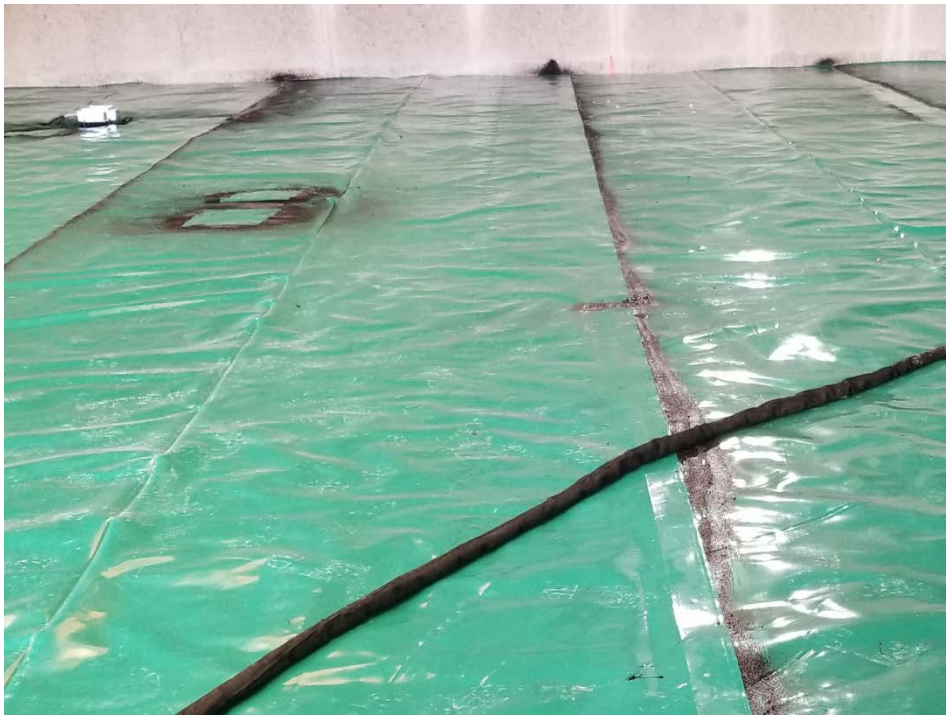
Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 3 **Date:** 2/23/2021 **Direction:** NA **Comments:** vapor probe	
Photograph 4 **Date:** 2/23/2021 **Direction:** NA **Comments:** vapor probe installation (prior to barrier layer installation)	

GEOSYNTEC CONSULTANTS Photographic Record	Geosyntec consultants
Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 5 **Date:** 2/24/2021 **Direction:** NA **Comments:** barrier layer installation (geomembrane)	

Photograph 6 **Date:** 2/24/2021 **Direction:** NA **Comments:** barrier layer installation (geomembrane and LIQUID BOOT® seams)	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

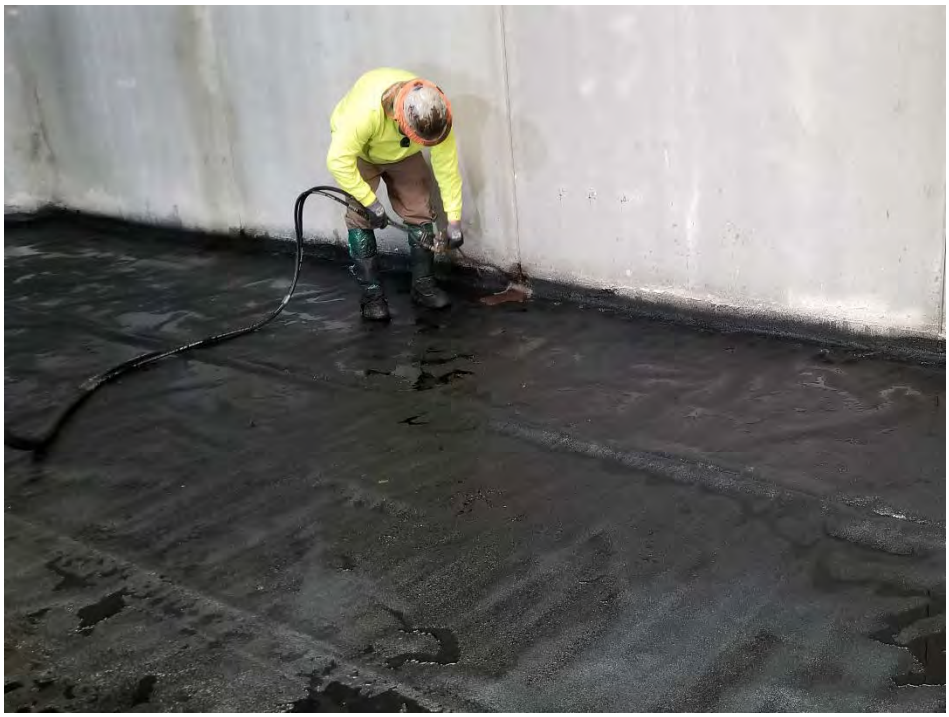
Photograph 7 **Date:** 7/30/2021 **Direction:** NA **Comments:** barrier layer installation (geomembrane and LIQUID BOOT® seams and boundaries)	

Photograph 8 **Date:** 2/24/2021 **Direction:** NA **Comments:** barrier layer installation (LIQUID BOOT® over geomembrane)	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 9 **Date:** 2/25/2021 **Direction:** NA **Comments:** barrier installation (LIQUID BOOT®)	

Photograph 10 **Date:** 2/25/2021 **Direction:** NA **Comments:** barrier installation (LIQUID BOOT®)	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 11 **Date:** 7/30/2021 **Direction:** NA **Comments:** barrier quality control sample collection for thickness verification	

Photograph 12 **Date:** 7/30/2021 **Direction:** NA **Comments:** barrier quality control sample thickness verification	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 13	
Date: 2/25/2021	
Direction: NA	
Comments: barrier quality control smoke testing	

Photograph 14	
Date: 7/28/2021	
Direction: NA	
Comments: barrier protection layer (non-woven geotextile) over barrier layer	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 15 **Date:** 4/14/2023 **Direction:** NA **Comments:** vapor probe	
Photograph 16 **Date:** 10/6/2022 **Direction:** NA **Comments:** riser pipe, ball valve, Magnehelic® differential pressure gauge and alarm	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 17	
Date: 9/23/2021	
Direction: NA	
Comments: roof-mounted blower	

Photograph 18	
Date: 4/14/2023	
Direction: NA	
Comments: blower and stack	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 19	
Date: 10/6/2022	
Direction: NA	
Comments: electrical panel	

Photograph 20	
Date: 10/6/2022	
Direction: NA	
Comments: VMS breakers 85, 87 and 89	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 21 **Date:** 3/9/2021 **Direction:** SE **Comments:** utility trench plug construction	
Photograph 22 **Date:** 3/9/2021 **Direction:** SE **Comments:** utility trench plug construction	

APPENDIX 3

Post-Installation Verification Checklist

VAPOR INTRUSION MITIGATION SYSTEM POST-INSTALLATION VERIFICATION CHECKLIST

The purpose of this checklist is to provide the user with a selection of tools to verify that the appropriate system components for the vapor intrusion mitigation system (VIMS) were installed and the system is operating as designed. This information applies to the four most common active mitigation systems (SSD, SSV, SMD, and CSV) and passive systems that are described in the associated Fact Sheets and Technology Information Sheets. The user of this checklist should review the VIMS design or as-built documentation prior to completing this checklist.

This document was prepared in consideration of multiple types of VIMS. Not all the information presented below is necessary to document system operation for all types of systems on all types of buildings. The user should be able to identify which criteria below best represent effective operation for their specific mitigation system and which criteria will validate the conceptual site model for the VIMS that was implemented. Timing on when to collect post-installation verification data may vary and more than one event may be reasonable. See the ***Post-Installation Verification Fact Sheet*** for additional information on timing a post-installation verification site visit.

Instructions for Use: Major system components are grouped below for this checklist, and one or more of these groups may not apply to a particular VIMS design. Those groups can be marked as Not Applicable by selecting the 'X' box to the right of the group.

Design elements within these groups that **will** apply should be selected by checking the appropriate box included for this checklist as:

Yes—the design element was considered and documented
No—this item was not considered and may be relevant to the overall system performance, applicable guidance, and/or best practices
NA—not applicable to the system design or operation

This checklist is intended to serve as a guide for design considerations and as documentation for VIMS installation. This list can be modified for a specific project or program if needed or can be used as shown. The list should be submitted along with the final project as-builts and/or installation oversight verification documentation and reporting.

1. SITE INFORMATION

Address inspected: 3100 West North Avenue
Milwaukee, WI

Date of inspection: 2022 and 2023; multiple dates

Inspector(s): Dave Zolp

Inspector's company name: Geosyntec Consultants

Building contact:

Building contact phone number:

Note: As-built drawings & performance criteria are needed when conducting inspections of vapor intrusion mitigation systems.
refer to 2023 Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan

2. BUILDING TYPE

☐ Existing building
■ New construction

vapor mitigation system installed in the re-constructed (southwest) portion of Site building

3. TYPE OF SYSTEM

Active

☐ Sub-slab depressurization (SSD)
☐ Sub-slab venting (SSV)
■ Sub-membrane depressurization (SMD)
☐ Crawlspace ventilation (CSV)

Passive (Check all that apply)

☐ Epoxy floor coating (EFCs)
☐ Passive barrier system
☐ Passive sub-slab venting (PSSV)
☐ Aerated floors

4. SYSTEM DESIGN COMPONENTS AND INSTALLATION DOCUMENTATION

4.1. Site Conditions/Conceptual Site Model

- Contaminant concentrations at the site have been reviewed and compared to generic or building-specific screening levels. The level of applied effort (flow and vacuums) should be proportional to the magnitude of the concentrations. In large buildings, the VIMS target treatment area may not include the entire footprint, but should allow for adequate capture of vapors to mitigate the potential for unacceptable risk to the occupants of the building. ■ Yes ☐ No ☐ NA *refer to 2020 Remedial Action Design Report*
- Slab conditions should be verified/inspected for cracks/voids/utility penetrations/potential preferential pathways (if known/observed) and identified on a diagram, sealed to the extent practical, and visually inspected during post-installation verification event. ■ Yes ☐ No ☐ NA *new slab constructed in VMS area*

4.2. Extraction Point(s) ☐ Not applicable

- Suction point location, diameter, and sealing are documented. ■ Yes ☐ No ☐ NA
- Pipe and manifold location, materials, diameter, slope, and sealing are documented. ■ Yes ☐ No ☐ NA
- Sample port, shutoff valve, and access have been identified.
- U-tube manometer (or similar vacuum gauge) is installed and target vacuum level is clearly marked ■ Yes ☐ No ☐ NA

4.3. Collection Piping ☐ Not applicable

- As-built collection piping diagrams have been provided. ■ Yes ☐ No ☐ NA
- Riser pipe is located in an interior wall where possible and does not penetrate firewalls or shear walls. ■ Yes ☐ No ☐ NA
- Fire collars are installed on pipes where firewalls are penetrated. ☐ Yes ☐ No ■ NA
- Vent piping system was designed by a qualified individual with VIMS design experience. ■ Yes ☐ No ☐ NA *refer to 2020 Remedial Action Design Report*
- All vent stack piping is identified as solid, rigid pipe. ■ Yes ☐ No ☐ NA
- All pipe joints and connections are permanently sealed. ■ Yes ☐ No ☐ NA
- Foundation penetration sleeves are installed as approved by the structural engineer. ☐ Yes ☐ No ■ NA
- All exhaust pipes are supported and secured in a permanent manner consistent with building codes. ■ Yes ☐ No ☐ NA

- Horizontal piping runs are sloped to ensure that condensation drains into the ground beneath the slab. ☐ Yes ☐ No ■ NA
  GEOVENT™ conveyance units
- Vertical piping runs drain naturally or can be verified to be free of water or moisture. ■ Yes ☐ No ☐ NA

4.4. Piping Completion Specifications ☐ **Not applicable**

(Review the primary wind flow direction from nearby weather stations.)

- As-built collection piping diagrams have been provided. ■ Yes ☐ No ☐ NA
- Pipes are completed with an exhaust stack and are an appropriate height above the roof. ■ Yes ☐ No ☐ NA
- Point(s) of discharge are an appropriate distance away from any air intake location, opening (door, chimney flue, window, vent, etc.), or occupied spaces, including adjacent structures. ■ Yes ☐ No ☐ NA
- To reduce the risk of vent stack blockage, confirm that the point of discharge from vent stack pipes is vertical and upward, outside the structure. Consider wire mesh to deter birds and small animals ■ Yes ☐ No ☐ NA

4.5. Blower/Fan ☐ **Not applicable**

- Blower/fan number, location, size, model number, and performance specifications are documented. ■ Yes ☐ No ☐ NA
- Blower/fan is securely mounted with discharge locations far from building intake locations. ■ Yes ☐ No ☐ NA
- Electrical components and wiring were installed by a licensed electrician in accordance with applicable building codes. ■ Yes ☐ No ☐ NA
- Intrinsically safe or explosion-proof components installed where specified in the project plans. ☐ Yes ☐ No ■ NA
- Diagnostic testing and results are documented and summarized to meet design criteria. ■ Yes ☐ No ☐ NA
- Audible and/or visual low vacuum alarm is installed, tested, and separately powered (e.g., battery). ■ Yes ☐ No ☐ NA
- Controller system (where present): model number, location, OM&M manual are documented. ☐ Yes ☐ No ■ NA
- Telemetry system (where present): model number, location, OM&M manual are documented. ☐ Yes ☐ No ■ NA

4.6. Monitoring Probes ☐ **Not applicable**

- Sub-slab vapor probes, if needed, are installed in accordance with design (appropriate number and location(s)). ■ Yes ☐ No ☐ NA
- Surface completion provides a seal to the subsurface and a leak check test was passed. ■ Yes ☐ No ☐ NA
- Probes and surface completions are level to grade to minimize trip hazard. ■ Yes ☐ No ☐ NA

4.7. Post-Installation Diagnostic Testing ☐ **Not applicable**

- System flow and vacuum are documented in vent pipe(s) and data meet design criteria. ■ Yes ☐ No ☐ NA

- Pressure field extension (PFE) testing is documented to meet design criteria across targeted areas. ■ Yes ☐ No ☐ NA
- Additional diagnostics were performed as appropriate where data do not meet expectations. ☐ Yes ☐ No ■ NA
- Effluent concentrations were measured and calculated discharge meets design criteria/permit limits, if needed. ■ Yes ☐ No ☐ NA
  air permit exemption granted by WDNR based on discharge sampling data
- Nonsealed combustion appliances were checked for back drafting/CO_2 levels. ☐ Yes ☐ No ■ NA

4.8. System Monitors and Labeling ☐ **Not applicable**

- System labels are placed on the mitigation system, riser piping, electrical panel breaker and junction box, and other prominent locations, including the exterior venting locations. ■ Yes ☐ No ☐ NA
- Description of signage and locations is provided. ■ Yes ☐ No ☐ NA
  - signage contains language indicating that the mitigation vent may contain volatile organic compounds ☐ Yes ■ No ☐ NA
  - figure provided, if needed, identifying locations of signs ☐ Yes ☐ No ■ NA
  - name and contact information for operator clearly visible with instructions to notify operator in the event of alarm conditions, damage to any system component, power failure, etc. ■ Yes ☐ No ☐ NA
- ~~Documentation states that a~~ notice has or will be provided to tenants that will be occupying the structure. ■ Yes ☐ No ☐ NA
  We Energies has notified employees of VMS

4.9. System Design and Specification ☐ **Not applicable**

- Mitigation system design has been reviewed by a vapor intrusion mitigation specialist, professional engineer, or professional with demonstrated mitigation design experience. ■ Yes ☐ No ☐ NA
  refer to 2020 Remedial Action Design Report
- As-built project plans ~~and specifications~~ have been prepared and reviewed by the designer. ■ Yes ☐ No ☐ NA
  refer to 2023 Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan
- Electrical one-line diagrams have been prepared and reviewed by a licensed electrician. ☐ Yes ■ No ☐ NA
- Dewatering has been considered and, if necessary, incorporated into the design. ☐ Yes ☐ No ■ NA
- Engineer or design firm is identified. ■ Yes ☐ No ☐ NA
- Building/fire codes: Document states that mitigation systems is designed and installed to conform to applicable building and fire codes and to maintain the function and operation of existing equipment and building features, including doors, windows, access panels, etc. ☐ Yes ☐ No ☐ NA
  vapor mitigation system installed during building re-construction and pursuant to re-construction codes and permits
- Permits: Documentation is provided that the system passed required permit inspections. ☐ Yes ☐ No ☐ NA

4.10. Sumps ☐ **Not applicable**

- Floor drains are designed to allow water to flow into sumps while sealing out soil gases from entering the indoor air space from the sub-floor area (e.g., Drainjer-style drain). ☐ Yes ☐ No ■ NA

5. NEW CONSTRUCTION ☐ **Not applicable**

5.1. Aggregate Layer ☐ **Not applicable**

- Delivered sub-slab aggregate grain size gradation matches project design specifications. ■ Yes ☐ No ☐ NA
- Aggregate is uniformly compacted and rolled flat and is free of protrusions or debris that may be a puncture hazard. ■ Yes ☐ No ☐ NA
- Aggregate thickness was measured and documented to meet project specifications. ■ Yes ☐ No ☐ NA

5.2. Engineered Plenums (e.g., drainage mats) ☐ **Not applicable**

- Engineered plenums were supplied and documented to meet project specifications. ■ Yes ☐ No ☐ NA
  GEOVENT™ conveyance units
- Plenum was uniformly laid flat across target treatment area to meet project specifications. ■ Yes ☐ No ☐ NA

5.3. Collection and Manifold Piping ■ **Not applicable**

- Delivered vapor collection piping matches project design specifications. ☐ Yes ☐ No ■ NA
- Vapor collection piping is laid and pipe joints and connections are permanently sealed. ☐ Yes ☐ No ■ NA
- Solid piping is used in areas adjacent to utilities or trenches or where short circuiting may occur ☐ Yes ☐ No ■ NA

5.4. Membrane Installation Documentation ☐ **Not applicable**

- Membrane manufacturer installation requirements are provided. ■ Yes ☐ No ☐ NA
- System was installed by a certified installation vendor, if required by the manufacturer. ■ Yes ☐ No ☐ NA
  CETCO-approved LIQUID BOOT Applicator
- Mitigation system as-built drawings are provided. ■ Yes ☐ No ☐ NA
- Photographic log is provided for seals/repairs at the following locations: ■ Yes ☐ No ☐ NA
  - along foundation edge ■ Yes ☐ No ☐ NA
  - around foundation penetrations (slab penetrations) ■ Yes ☐ No ☐ NA
  - along vertical exterior walls ■ Yes ☐ No ☐ NA
  - around elevator shafts ☐ Yes ☐ No ■ NA
  - coupon/smoke testing repairs ■ Yes ☐ No ☐ NA
- **Trench Dams:** Utility trench dams were installed in ~~all~~ utility trenches leading to the building. ■ Yes ☐ No ☐ NA
  water line; refer to 2023 Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan
- **Conduit Seals**: Conduit seals were installed in all electrical conduits that extend below the membrane. ☐ Yes ☐ No ☐ NA

5.5. Membrane Design and Specification ☐ **Not applicable**

- Membrane selection and/or thickness was considered for potential contaminant concentrations in the subsurface (i.e., chemical compatibility). ■ Yes ☐ No ☐ NA
- Sub-slab screening levels protective of diffusive transport across the slab have been calculated and monitoring is specified to document sub-slab concentrations after the membrane is placed. Contingencies are in place to modify the system (i.e., ☐ Yes ☐ No ■ NA

potentially activate a passive system) if diffusive transport may become an issue.

- Documentation provides details for areas that require specialized completion, including all penetrations and terminations. ■ Yes ☐ No ☐ NA
  refer to 2023 Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan; photographs of penetration seals
- Drains that perforate the barrier are designed to allow water to flow into sumps and floor drains while sealing out soil gases from entering the indoor air space from the sub-floor area (e.g., Drainjer-style drain).
- Membrane selection and/or thickness was considered for potential contaminant concentrations in the subsurface (i.e., chemical compatibility). ■ Yes ☐ No ☐ NA

5.6. Quality Assurance/Quality Control Installation Plan Requirements Identified in the Design Document ☐ **Not applicable**

refer to 2020 Remedial Action Design Report

- Products and materials installed meet the project design specifications. ■ Yes ☐ No ☐ NA
- Material Safety Data Sheets (MSDS) for potential background contaminants (e.g., adhesives, glues, etc.) were reviewed. ☐ Yes ☐ No ■ NA
- Installation was conducted in accordance with manufacturer's specifications (e.g., weather, curing time). ■ Yes ☐ No ☐ NA
- Estimated quantities of the product to be used are provided. ■ Yes ☐ No ☐ NA
- Engineer of record or barrier manufacturer identifies steps to document the effectiveness of the mitigation system. ■ Yes ☐ No ☐ NA
  - Coupon sampling ■ Yes ☐ No ☐ NA
    - Sample frequency is appropriate to assess integrity of entire barrier.
      23 samples collected; all met minimum design thickness of 80 mils
  - Smoke testing ■ Yes ☐ No ☐ NA
    - Locations are appropriate to assess integrity of entire barrier. ■ Yes ☐ No ☐ NA
      12 smoke tests conducted
    - Assessment of barrier integrity is based on visual observation of where smoke has migrated and/or where membrane repairs were made. ■ Yes ☐ No ☐ NA
      penetration and edge seal leaks observed during smoke testing were addressed by supplemental LIQUID BOOT application
- On-site installation oversight and documentation by the design firm is noted. ☐ Yes ☐ No ☐ NA
  refer to 2023 Vapor Mitigation System Construction Documentation Report and Operation and Maintenance Plan
- Documentation is present verifying that the installation and repairs have been completed per project specifications and manufacturer's installation instructions. ■ Yes ☐ No ☐ NA
- Verification sampling was performed in accordance with the system design plan. ■ Yes ☐ No ☐ NA
  performance verification PFE testing and indoor air sampling were completed
  - Field sampling procedures specified were followed. ■ Yes ☐ No ☐ NA
  - The correct number and locations of verification samples were collected. ■ Yes ☐ No ☐ NA
  - Verification samples were collected at the appropriate frequency. ■ Yes ☐ No ☐ NA
  - Verification samples were analyzed using the appropriate analytical method. ■ Yes ☐ No ☐ NA

○ Results of the verification samples indicate that the VIMS is effectively mitigating the vapor intrusion risk present at the site.	■ Yes	☐ No ☐ NA
○ Deviations in the verification sampling plan, if needed, are documented with rationale for the change.	☐ Yes	☐ No ■ NA

APPENDIX 4

Indoor Air Sampling Laboratory Reports

Pace Analytical Laboratory Report 10611596, June 16, 2022
Pace Analytical Laboratory Report 10636919, December 20, 2022
Eurofins Burlington Analytical Report 200-66486-1, January 23, 2023
Pace Analytical Laboratory Report 10640013, January 25, 2023
Pace Analytical Laboratory Report 10643963, March 07, 2023
Eurofins Burlington Analytical Report 200-67055-1, March 15, 2023

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

June 16, 2022

David Zolp
Geosyntec
W67/N222 Evergreen Blvd.
Suite 113
Cedarburg, WI 53012

RE: Project: CHE8094OQ
Pace Project No.: 10611596

Dear David Zolp:

Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Ray
matt.ray@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Jeremy Johnson, Geosyntec Consultants

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: CHE8094OQ
Pace Project No.: 10611596

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
A2LA Certification #: 2926.01*
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: CHE8094OQ
Pace Project No.: 10611596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10611596001	**IA-01-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596002	**IA-01-062022 CERT#0174**	Air		06/07/22 12:46
10611596003	**IA-02-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596004	**IA-02-062022 CERT#1647**	Air		06/07/22 12:46
10611596005	**IA-03-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596006	**IA-03-062022 CERT#0047**	Air		06/07/22 12:46
10611596007	**IA-03DUP-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596008	**IA-03DUP-062022 CERT#0186**	Air		06/07/22 12:46
10611596009	**IA-04-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596010	**IA-04-062022 CERT#2335**	Air		06/07/22 12:46
10611596011	**IA-05-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596012	**IA-05-062022 CERT#0080**	Air		06/07/22 12:46
10611596013	**IA-06-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596014	**IA-06-062022 CERT#3446**	Air		06/07/22 12:46
10611596015	**OA-07-062022**	Air	06/04/22 16:00	06/07/22 12:46
10611596016	**OA-07-062022 CERT#2389**	Air		06/07/22 12:46

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: CHE8094OQ
Pace Project No.: 10611596

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10611596001	**IA-01-062022**	TO-15	HMH	5
10611596002	**IA-01-062022 CERT#0174**	TO-15	MJL	5
10611596003	**IA-02-062022**	TO-15	HMH	5
10611596004	**IA-02-062022 CERT#1647**	TO-15	MJL	5
10611596005	**IA-03-062022**	TO-15	HMH	5
10611596006	**IA-03-062022 CERT#0047**	TO-15	HMH	5
10611596007	**IA-03DUP-062022**	TO-15	HMH	5
10611596008	**IA-03DUP-062022 CERT#0186**	TO-15	MJL	5
10611596009	**IA-04-062022**	TO-15	HMH	5
10611596010	**IA-04-062022 CERT#2335**	TO-15	SW	5
10611596011	**IA-05-062022**	TO-15	HMH	5
10611596012	**IA-05-062022 CERT#0080**	TO-15	MJL	5
10611596013	**IA-06-062022**	TO-15	DR1	5
10611596014	**IA-06-062022 CERT#3446**	TO-15	SW	5
10611596015	**OA-07-062022**	TO-15	HMH	5
10611596016	**OA-07-062022 CERT#2389**	TO-15	AFV	5

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE8094OQ
Pace Project No.: 10611596

Sample: IA-01-062022 **Lab ID: 10611596001** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.46		06/09/22 16:52	156-59-2	
trans-1,2-Dichloroethene	**<0.25**	ug/m3	1.2	0.25	1.46		06/09/22 16:52	156-60-5	
Tetrachloroethene	**1.9**	ug/m3	1.0	0.43	1.46		06/09/22 16:52	127-18-4	
Trichloroethene	**<0.29**	ug/m3	0.80	0.29	1.46		06/09/22 16:52	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.76	0.13	1.46		06/09/22 16:52	75-01-4	

Sample: IA-01-062022 CERT#0174 **Lab ID: 10611596002** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.098**	ug/m3	0.40	0.098	0.5		05/18/22 09:16	156-59-2	
trans-1,2-Dichloroethene	**<0.084**	ug/m3	1.0	0.084	0.5		05/18/22 09:16	156-60-5	
Tetrachloroethene	**<0.15**	ug/m3	0.34	0.15	0.5		05/18/22 09:16	127-18-4	
Trichloroethene	**<0.098**	ug/m3	0.27	0.098	0.5		05/18/22 09:16	79-01-6	
Vinyl chloride	**<0.043**	ug/m3	0.13	0.043	0.5		05/18/22 09:16	75-01-4	

Sample: IA-02-062022 **Lab ID: 10611596003** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.2	0.30	1.52		06/09/22 16:21	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/m3	1.2	0.26	1.52		06/09/22 16:21	156-60-5	
Tetrachloroethene	**2.8**	ug/m3	1.0	0.44	1.52		06/09/22 16:21	127-18-4	
Trichloroethene	**<0.30**	ug/m3	0.83	0.30	1.52		06/09/22 16:21	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.79	0.13	1.52		06/09/22 16:21	75-01-4	

Sample: IA-02-062022 CERT#1647 **Lab ID: 10611596004** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.098**	ug/m3	0.40	0.098	0.5		05/18/22 19:40	156-59-2	
trans-1,2-Dichloroethene	**<0.084**	ug/m3	1.0	0.084	0.5		05/18/22 19:40	156-60-5	
Tetrachloroethene	**<0.15**	ug/m3	0.34	0.15	0.5		05/18/22 19:40	127-18-4	
Trichloroethene	**<0.098**	ug/m3	0.27	0.098	0.5		05/18/22 19:40	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: CHE8094OQ
Pace Project No.: 10611596

Sample: IA-02-062022 CERT#1647 **Lab ID: 10611596004** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.043**	ug/m3	0.13	0.043	0.5		05/18/22 19:40	75-01-4	

Sample: IA-03-062022 **Lab ID: 10611596005** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.44		06/09/22 19:28	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.2	0.24	1.44		06/09/22 19:28	156-60-5	
Tetrachloroethene	**1.5**	ug/m3	0.99	0.42	1.44		06/09/22 19:28	127-18-4	
Trichloroethene	**<0.28**	ug/m3	0.79	0.28	1.44		06/09/22 19:28	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.75	0.12	1.44		06/09/22 19:28	75-01-4	

Sample: IA-03-062022 CERT#0047 **Lab ID: 10611596006** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.20**	ug/m3	0.81	0.20	1		05/18/22 13:42	156-59-2	
trans-1,2-Dichloroethene	**<0.17**	ug/m3	0.81	0.17	1		05/18/22 13:42	156-60-5	
Tetrachloroethene	**<0.29**	ug/m3	0.69	0.29	1		05/18/22 13:42	127-18-4	
Trichloroethene	**<0.20**	ug/m3	0.55	0.20	1		05/18/22 13:42	79-01-6	
Vinyl chloride	**<0.087**	ug/m3	0.26	0.087	1		05/18/22 13:42	75-01-4	

Sample: IA-03DUP-062022 **Lab ID: 10611596007** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.46		06/09/22 18:57	156-59-2	
trans-1,2-Dichloroethene	**<0.25**	ug/m3	1.2	0.25	1.46		06/09/22 18:57	156-60-5	
Tetrachloroethene	**1.8**	ug/m3	1.0	0.43	1.46		06/09/22 18:57	127-18-4	
Trichloroethene	**<0.29**	ug/m3	0.80	0.29	1.46		06/09/22 18:57	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.76	0.13	1.46		06/09/22 18:57	75-01-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CHE8094OQ
Pace Project No.: 10611596

Sample: IA-03DUP-062022 CERT#0186 **Lab ID: 10611596008** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.098**	ug/m3	0.40	0.098	0.5		05/18/22 17:36	156-59-2	
trans-1,2-Dichloroethene	**<0.084**	ug/m3	1.0	0.084	0.5		05/18/22 17:36	156-60-5	
Tetrachloroethene	**<0.15**	ug/m3	0.34	0.15	0.5		05/18/22 17:36	127-18-4	
Trichloroethene	**<0.098**	ug/m3	0.27	0.098	0.5		05/18/22 17:36	79-01-6	
Vinyl chloride	**<0.043**	ug/m3	0.13	0.043	0.5		05/18/22 17:36	75-01-4	

Sample: IA-04-062022 **Lab ID: 10611596009** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.44		06/09/22 18:26	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.2	0.24	1.44		06/09/22 18:26	156-60-5	
Tetrachloroethene	**1.7**	ug/m3	0.99	0.42	1.44		06/09/22 18:26	127-18-4	
Trichloroethene	**<0.28**	ug/m3	0.79	0.28	1.44		06/09/22 18:26	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.75	0.12	1.44		06/09/22 18:26	75-01-4	

Sample: IA-04-062022 CERT#2335 **Lab ID: 10611596010** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.098**	ug/m3	0.40	0.098	0.5		05/18/22 11:37	156-59-2	
trans-1,2-Dichloroethene	**<0.084**	ug/m3	0.40	0.084	0.5		05/18/22 11:37	156-60-5	
Tetrachloroethene	**<0.15**	ug/m3	0.69	0.15	0.5		05/18/22 11:37	127-18-4	
Trichloroethene	**<0.098**	ug/m3	0.27	0.098	0.5		05/18/22 11:37	79-01-6	
Vinyl chloride	**<0.043**	ug/m3	0.13	0.043	0.5		05/18/22 11:37	75-01-4	

Sample: IA-05-062022 **Lab ID: 10611596011** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.27**	ug/m3	1.1	0.27	1.41		06/09/22 17:55	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.1	0.24	1.41		06/09/22 17:55	156-60-5	
Tetrachloroethene	**1.5**	ug/m3	0.97	0.41	1.41		06/09/22 17:55	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: CHE8094OQ
Pace Project No.: 10611596

Sample: IA-05-062022 **Lab ID: 10611596011** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Trichloroethene	**<0.28**	ug/m3	0.77	0.28	1.41		06/09/22 17:55	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.73	0.12	1.41		06/09/22 17:55	75-01-4	

Sample: IA-05-062022 CERT#0080 **Lab ID: 10611596012** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.098**	ug/m3	0.40	0.098	0.5		05/18/22 19:08	156-59-2	
trans-1,2-Dichloroethene	**<0.084**	ug/m3	1.0	0.084	0.5		05/18/22 19:08	156-60-5	
Tetrachloroethene	**<0.15**	ug/m3	0.34	0.15	0.5		05/18/22 19:08	127-18-4	
Trichloroethene	**<0.098**	ug/m3	0.27	0.098	0.5		05/18/22 19:08	79-01-6	
Vinyl chloride	**<0.043**	ug/m3	0.13	0.043	0.5		05/18/22 19:08	75-01-4	

Sample: IA-06-062022 **Lab ID: 10611596013** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.44		06/10/22 16:24	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.2	0.24	1.44		06/10/22 16:24	156-60-5	
Tetrachloroethene	**0.44J**	ug/m3	0.99	0.42	1.44		06/10/22 16:24	127-18-4	
Trichloroethene	**1.9**	ug/m3	0.79	0.28	1.44		06/10/22 16:24	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.75	0.12	1.44		06/10/22 16:24	75-01-4	

Sample: IA-06-062022 CERT#3446 **Lab ID: 10611596014** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.098**	ug/m3	0.40	0.098	0.5		05/18/22 12:14	156-59-2	
trans-1,2-Dichloroethene	**<0.084**	ug/m3	0.40	0.084	0.5		05/18/22 12:14	156-60-5	
Tetrachloroethene	**<0.15**	ug/m3	0.69	0.15	0.5		05/18/22 12:14	127-18-4	
Trichloroethene	**<0.098**	ug/m3	0.27	0.098	0.5		05/18/22 12:14	79-01-6	
Vinyl chloride	**<0.043**	ug/m3	0.13	0.043	0.5		05/18/22 12:14	75-01-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CHE8094OQ
Pace Project No.: 10611596

Sample: OA-07-062022 **Lab ID: 10611596015** Collected: 06/04/22 16:00 Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.44		06/09/22 21:31	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.2	0.24	1.44		06/09/22 21:31	156-60-5	
Tetrachloroethene	**2.0**	ug/m3	0.99	0.42	1.44		06/09/22 21:31	127-18-4	
Trichloroethene	**<0.28**	ug/m3	0.79	0.28	1.44		06/09/22 21:31	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.75	0.12	1.44		06/09/22 21:31	75-01-4	

Sample: OA-07-062022 CERT#2389 **Lab ID: 10611596016** Collected: Received: 06/07/22 12:46 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.20**	ug/m3	0.81	0.20	1		05/18/22 13:10	156-59-2	
trans-1,2-Dichloroethene	**<0.17**	ug/m3	0.81	0.17	1		05/18/22 13:10	156-60-5	
Tetrachloroethene	**<0.29**	ug/m3	0.69	0.29	1		05/18/22 13:10	127-18-4	
Trichloroethene	**<0.20**	ug/m3	0.55	0.20	1		05/18/22 13:10	79-01-6	
Vinyl chloride	**<0.087**	ug/m3	0.26	0.087	1		05/18/22 13:10	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: CHE8094OQ
Pace Project No.: 10611596

QC Batch: 820709
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10611596001, 10611596003, 10611596005, 10611596007, 10611596009, 10611596011, 10611596015

METHOD BLANK: 4348694 Matrix: Air
Associated Lab Samples: 10611596001, 10611596003, 10611596005, 10611596007, 10611596009, 10611596011, 10611596015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.20	0.81	06/09/22 10:32	
Tetrachloroethene	ug/m3	0.50J	0.69	06/09/22 10:32	
trans-1,2-Dichloroethene	ug/m3	<0.17	0.81	06/09/22 10:32	
Trichloroethene	ug/m3	<0.20	0.55	06/09/22 10:32	
Vinyl chloride	ug/m3	<0.087	0.52	06/09/22 10:32	

LABORATORY CONTROL SAMPLE: 4348695

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	43.4	44.9	103	70-136	
Tetrachloroethene	ug/m3	73.4	83.8	114	70-134	
trans-1,2-Dichloroethene	ug/m3	43.6	39.3	90	70-134	
Trichloroethene	ug/m3	58.4	61.8	106	70-134	
Vinyl chloride	ug/m3	28	30.7	110	70-132	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CHE8094OQ
Pace Project No.: 10611596

QC Batch: 820969
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10611596013

METHOD BLANK: 4350202 Matrix: Air
Associated Lab Samples: 10611596013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.098	0.40	06/10/22 09:16	
Tetrachloroethene	ug/m3	<0.15	0.34	06/10/22 09:16	
trans-1,2-Dichloroethene	ug/m3	<0.084	0.40	06/10/22 09:16	
Trichloroethene	ug/m3	<0.098	0.27	06/10/22 09:16	
Vinyl chloride	ug/m3	<0.043	0.26	06/10/22 09:16	MN

LABORATORY CONTROL SAMPLE: 4350203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	43.4	45.0	104	70-136	
Tetrachloroethene	ug/m3	73.4	76.3	104	70-134	
trans-1,2-Dichloroethene	ug/m3	43.6	46.1	106	70-134	
Trichloroethene	ug/m3	58.4	59.4	102	70-134	
Vinyl chloride	ug/m3	28	26.5	95	70-132	

SAMPLE DUPLICATE: 4352886

Parameter	Units	10611596013 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.28	<0.28		25	
Tetrachloroethene	ug/m3	0.44J	0.45J		25	
trans-1,2-Dichloroethene	ug/m3	<0.24	<0.24		25	
Trichloroethene	ug/m3	1.9	1.9	1	25	
Vinyl chloride	ug/m3	<0.12	<0.12		25	

SAMPLE DUPLICATE: 4352887

Parameter	Units	35718457006 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	0.36U	<0.36		25	
Tetrachloroethene	ug/m3	0.55U	<0.55		25	
trans-1,2-Dichloroethene	ug/m3	0.87J	1.0J		25	
Trichloroethene	ug/m3	0.37U	<0.37		25	
Vinyl chloride	ug/m3	0.16U	<0.16		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
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QUALIFIERS

Project: CHE8094OQ
Pace Project No.: 10611596

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

MN	The reporting limit has been raised in accordance with Minnesota Statutes 4740.2100 Subpart 8. C, D. Reporting Limit Evaluation Rule.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CHE8094OQ
Pace Project No.: 10611596

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10611596001	**IA-01-062022**	TO-15	820709		
10611596003	**IA-02-062022**	TO-15	820709		
10611596005	**IA-03-062022**	TO-15	820709		
10611596007	**IA-03DUP-062022**	TO-15	820709		
10611596009	**IA-04-062022**	TO-15	820709		
10611596011	**IA-05-062022**	TO-15	820709		
10611596013	**IA-06-062022**	TO-15	820969		
10611596015	**OA-07-062022**	TO-15	820709		
10611596002	**IA-01-062022 CERT#0174**	TO-15	821997		
10611596004	**IA-02-062022 CERT#1647**	TO-15	821997		
10611596006	**IA-03-062022 CERT#0047**	TO-15	821997		
10611596008	**IA-03DUP-062022 CERT#0186**	TO-15	821997		
10611596010	**IA-04-062022 CERT#2335**	TO-15	821997		
10611596012	**IA-05-062022 CERT#0080**	TO-15	821997		
10611596014	**IA-06-062022 CERT#3446**	TO-15	821997		
10611596016	**OA-07-062022 CERT#2389**	TO-15	821997		

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

54914

Page: 1 of 1

Section A Required Client Information:

Company: Geosyntec
Address: 10600 N. Port Washington Rd
Mequon, WI 53012
Email To: dzolp@geosyntec.com
Phone: 262 496-6103 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To:
Copy To: jpjohnson@geosyntec.com
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:

Attention: Frank Dombrowski
Company Name: We Energies
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 37426

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: WI

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level: II.___ III.___ IV.___ Other___

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE - END/GRAB DATE	COLLECTED COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	IA-01-062022	1LC		6/1/22	800	6/1/22	1600	-27.1	-2.0	0174	0538							X			001 002
2	IA-02-062022							-27.1	-2.9	1647	0256							X			003 004
3	IA-03-062022							-27.1	-1.8	0047	1092							X			005 006
4	IA-03DUP-062022							-27.1	-1.9	0186	1252							X			007 008
5	IA-04-062022							-27.1	-1.7	2335	1257							X			009 010
6	IA-05-062022							-27.1	-1.6	0080	1280							X			011 012
7	IA-06-062022							-27.1	-1.7	3446	0119							X			013 014
8	~~IA~~ 0A-07-062022							-27.1	-2.0	2389	1402							X			015 016
9																					
10																					
11																					
12																					

Comments: Analysis List:
Tetrachloroethylene (PCE)
Trichloroethylene (TCE)
1,2-Dichloroethylene (cis & trans)
Vinyl Chloride

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / Geosyntec	6/6/22	1430	Matt [signature] / Pace	6/7/22	12:46

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
-	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: David Zolp
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM / DD / YY): 06/06/22

WO# : 10611596

10611596

1700 El ... Phone: 612.607.6386

DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air

Effective Date: 02/25/2022

Air Sample Condition Upon Receipt

Client Name: Geosyntec

Project #: WO#: 10611596

PM: MR2 Due Date: 06/14/22

CLIENT: Geosyntec WI

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 7770 5075 2090 1943 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: 6-7-22 MI

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9. IA-04 is FC 1275, not 1257.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: Air Can | Airbag				11. Individually Certified Cans? Y | N (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946III)**	☒ Yes	☐ No		13.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☒ 10AIR17 ☐ 10AIR47 ☐ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
IA-01	174	538	-2.5	+5					
" -02	1647	256	-3.5						
" -03	47	1092	-2						
" DUP	186	1252	-2.5						
IA-04	2335	1275	-2						
" -05	80	1280	-1.5						
" -06	3446	119	-2						
OA-07	2389	1402	-2						

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time:

Comments/Resolution:

Field Data Required? ☐ Yes ☐ No

Project Manager Review: Matt Ray **Date:** 06/09/22

***Note:** Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

December 20, 2022

David Zolp
Geosyntec
W67/N222 Evergreen Blvd.
Suite 113
Cedarburg, WI 53012

RE: Project: MNSC
Pace Project No.: 10636919

Dear David Zolp:

Enclosed are the analytical results for sample(s) received by the laboratory on December 13, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Ray
matt.ray@pacelabs.com
(612)607-1700
Project Manager

Enclosures

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: MNSC
Pace Project No.: 10636919

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
A2LA Certification #: 2926.01*
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: MNSC
Pace Project No.: 10636919

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10636919001	**IA-01-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919002	**IA-02-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919003	**IA-03-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919004	**IA-03DUP-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919005	**IA-04-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919006	**IA-05-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919007	**IA-06-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919008	**OA-07-122022**	Air	12/10/22 17:12	12/13/22 12:22
10636919009	**IA-01-122022 CERT1248**	Air		12/13/22 12:22
10636919010	**IA-02-122022 CERT2769**	Air		12/13/22 12:22
10636919011	**IA-03-122022 CERT0637**	Air		12/13/22 12:22
10636919012	**IA-03DUP-122022 CERT3674**	Air		12/13/22 12:22
10636919013	**IA-04-122022 CERT2690**	Air		12/13/22 12:22
10636919014	**IA-05-122022 CERT3658**	Air		12/13/22 12:22
10636919015	**IA-06-122022 CERT2361**	Air		12/13/22 12:22
10636919016	**OA-07-122022 CERT1616**	Air		12/13/22 12:22

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: MNSC
Pace Project No.: 10636919

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10636919001	**IA-01-122022**	TO-15	AJA	5
10636919002	**IA-02-122022**	TO-15	AJA	5
10636919003	**IA-03-122022**	TO-15	SW	5
10636919004	**IA-03DUP-122022**	TO-15	SW	5
10636919005	**IA-04-122022**	TO-15	SW	5
10636919006	**IA-05-122022**	TO-15	SW	5
10636919007	**IA-06-122022**	TO-15	SW	5
10636919008	**OA-07-122022**	TO-15	SW	5
10636919009	**IA-01-122022 CERT1248**	TO-15	AFV	5
10636919010	**IA-02-122022 CERT2769**	TO-15	GT	5
10636919011	**IA-03-122022 CERT0637**	TO-15	MJL	5
10636919012	**IA-03DUP-122022 CERT3674**	TO-15	AFV	5
10636919013	**IA-04-122022 CERT2690**	TO-15	AFV	5
10636919014	**IA-05-122022 CERT3658**	TO-15	AFV	5
10636919015	**IA-06-122022 CERT2361**	TO-15	AFV	5
10636919016	**OA-07-122022 CERT1616**	TO-15	AFV	5

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: MNSC
Pace Project No.: 10636919

Sample: IA-01-122022 **Lab ID: 10636919001** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.34**	ug/m3	1.3	0.34	1.61		12/14/22 15:21	156-59-2	
trans-1,2-Dichloroethene	**<0.67**	ug/m3	1.3	0.67	1.61		12/14/22 15:21	156-60-5	
Tetrachloroethene	**71.7**	ug/m3	1.1	0.40	1.61		12/14/22 15:21	127-18-4	
Trichloroethene	**<0.38**	ug/m3	0.88	0.38	1.61		12/14/22 15:21	79-01-6	
Vinyl chloride	**<0.15**	ug/m3	0.42	0.15	1.61		12/14/22 15:21	75-01-4	

Sample: IA-02-122022 **Lab ID: 10636919002** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.39		12/14/22 16:20	156-59-2	
trans-1,2-Dichloroethene	**<0.58**	ug/m3	1.1	0.58	1.39		12/14/22 16:20	156-60-5	
Tetrachloroethene	**93.3**	ug/m3	0.96	0.34	1.39		12/14/22 16:20	127-18-4	
Trichloroethene	**<0.33**	ug/m3	0.76	0.33	1.39		12/14/22 16:20	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.36	0.13	1.39		12/14/22 16:20	75-01-4	

Sample: IA-03-122022 **Lab ID: 10636919003** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.31**	ug/m3	1.2	0.31	1.44		12/19/22 22:55	156-59-2	
trans-1,2-Dichloroethene	**<0.60**	ug/m3	1.2	0.60	1.44		12/19/22 22:55	156-60-5	
Tetrachloroethene	**182**	ug/m3	0.99	0.36	1.44		12/19/22 22:55	127-18-4	
Trichloroethene	**<0.34**	ug/m3	0.79	0.34	1.44		12/19/22 22:55	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.44		12/19/22 22:55	75-01-4	

Sample: IA-03DUP-122022 **Lab ID: 10636919004** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.39**	ug/m3	1.5	0.39	1.83		12/19/22 23:28	156-59-2	
trans-1,2-Dichloroethene	**<0.76**	ug/m3	1.5	0.76	1.83		12/19/22 23:28	156-60-5	
Tetrachloroethene	**178**	ug/m3	1.3	0.45	1.83		12/19/22 23:28	127-18-4	
Trichloroethene	**<0.44**	ug/m3	1.0	0.44	1.83		12/19/22 23:28	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: MNSC
Pace Project No.: 10636919

Sample: IA-03DUP-122022 **Lab ID: 10636919004** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.18**	ug/m3	0.48	0.18	1.83		12/19/22 23:28	75-01-4	

Sample: IA-04-122022 **Lab ID: 10636919005** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.31**	ug/m3	1.2	0.31	1.44		12/20/22 00:02	156-59-2	
trans-1,2-Dichloroethene	**<0.60**	ug/m3	1.2	0.60	1.44		12/20/22 00:02	156-60-5	
Tetrachloroethene	**159**	ug/m3	0.99	0.36	1.44		12/20/22 00:02	127-18-4	
Trichloroethene	**<0.34**	ug/m3	0.79	0.34	1.44		12/20/22 00:02	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.44		12/20/22 00:02	75-01-4	

Sample: IA-05-122022 **Lab ID: 10636919006** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.31**	ug/m3	1.2	0.31	1.44		12/20/22 00:35	156-59-2	
trans-1,2-Dichloroethene	**<0.60**	ug/m3	1.2	0.60	1.44		12/20/22 00:35	156-60-5	
Tetrachloroethene	**184**	ug/m3	0.99	0.36	1.44		12/20/22 00:35	127-18-4	
Trichloroethene	**<0.34**	ug/m3	0.79	0.34	1.44		12/20/22 00:35	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.44		12/20/22 00:35	75-01-4	

Sample: IA-06-122022 **Lab ID: 10636919007** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.41		12/20/22 01:09	156-59-2	
trans-1,2-Dichloroethene	**<0.59**	ug/m3	1.1	0.59	1.41		12/20/22 01:09	156-60-5	
Tetrachloroethene	**168**	ug/m3	0.97	0.35	1.41		12/20/22 01:09	127-18-4	
Trichloroethene	**<0.34**	ug/m3	0.77	0.34	1.41		12/20/22 01:09	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.41		12/20/22 01:09	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: MNSC
Pace Project No.: 10636919

Sample: OA-07-122022 **Lab ID: 10636919008** Collected: 12/10/22 17:12 Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.29**	ug/m3	1.1	0.29	1.34		12/20/22 02:14	156-59-2	
trans-1,2-Dichloroethene	**<0.56**	ug/m3	1.1	0.56	1.34		12/20/22 02:14	156-60-5	
Tetrachloroethene	**<0.33**	ug/m3	0.92	0.33	1.34		12/20/22 02:14	127-18-4	
Trichloroethene	**<0.32**	ug/m3	0.73	0.32	1.34		12/20/22 02:14	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.35	0.13	1.34		12/20/22 02:14	75-01-4	

Sample: IA-01-122022 CERT1248 **Lab ID: 10636919009** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/07/22 02:00	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/07/22 02:00	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/07/22 02:00	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/07/22 02:00	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/07/22 02:00	75-01-4	

Sample: IA-02-122022 CERT2769 **Lab ID: 10636919010** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/07/22 10:11	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/07/22 10:11	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/07/22 10:11	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/07/22 10:11	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/07/22 10:11	75-01-4	

Sample: IA-03-122022 CERT0637 **Lab ID: 10636919011** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		11/17/22 12:23	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		11/17/22 12:23	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.69	0.12	0.5		11/17/22 12:23	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		11/17/22 12:23	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: MNSC
Pace Project No.: 10636919

Sample: IA-03-122022 CERT0637 **Lab ID: 10636919011** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.048**	ug/m3	0.26	0.048	0.5		11/17/22 12:23	75-01-4	

Sample: IA-03DUP-122022 CERT3674 **Lab ID: 10636919012** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/07/22 10:50	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/07/22 10:50	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/07/22 10:50	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/07/22 10:50	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/07/22 10:50	75-01-4	

Sample: IA-04-122022 CERT2690 **Lab ID: 10636919013** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/06/22 16:15	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/06/22 16:15	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/06/22 16:15	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/06/22 16:15	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/06/22 16:15	75-01-4	

Sample: IA-05-122022 CERT3658 **Lab ID: 10636919014** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/07/22 03:59	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/07/22 03:59	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/07/22 03:59	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/07/22 03:59	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/07/22 03:59	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: MNSC
Pace Project No.: 10636919

Sample: IA-06-122022 CERT2361 **Lab ID: 10636919015** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/06/22 17:35	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/06/22 17:35	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/06/22 17:35	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/06/22 17:35	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/06/22 17:35	75-01-4	

Sample: OA-07-122022 CERT1616 **Lab ID: 10636919016** Collected: Received: 12/13/22 12:22 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		12/07/22 00:41	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		12/07/22 00:41	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		12/07/22 00:41	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		12/07/22 00:41	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		12/07/22 00:41	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: MNSC
Pace Project No.: 10636919

QC Batch: 858518
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10636919001, 10636919002

METHOD BLANK: 4536922 Matrix: Air
Associated Lab Samples: 10636919001, 10636919002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.11	0.40	12/14/22 08:36	
Tetrachloroethene	ug/m3	<0.12	0.34	12/14/22 08:36	
trans-1,2-Dichloroethene	ug/m3	<0.21	0.40	12/14/22 08:36	
Trichloroethene	ug/m3	<0.12	0.27	12/14/22 08:36	
Vinyl chloride	ug/m3	<0.048	0.13	12/14/22 08:36	

LABORATORY CONTROL SAMPLE: 4536923

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	42.1	42.8	102	70-136	
Tetrachloroethene	ug/m3	72	71.1	99	70-134	
trans-1,2-Dichloroethene	ug/m3	42.3	41.9	99	70-134	
Trichloroethene	ug/m3	57.2	56.4	98	70-134	
Vinyl chloride	ug/m3	27.2	26.6	98	70-132	

SAMPLE DUPLICATE: 4538388

Parameter	Units	10636919001 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.34	<0.34		25	
Tetrachloroethene	ug/m3	71.7	72.7	1	25	
trans-1,2-Dichloroethene	ug/m3	<0.67	<0.67		25	
Trichloroethene	ug/m3	<0.38	<0.38		25	
Vinyl chloride	ug/m3	<0.15	<0.15		25	

SAMPLE DUPLICATE: 4538389

Parameter	Units	10636919002 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.30	<0.30		25	
Tetrachloroethene	ug/m3	93.3	93.0	0	25	
trans-1,2-Dichloroethene	ug/m3	<0.58	<0.58		25	
Trichloroethene	ug/m3	<0.33	<0.33		25	
Vinyl chloride	ug/m3	<0.13	<0.13		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: MNSC
Pace Project No.: 10636919

QC Batch: 859246
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10636919003, 10636919004, 10636919005, 10636919006, 10636919007, 10636919008

METHOD BLANK: 4540840 Matrix: Air
Associated Lab Samples: 10636919003, 10636919004, 10636919005, 10636919006, 10636919007, 10636919008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.11	0.40	12/19/22 17:19	
Tetrachloroethene	ug/m3	<0.12	0.34	12/19/22 17:19	
trans-1,2-Dichloroethene	ug/m3	<0.21	0.40	12/19/22 17:19	
Trichloroethene	ug/m3	<0.12	0.27	12/19/22 17:19	
Vinyl chloride	ug/m3	<0.048	0.13	12/19/22 17:19	

LABORATORY CONTROL SAMPLE: 4540841

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	42.1	43.6	104	70-136	
Tetrachloroethene	ug/m3	72	74.3	103	70-134	
trans-1,2-Dichloroethene	ug/m3	42.3	42.3	100	70-134	
Trichloroethene	ug/m3	57.2	56.1	98	70-134	
Vinyl chloride	ug/m3	27.2	26.6	97	70-132	

SAMPLE DUPLICATE: 4541613

Parameter	Units	10637245001 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	ND	<0.31		25	
Tetrachloroethene	ug/m3	ND	0.43J		25	
trans-1,2-Dichloroethene	ug/m3	ND	<0.61		25	
Trichloroethene	ug/m3	ND	<0.35		25	
Vinyl chloride	ug/m3	ND	<0.14		25	

SAMPLE DUPLICATE: 4541614

Parameter	Units	10637245003 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	ND	<0.31		25	
Tetrachloroethene	ug/m3	ND	<0.36		25	
trans-1,2-Dichloroethene	ug/m3	ND	<0.60		25	
Trichloroethene	ug/m3	ND	<0.34		25	
Vinyl chloride	ug/m3	ND	<0.14		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: MNSC
Pace Project No.: 10636919

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MNSC
Pace Project No.: 10636919

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10636919001	**IA-01-122022**	TO-15	858518		
10636919002	**IA-02-122022**	TO-15	858518		
10636919003	**IA-03-122022**	TO-15	859246		
10636919004	**IA-03DUP-122022**	TO-15	859246		
10636919005	**IA-04-122022**	TO-15	859246		
10636919006	**IA-05-122022**	TO-15	859246		
10636919007	**IA-06-122022**	TO-15	859246		
10636919008	**OA-07-122022**	TO-15	859246		
10636919009	**IA-01-122022 CERT1248**	TO-15	858688		
10636919010	**IA-02-122022 CERT2769**	TO-15	858688		
10636919011	**IA-03-122022 CERT0637**	TO-15	858688		
10636919012	**IA-03DUP-122022 CERT3674**	TO-15	858688		
10636919013	**IA-04-122022 CERT2690**	TO-15	858688		
10636919014	**IA-05-122022 CERT3658**	TO-15	858688		
10636919015	**IA-06-122022 CERT2361**	TO-15	858688		
10636919016	**OA-07-122022 CERT1616**	TO-15	858688		

Pace Analytical®
www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

58132

Page: 1 of 1

Section A Required Client Information:

Company: Geosyntec
Address: 10600 N. Port Washington Rd Ste 100 Mequon, WI 53092
Email To: dzolp@geosyntec.com
Phone: 262 496-6103 Fax: —
Requested Due Date/TAT:

Section B Required Project Information:

Report To: dzolp@geosyntec.com
Copy To: pjohnson@geosyntec.com
Purchase Order No.:
Project Name: MNSC
Project Number: CHE809400

Section C Invoice Information:

Attention: Frank Dombrowski
Company Name: We Energies
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep. 37426
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: WI

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other ___

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE - END/GRAB DATE	COLLECTED COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	IA-01-122022	6LC	✓	12/10/22	9:12	12/11/22	17:12	27.3	-5.5	1248	1058										001 009
2	IA-02-122022		✓					27.1	-2.3	2769	0243										002 010
3	IA-03-122022		✓					27.1	-2.8	0637	1098										003 011
4	IA-03DUP-122022		✓					27.1	-9.0	3674	1357										004 012
5	IA-04-122022		✓					27.1	-2.7	2690	2618										005 013
6	IA-05-122022		✓					27.1	-2.9	3658	2622										006 014
7	IA-06-122022		✓					27.2	-2.6	2361	1090										007 015
8	OA-07-122022		✓					27.1	-1.0	1616	0853										008 016
9																					
10																					
11																					
12																					

WO#: 10636919

10636919

Comments: Analyses: Tetrachloroethylene, Trichloroethylene, cis & trans 1,2-Dichloroethylene, Vinyl Chloride

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	12/12/22	1200	Pace	12/13/22	1222

ONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dave Zolp

SIGNATURE of SAMPLER:

DATE Signed (MM / DD / YY): 12/12/22

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air

Effective Date: 02/25/2022

WO#: 10636919

Air Sample Condition Upon Receipt | **Client Name:** Geosyntec | **Project #:**

PM: MR2 **Due Date: 12/20/22**

CLIENT: Geosyntec WI

Courier: ☑ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 6101 8740 3470 + 3480 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☑ No

Seals Intact? ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: 121322 MS

				Comments:
Chain of Custody Present?	☑ Yes	☐ No		1.
Chain of Custody Filled Out?	☑ Yes	☐ No		2.
Chain of Custody Relinquished?	☑ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No		6.
Rush Turn Around Time Requested?	☐ Yes	☑ No		7.
Sufficient Volume?	☑ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☑ Yes ☑ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☑ Yes	☐ No		10. Tags list start time
Media: ~~Air Can~~ | Airbag				11. Individually Certified Cans? Y | (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☑ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☑ Yes	☐ No		13.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☑ 10AIR17 ☐ 10AIR47 ☐ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
IA-1	1248	1058	-5	5					
2	2769	243	-1	|					
3	637	1098	-2	|					
3 Dup	3674	1357	-8	|					
4	2690	2618	-2	|					
5	3658	2622	-2	|					
6	2361	1090	-1.5	|					
OA-7	1616	853	0	▽					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Matt Ray **Date:** 12/14/22

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave Zolp
Geosyntec Consultants, Inc.
10600 N. Port Washington Road, Suite 100
Mequon, Wisconsin 53092

Generated 1/23/2023 3:44:03 PM

JOB DESCRIPTION

Metro North Service Center
SDG NUMBER 200-66486

JOB NUMBER

200-66486-1

Eurofins Burlington
530 Community Drive
Suite 11
South Burlington VT 05403

See page two for job notes and contact information.

Job Notes

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
1/23/2023 3:44:03 PM

Authorized for release by
Kathryn Kelly, Project Manager II
Kathryn.Kelly@et.eurofinsus.com
(802)923-1021

Table of Contents

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 200-66486-1

Laboratory: Eurofins Burlington

Narrative

CASE NARRATIVE

Client: Geosyntec Consultants, Inc.

Project: Metro North Service Center

Report Number: 200-66486-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 01/17/2023; the samples arrived in good condition.

VOLATILE ORGANIC COMPOUNDS
Samples IA-01-012023, IA-02-012023, IA-03-012023, IA-04-012023, IA-05-012023, IA-05DUP-012023, IA-06-012023 and IA-07-012023 were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 01/18/2023 and 01/19/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Client Sample ID: IA-01-012023 — Lab Sample ID: 200-66486-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.30	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.13	J	0.70	0.11	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.098	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.20		0.20	0.023	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.18	J	0.20	0.025	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.099	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	1.2	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Xylene (total)	0.56	J	3.0	0.48	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.67	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.80		0.79	0.091	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.95	J	1.1	0.13	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.39	J	0.79	0.083	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-02-012023 — Lab Sample ID: 200-66486-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylene (total)	0.88		0.70	0.11	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.073	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.29		0.20	0.025	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylene (total)	3.8		3.0	0.48	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.50	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
Trichloroethene	1.5		1.1	0.13	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-03-012023 — Lab Sample ID: 200-66486-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.19	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.19	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.19	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.75	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.3	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.74	J	0.79	0.091	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-04-012023 — Lab Sample ID: 200-66486-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.19	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.65	J	0.70	0.11	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.25		0.20	0.021	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.19	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.75	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Xylene (total)	2.8	J	3.0	0.48	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.7		1.4	0.14	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.75	J	0.79	0.091	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Client Sample ID: IA-05-012023 — Lab Sample ID: 200-66486-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.17	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.54	J	0.70	0.11	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.19	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.17	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.67	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Xylene (total)	2.3	J	3.0	0.48	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.3	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.68	J	0.79	0.091	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-05DUP-012023 — Lab Sample ID: 200-66486-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.18	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.50	J	0.70	0.11	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.21		0.20	0.021	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.18	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.71	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Xylene (total)	2.2	J	3.0	0.48	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.4		1.4	0.14	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.71	J	0.79	0.091	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-06-012023 — Lab Sample ID: 200-66486-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.17	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.15	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.17	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.67	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.99	J	1.4	0.14	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.69	J	0.79	0.091	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-07-012023 — Lab Sample ID: 200-66486-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.14	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
Xylene (total)	0.14	J	0.70	0.11	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.14	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.56	J	1.6	0.40	ug/m3	1		TO-15	Total/NA
Xylene (total)	0.61	J	3.0	0.48	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.55	J	0.79	0.091	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-01-012023

Lab Sample ID: 200-66486-1

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	0.30	J	0.40	0.10	ppb v/v			01/18/23 20:55	1
Xylene (total)	0.13	J	0.70	0.11	ppb v/v			01/18/23 20:55	1
Tetrachloroethene	0.098	J	0.20	0.021	ppb v/v			01/18/23 20:55	1
trans-1,2-Dichloroethene	0.20		0.20	0.023	ppb v/v			01/18/23 20:55	1
Trichloroethene	0.18	J	0.20	0.025	ppb v/v			01/18/23 20:55	1
cis-1,2-Dichloroethene	0.099	J	0.20	0.021	ppb v/v			01/18/23 20:55	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/18/23 20:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	1.2	J	1.6	0.40	ug/m3			01/18/23 20:55	1
Xylene (total)	0.56	J	3.0	0.48	ug/m3			01/18/23 20:55	1
Tetrachloroethene	0.67	J	1.4	0.14	ug/m3			01/18/23 20:55	1
trans-1,2-Dichloroethene	0.80		0.79	0.091	ug/m3			01/18/23 20:55	1
Trichloroethene	0.95	J	1.1	0.13	ug/m3			01/18/23 20:55	1
cis-1,2-Dichloroethene	0.39	J	0.79	0.083	ug/m3			01/18/23 20:55	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/18/23 20:55	1

Client Sample ID: IA-02-012023

Lab Sample ID: 200-66486-2

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	<0.10		0.40	0.10	ppb v/v			01/18/23 21:48	1
Xylene (total)	0.88		0.70	0.11	ppb v/v			01/18/23 21:48	1
Tetrachloroethene	0.073	J	0.20	0.021	ppb v/v			01/18/23 21:48	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			01/18/23 21:48	1
Trichloroethene	0.29		0.20	0.025	ppb v/v			01/18/23 21:48	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/18/23 21:48	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/18/23 21:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	<0.40		1.6	0.40	ug/m3			01/18/23 21:48	1
Xylene (total)	3.8		3.0	0.48	ug/m3			01/18/23 21:48	1
Tetrachloroethene	0.50	J	1.4	0.14	ug/m3			01/18/23 21:48	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			01/18/23 21:48	1
Trichloroethene	1.5		1.1	0.13	ug/m3			01/18/23 21:48	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/18/23 21:48	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/18/23 21:48	1

Client Sample ID: IA-03-012023

Lab Sample ID: 200-66486-3

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	0.19	J	0.40	0.10	ppb v/v			01/18/23 22:40	1
Xylene (total)	<0.11		0.70	0.11	ppb v/v			01/18/23 22:40	1
Tetrachloroethene	0.19	J	0.20	0.021	ppb v/v			01/18/23 22:40	1

Client Sample ID: IA-03-012023

Lab Sample ID: 200-66486-3

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**0.19**	**J**	0.20	0.023	ppb v/v			01/18/23 22:40	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/18/23 22:40	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/18/23 22:40	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/18/23 22:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.75**	**J**	1.6	0.40	ug/m3			01/18/23 22:40	1
Xylene (total)	<0.48		3.0	0.48	ug/m3			01/18/23 22:40	1
Tetrachloroethene	**1.3**	**J**	1.4	0.14	ug/m3			01/18/23 22:40	1
trans-1,2-Dichloroethene	**0.74**	**J**	0.79	0.091	ug/m3			01/18/23 22:40	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/18/23 22:40	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/18/23 22:40	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/18/23 22:40	1

Client Sample ID: IA-04-012023

Lab Sample ID: 200-66486-4

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.19**	**J**	0.40	0.10	ppb v/v			01/18/23 23:33	1
Xylene (total)	**0.65**	**J**	0.70	0.11	ppb v/v			01/18/23 23:33	1
Tetrachloroethene	**0.25**		0.20	0.021	ppb v/v			01/18/23 23:33	1
trans-1,2-Dichloroethene	**0.19**	**J**	0.20	0.023	ppb v/v			01/18/23 23:33	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/18/23 23:33	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/18/23 23:33	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/18/23 23:33	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.75**	**J**	1.6	0.40	ug/m3			01/18/23 23:33	1
Xylene (total)	**2.8**	**J**	3.0	0.48	ug/m3			01/18/23 23:33	1
Tetrachloroethene	**1.7**		1.4	0.14	ug/m3			01/18/23 23:33	1
trans-1,2-Dichloroethene	**0.75**	**J**	0.79	0.091	ug/m3			01/18/23 23:33	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/18/23 23:33	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/18/23 23:33	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/18/23 23:33	1

Client Sample ID: IA-05-012023

Lab Sample ID: 200-66486-5

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.17**	**J**	0.40	0.10	ppb v/v			01/19/23 01:19	1
Xylene (total)	**0.54**	**J**	0.70	0.11	ppb v/v			01/19/23 01:19	1
Tetrachloroethene	**0.19**	**J**	0.20	0.021	ppb v/v			01/19/23 01:19	1
trans-1,2-Dichloroethene	**0.17**	**J**	0.20	0.023	ppb v/v			01/19/23 01:19	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/19/23 01:19	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 01:19	1

Client Sample ID: IA-05-012023

Lab Sample ID: 200-66486-5

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/19/23 01:19	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.67**	**J**	1.6	0.40	ug/m3			01/19/23 01:19	1
Xylene (total)	**2.3**	**J**	3.0	0.48	ug/m3			01/19/23 01:19	1
Tetrachloroethene	**1.3**	**J**	1.4	0.14	ug/m3			01/19/23 01:19	1
trans-1,2-Dichloroethene	**0.68**	**J**	0.79	0.091	ug/m3			01/19/23 01:19	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/19/23 01:19	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/19/23 01:19	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/19/23 01:19	1

Client Sample ID: IA-05DUP-012023

Lab Sample ID: 200-66486-6

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.18**	**J**	0.40	0.10	ppb v/v			01/19/23 02:12	1
Xylene (total)	**0.50**	**J**	0.70	0.11	ppb v/v			01/19/23 02:12	1
Tetrachloroethene	**0.21**		0.20	0.021	ppb v/v			01/19/23 02:12	1
trans-1,2-Dichloroethene	**0.18**	**J**	0.20	0.023	ppb v/v			01/19/23 02:12	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/19/23 02:12	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 02:12	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/19/23 02:12	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.71**	**J**	1.6	0.40	ug/m3			01/19/23 02:12	1
Xylene (total)	**2.2**	**J**	3.0	0.48	ug/m3			01/19/23 02:12	1
Tetrachloroethene	**1.4**		1.4	0.14	ug/m3			01/19/23 02:12	1
trans-1,2-Dichloroethene	**0.71**	**J**	0.79	0.091	ug/m3			01/19/23 02:12	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/19/23 02:12	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/19/23 02:12	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/19/23 02:12	1

Client Sample ID: IA-06-012023

Lab Sample ID: 200-66486-7

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.17**	**J**	0.40	0.10	ppb v/v			01/19/23 03:04	1
Xylene (total)	<0.11		0.70	0.11	ppb v/v			01/19/23 03:04	1
Tetrachloroethene	**0.15**	**J**	0.20	0.021	ppb v/v			01/19/23 03:04	1
trans-1,2-Dichloroethene	**0.17**	**J**	0.20	0.023	ppb v/v			01/19/23 03:04	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/19/23 03:04	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 03:04	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/19/23 03:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.67**	**J**	1.6	0.40	ug/m3			01/19/23 03:04	1

Client Sample ID: IA-06-012023

Lab Sample ID: 200-66486-7

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (total)	<0.48		3.0	0.48	ug/m3			01/19/23 03:04	1
Tetrachloroethene	**0.99**	**J**	1.4	0.14	ug/m3			01/19/23 03:04	1
trans-1,2-Dichloroethene	**0.69**	**J**	0.79	0.091	ug/m3			01/19/23 03:04	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/19/23 03:04	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/19/23 03:04	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/19/23 03:04	1

Client Sample ID: IA-07-012023

Lab Sample ID: 200-66486-8

Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.14**	**J**	0.40	0.10	ppb v/v			01/19/23 13:32	1
Xylene (total)	**0.14**	**J**	0.70	0.11	ppb v/v			01/19/23 13:32	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 13:32	1
trans-1,2-Dichloroethene	**0.14**	**J**	0.20	0.023	ppb v/v			01/19/23 13:32	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/19/23 13:32	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 13:32	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/19/23 13:32	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	**0.56**	**J**	1.6	0.40	ug/m3			01/19/23 13:32	1
Xylene (total)	**0.61**	**J**	3.0	0.48	ug/m3			01/19/23 13:32	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			01/19/23 13:32	1
trans-1,2-Dichloroethene	**0.55**	**J**	0.79	0.091	ug/m3			01/19/23 13:32	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/19/23 13:32	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/19/23 13:32	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/19/23 13:32	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-187597/4
Matrix: Air
Analysis Batch: 187597

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	<0.10		0.40	0.10	ppb v/v			01/18/23 10:12	1
Xylene (total)	<0.11		0.70	0.11	ppb v/v			01/18/23 10:12	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			01/18/23 10:12	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			01/18/23 10:12	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/18/23 10:12	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/18/23 10:12	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/18/23 10:12	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	<0.40		1.6	0.40	ug/m3			01/18/23 10:12	1
Xylene (total)	<0.48		3.0	0.48	ug/m3			01/18/23 10:12	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			01/18/23 10:12	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			01/18/23 10:12	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/18/23 10:12	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/18/23 10:12	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/18/23 10:12	1

Lab Sample ID: LCS 200-187597/3
Matrix: Air
Analysis Batch: 187597

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	10.0	9.09		ppb v/v		91	70 - 125
trans-1,2-Dichloroethene	10.0	8.72		ppb v/v		87	69 - 137
Trichloroethene	10.0	9.21		ppb v/v		92	73 - 122
cis-1,2-Dichloroethene	10.0	8.75		ppb v/v		88	72 - 121
Vinyl chloride	10.0	8.78		ppb v/v		88	61 - 135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	68	61.7		ug/m3		91	70 - 125
trans-1,2-Dichloroethene	40	34.6		ug/m3		87	69 - 137
Trichloroethene	54	49.5		ug/m3		92	73 - 122
cis-1,2-Dichloroethene	40	34.7		ug/m3		88	72 - 121
Vinyl chloride	26	22.4		ug/m3		88	61 - 135

Lab Sample ID: 200-66486-4 DU
Matrix: Air
Analysis Batch: 187597

Client Sample ID: IA-04-012023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,2-Dichloroethene, Total	0.19	J	0.174	J	ppb v/v		9	25
Xylene (total)	0.65	J	0.650	J	ppb v/v		0	25
Tetrachloroethene	0.25		0.256		ppb v/v		3	25
trans-1,2-Dichloroethene	0.19	J	0.174	J	ppb v/v		8	25
Trichloroethene	<0.025		<0.025		ppb v/v		NC	25
cis-1,2-Dichloroethene	<0.021		<0.021		ppb v/v		NC	25
Vinyl chloride	<0.021		<0.021		ppb v/v		NC	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,2-Dichloroethene, Total	0.75	J	0.690	J	ug/m3		9	25
Xylene (total)	2.8	J	2.82	J	ug/m3		0	25
Tetrachloroethene	1.7		1.73		ug/m3		3	25
trans-1,2-Dichloroethene	0.75	J	0.691	J	ug/m3		8	25
Trichloroethene	<0.13		<0.13		ug/m3		NC	25
cis-1,2-Dichloroethene	<0.083		<0.083		ug/m3		NC	25
Vinyl chloride	<0.054		<0.054		ug/m3		NC	25

Lab Sample ID: MB 200-187638/4
Matrix: Air
Analysis Batch: 187638

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	<0.10		0.40	0.10	ppb v/v			01/19/23 09:51	1
Xylene (total)	<0.11		0.70	0.11	ppb v/v			01/19/23 09:51	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 09:51	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			01/19/23 09:51	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			01/19/23 09:51	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			01/19/23 09:51	1
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			01/19/23 09:51	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	<0.40		1.6	0.40	ug/m3			01/19/23 09:51	1
Xylene (total)	<0.48		3.0	0.48	ug/m3			01/19/23 09:51	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			01/19/23 09:51	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			01/19/23 09:51	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			01/19/23 09:51	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			01/19/23 09:51	1
Vinyl chloride	<0.054		0.51	0.054	ug/m3			01/19/23 09:51	1

Lab Sample ID: LCS 200-187638/3
Matrix: Air
Analysis Batch: 187638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	10.0	9.38		ppb v/v		94	70 - 125
trans-1,2-Dichloroethene	10.0	10.1		ppb v/v		101	69 - 137
Trichloroethene	10.0	9.58		ppb v/v		96	73 - 122
cis-1,2-Dichloroethene	10.0	9.64		ppb v/v		96	72 - 121
Vinyl chloride	10.0	9.76		ppb v/v		98	61 - 135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	68	63.6		ug/m3		94	70 - 125
trans-1,2-Dichloroethene	40	39.9		ug/m3		101	69 - 137
Trichloroethene	54	51.5		ug/m3		96	73 - 122
cis-1,2-Dichloroethene	40	38.2		ug/m3		96	72 - 121
Vinyl chloride	26	24.9		ug/m3		98	61 - 135

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: 200-66486-8 DU
Matrix: Air
Analysis Batch: 187638

Client Sample ID: IA-07-012023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2-Dichloroethene, Total	0.14	J		0.144	J	ppb v/v				3	25
Xylene (total)	0.14	J		0.151	J	ppb v/v				8	25
Tetrachloroethene	<0.021			<0.021		ppb v/v				NC	25
trans-1,2-Dichloroethene	0.14	J		0.144	J	ppb v/v				4	25
Trichloroethene	<0.025			<0.025		ppb v/v				NC	25
cis-1,2-Dichloroethene	<0.021			<0.021		ppb v/v				NC	25
Vinyl chloride	<0.021			<0.021		ppb v/v				NC	25

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2-Dichloroethene, Total	0.56	J		0.571	J	ug/m3				3	25
Xylene (total)	0.61	J		0.656	J	ug/m3				8	25
Tetrachloroethene	<0.14			<0.14		ug/m3				NC	25
trans-1,2-Dichloroethene	0.55	J		0.571	J	ug/m3				4	25
Trichloroethene	<0.13			<0.13		ug/m3				NC	25
cis-1,2-Dichloroethene	<0.083			<0.083		ug/m3				NC	25
Vinyl chloride	<0.054			<0.054		ug/m3				NC	25

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Air - GC/MS VOA

Analysis Batch: 187597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-66486-1	IA-01-012023	Total/NA	Air	TO-15	
200-66486-2	IA-02-012023	Total/NA	Air	TO-15	
200-66486-3	IA-03-012023	Total/NA	Air	TO-15	
200-66486-4	IA-04-012023	Total/NA	Air	TO-15	
200-66486-5	IA-05-012023	Total/NA	Air	TO-15	
200-66486-6	IA-05DUP-012023	Total/NA	Air	TO-15	
200-66486-7	IA-06-012023	Total/NA	Air	TO-15	
MB 200-187597/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-187597/3	Lab Control Sample	Total/NA	Air	TO-15	
200-66486-4 DU	IA-04-012023	Total/NA	Air	TO-15	

Analysis Batch: 187638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-66486-8	IA-07-012023	Total/NA	Air	TO-15	
MB 200-187638/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-187638/3	Lab Control Sample	Total/NA	Air	TO-15	
200-66486-8 DU	IA-07-012023	Total/NA	Air	TO-15	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Client Sample ID: IA-01-012023
Lab Sample ID: 200-66486-1
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/18/23 20:55

Client Sample ID: IA-02-012023
Lab Sample ID: 200-66486-2
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/18/23 21:48

Client Sample ID: IA-03-012023
Lab Sample ID: 200-66486-3
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/18/23 22:40

Client Sample ID: IA-04-012023
Lab Sample ID: 200-66486-4
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/18/23 23:33

Client Sample ID: IA-05-012023
Lab Sample ID: 200-66486-5
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/19/23 01:19

Client Sample ID: IA-05DUP-012023
Lab Sample ID: 200-66486-6
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/19/23 02:12

Client Sample ID: IA-06-012023
Lab Sample ID: 200-66486-7
Date Collected: 01/13/23 22:50
Matrix: Air
Date Received: 01/17/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187597	K1P	EET BUR	01/19/23 03:04

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Client Sample ID: IA-07-012023

Date Collected: 01/13/23 22:50
Date Received: 01/17/23 10:30

Lab Sample ID: 200-66486-8

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	187638	K1P	EET BUR	01/19/23 13:32

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Laboratory: Eurofins Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	399133350	08-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,2-Dichloroethene, Total
TO-15		Air	cis-1,2-Dichloroethene
TO-15		Air	Tetrachloroethene
TO-15		Air	trans-1,2-Dichloroethene
TO-15		Air	Trichloroethene
TO-15		Air	Vinyl chloride
TO-15		Air	Xylene (total)

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Metro North Service Center

Job ID: 200-66486-1
SDG: 200-66486

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-66486-1	IA-01-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #2523
200-66486-2	IA-02-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #2898
200-66486-3	IA-03-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #5406
200-66486-4	IA-04-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #4298
200-66486-5	IA-05-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #4318
200-66486-6	IA-05DUP-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #5429
200-66486-7	IA-06-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #4781
200-66486-8	IA-07-012023	Air	01/13/23 22:50	01/17/23 10:30	Air Canister (6-Liter) #3236

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
200-66486	01/18/23	9:31	29.2	22	G20	JR

Sampling Information and Return Equipment Check	Yes	N o	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	Yes		
(2) Is the flow controller ID used for each canister recorded?	Yes		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		N o	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		N o	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-66486-A-1	2523	0.0	Y	4188	94/29	Y	5983-53616	
200-66486-A-2	2898	-5.3	N	4530	94/15	Y	4566-53728	
200-66486-A-3	5406	-5.5	N	6558	94/29	Y	4566-53728	
200-66486-A-4	4298	0.0	Y	5232	94/29	Y	4348-53728	
200-66486-A-5	4318	0.0	Y	6552	94/29	Y	5408-53728	
200-66486-A-6	5429	-2.9	N	4996	94/29	Y	4566-53728	
200-66486-A-7	4781	-1.6	N	3364	94/5	Y	2637-53728	
200-66486-A-8	3236	0.0	Y	4045	94/29	Y	4566-53728	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10"Hg, but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded

Eurofins TestAmerica, Burlington
530 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802 660.1990 fax 802.660.1919

Canister Samples Chain of Custody Record

200-66486 Chain of Custody

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Frank Dombrowski	**Samples Collected By:** D. Zolp
Company Name: Geosyntec	**Phone:** 414-221-2156	COC No. 1 of 1 COCs
Address: 10600 N. Port Washington Rd.	**Email:** frank.dombrowski@wecenergygroup.com	TALS Project #
City/State/Zip: Mequon, WI 53092	**Site Contact:** Dave Zolp	**For Lab Use Only:** Walk-in Client:
Phone: Email: dzolp@geosyntec.com	**Tel/Fax** 262-496-6103	Lab Sampling:
FAX:	**Analysis Turnaround Time**	Job / SDG No.
Project Name: MetroNorth Service Center	Standard (Specific):	(See below for Add'l Items)
Site/Location: Milwaukee, WI	Rush (Specify): 3 day (1/20/23)	
P O #		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-01-012023	1/13/23	1450	~~1/13/23~~	2250	-26.7	0.6	4188	2523							X		X						
IA-02-012023					-26.9	7.8	4530	2898							X		X						
IA-03-012023					-26.7	5.4	6558	5406							X		X						
IA-04-012023					26.9	1.2	5232	4298							X		X						
IA-05-012023					26.7	0	MS 6552	4318 ~~6552~~ DS							X		X						
IA-05DUP-012023					-26.7	4.2	4996	5429							X		X						
IA-06-012023					26.9	3.3	3364	4781							X		X						
OA-07-012023	↓	↓	↓	↓	26.9	0.6	4045	3236							X		X						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments: TO-15 short list as follows:
Tetrachloroethylene, Trichloroethylene, cis & trans-1,2-Dichloroethylene, Vinyl Chloride.

Samples Shipped by:	**Date / Time:** 1/16/23; 1230	**Samples Received by:** ETA Burl 1/17/23 1030
Samples Relinquished by:	**Date / Time:**	**Received by:**
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

Form No. CA-C-WI-003, Rev. 2.28, dated 1/8/2021

1/23/2023

ORIGIN ID:MKEA (262) 834-0227
DISTRIBUTION
GEOSYNTEC CONSULTANTS
10600 N PORT WASHINGTON RD
STE 100
MEQUON, WI 53092
UNITED STATES US

SHIP DATE: 16JAN23
ACTWGT: 35.00 LB
CAD: 102598228/INET4580

BILL SENDER

TO SAMPLE RECEIVING
TEST AMERICA
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF CHE80940Q
INV **
PO 02 DEPT 1811

591J2/D297/FE2D

FedEx Express

J2310230111101uu

TUE - 17 JAN 10:30A
PRIORITY OVERNIGHT

1 of 2
TRK# 0201 7710 3696 0687
MASTER

05403
VT-US BTV

NX BTVA

FedEx Ship Manager - Print Your Label(s)

Page 23 of 141

1/16/23, 1:02 PM

1/23/2023

ORIGIN ID:MKEA (262) 834-0227
DISTRIBUTION
GEOSYNTEC CONSULTANTS
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FedEx Express

J2310230111101uu

TUE - 17 JAN 10:30A
PRIORITY OVERNIGHT

2 of 2
MPS# 0263 7710 3696 1271
Mstr# 7710 3696 0687

0201

05403
VT-US BTV

NX BTVA

FedEx Ship Manager - Print Your Label(s)

1/16/23, 1:02 PM

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 200-66486-1
SDG Number: 200-66486

Login Number: 66486
List Number: 1
Creator: Reynolds, Jamie K

List Source: Eurofins Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1999266, 9267
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Top Rack	10	25	12/7/2022	1456	22	22	SML	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	2843	1.04	1.04	0	39.1	G26	12/9/22	1131	←	22.0	G26	12/10/22	1252	←	22.0
2	5159	↓	1.25	1.21	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
3	4136	↓	1.19	1.15	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
4	5894	↓	1.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
5	4368	↓	1.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
6	5983	1.04	1.04	0	29.9	G26	12/9/22	1329	←	22.0	G26	12/10/22	1351	←	22.0
7	34001039	1.04	1.24	1.20	30.1	G26	12/9/22	1131	←	22.0	G26	12/10/22	1252	←	22.0
8	4329	↓	1.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
9	4311	↓	1.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
10	2523	↓	1.15	1.11	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
11	5087	↓	1.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
12	4071	↓	1.01	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☒ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Review
5983	12/19/22	53616	VTP		XXXXXX				12/19/22	OPR

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Top Rack	10	25	12/17/2022	1229	22	22	SML	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5463	.04	.04	0	29.7	G26	12/18/22	1258	←	22.0	G26	12/28/22	1500	←	22.0
2	5429	"	.04	0	"	G26	"	"	"	"	G26	"	"	"	"
3	4566	.04	.04	0	29.5	G26	12/28/22	1500	←	22.0	G26	12/31/22	1737	←	22.0
4	4786	.04	.12	.08	29.7	G26	12/18/22	1258	←	22.0	G26	12/28/22	1500	←	22.0
5	5711		.04	0		G26					G26				
6	9196		.24	.20		G26					G26				
7	5403		.04	0		G26					G26				
8	2898		.04	0		G26					G26				
9	3236		.04	0		G26					G26				
10	3405		.22	.18		G26					G26				
11	2864		.04	0		G26					G26				
12	5406	✓	.04	0	✓	G26	✓	✓	✓	✓	G26	✓	✓	✓	✓

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☒ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewe
4566	12/20/22	537126	ATJ		XXXXXXX				12/20/22	DDG

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Bottom Rack	10	25	12/17/2022	1229	22	22	SML	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	2620	.04	.04	0	29.7	G26	12/18/22	1258	"	22.0	G26	12/28/22	1521	"	22.0
2	4318	"	.04	0	"	G26	"	"	"	"	G26	"	"	"	"
3	5408	.04	.04	0	29.5	G26	12/28/22	1521	"	22.0	G26	12/31/22	1337	"	22.0
4	3457	.04	.04	0	29.7	G26	12/18/22	1258	"	22.0	G26	12/28/22	1521	"	22.0
5	4111		.04	0		G26					G26				
6	4309		.04	0		G26					G26				
7	3310		.04	0		G26					G26				
8	5963		.04	0		G26					G26				
9	5398		.04	0		G26					G26				
10	5615		.04	0		G26					G26				
11	5454		.04	0		G26					G26				
12	34001302	"	.11	.07	"	G26	"	"	"	"	G26	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☐TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
5408	12/20/22	53728	TPB		XXXXXXX				12/28/22	WRB

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Oven 1/2	10	50	12/17/2022	1411	22	22	SML	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4356	.04	.04	0	29.7	G26	12/18/22	12:19	—	22.0	G26	12/28/22	11:17	—	22.0
2	5964	↓	.12	.08	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
3	2637	.04	.04	0	29.5	G26	12/28/22	11:49	—	22.0	G26	12/28/22	13:37	—	22.0
4	3083	.04	.04	0	29.7	G26	12/18/22	12:19	—	22.0	G26	12/28/22	11:17	—	22.0
5	4123	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
6	3028	↓	.15	.11	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
7	2515	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
8	4313	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
9	4781	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
10	9280	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
11	9220	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
12	3200	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☒ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Review
2637	12/20/22	537726	ABI		XXXXXXX				12/20/22	MP

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Oven 1/2	10	50	12/18/2022	1330	22	22	SML	6 liter	batch

						Initial Reading					Final Reading				
Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Gauge:	Date:	Time:	Tech:	Temp:	Gauge:	Date:	Time:	Tech:	Temp:
1	5895	.04	.04	0	29.7	G26	12/19/22	0950	DMB	22	G26	12/28/22	1546	←	22.0
2	4331	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
3	4908	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
4	4348	.04	.04	0	29.5	G26	12/28/22	1546	←	22.0	G26	12/31/22	1327	←	22.0
5	4874	.04	.04	0	29.7	G26	12/19/22	0950	DMB	22	G26	12/28/22	1546	←	22.0
6	4298	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
7	5414	↓	.23	.19	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
8	3485	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
9	2720	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
10	4332	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
11	9268	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
12	5902	↓	.04	0	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☒ TO15 Routine ☐ TO15 LL

				Inventory Level				Secondary Review		
Can ID	Date	Sequence	Analyst	1	2	3	4	Limited	Review Date	Revi
4348	12/20/22	53728	AB1		XXXXXXX				12/20/22	DMB

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

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1/23/2023

200-66202-A-4
4348
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 12/18/2022 12:00 AM 200-1688995

Loc: 200
66202
#4 A
Air-Storag

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66029-1

SDG No.:

Client Sample ID: 5983 Lab Sample ID: 200-66029-6

Matrix: Air Lab File ID: 53616-005.D

Analysis Method: TO-15 Date Collected: 12/07/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/09/2022 13:17

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66029-1

SDG No.:

Client Sample ID: 5983 Lab Sample ID: 200-66029-6

Matrix: Air Lab File ID: 53616-005.D

Analysis Method: TO-15 Date Collected: 12/07/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/09/2022 13:17

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66029-1

SDG No.:

Client Sample ID: 5983 Lab Sample ID: 200-66029-6

Matrix: Air Lab File ID: 53616-005.D

Analysis Method: TO-15 Date Collected: 12/07/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/09/2022 13:17

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\53616-005.D
Lims ID: 200-66029-A-6
Client ID: 5983
Sample Type: Client
Inject. Date: 09-Dec-2022 13:17:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0053616-005
Misc. Info.: 66029-6
Operator ID: vtp Instrument ID: CHC.i

Method: \\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 12-Dec-2022 10:54:54 Calib Date: 06-Dec-2022 00:53:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHC.i\20221205-53552.b\53552-013.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1681

First Level Reviewer: BKZ7 Date: 09-Dec-2022 15:26:03

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		2.805				ND	7
2	Dichlorodifluoromethane	85		2.863				ND	7
3	Chlorodifluoromethane	51		2.895				ND	7
4	1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.088				ND	7
5	Chloromethane	50		3.189				ND	7
6	Butane	43		3.376				ND	7
7	Vinyl chloride	62		3.402				ND	
8	Butadiene	54		3.472				ND	
9	Bromomethane	94		4.043				ND	
10	Chloroethane	64		4.256				ND	
13	Vinyl bromide	106		4.609				ND	
14	Trichlorofluoromethane	101		4.731				ND	
16	Ethanol	45		5.281				ND	
19	1,1,2-Trichloro-1,2,2-trifluoroe	101		5.756				ND	
20	1,1-Dichloroethene	96		5.761				ND	
21	Acetone	43		5.959				ND	7
22	Carbon disulfide	76		6.119				ND	7
23	Isopropyl alcohol	45		6.332				ND	
24	3-Chloro-1-propene	41		6.492				ND	7
26	Methylene Chloride	49		6.765				ND	7
28	2-Methyl-2-propanol	59		7.096				ND	
29	trans-1,2-Dichloroethene	61		7.224				ND	MU
30	Methyl tert-butyl ether	73		7.245				ND	7
32	Hexane	57		7.667				ND	7
33	1,1-Dichloroethane	63		8.046				ND	
34	Vinyl acetate	43		8.152				ND	
35	cis-1,2-Dichloroethene	96		9.118				ND	
36	2-Butanone (MEK)	72		9.172				ND	
37	Ethyl acetate	88		9.273				ND	
* 38	Chlorobromomethane	128	9.551	9.551	0.000	94	358286	20.0	
39	Tetrahydrofuran	42		9.631				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.711				ND	
	41 1,1,1-Trichloroethane	97		9.983				ND	
	42 Cyclohexane	84		9.999				ND	
S	43 1,2-Dichloroethene, Total	61		10.200				ND	7
	44 Carbon tetrachloride	117		10.250				ND	
	45 Benzene	78		10.661				ND	7
	46 Isooctane	57	10.730	10.730	-0.005	64	2209	0.008557	7M
	47 1,2-Dichloroethane	62		10.805				ND	
	48 n-Heptane	43		11.141				ND	7
*	49 1,4-Difluorobenzene	114	11.509	11.504	0.005	98	2171586	20.0	
	50 Trichloroethene	95		11.973				ND	7
	53 1,2-Dichloropropane	63		12.464				ND	
	56 Dibromomethane	174		12.710				ND	MU
	55 Methyl methacrylate	69		12.715				ND	
	57 1,4-Dioxane	88		12.758				ND	
	58 Dichlorobromomethane	83		13.041				ND	
	59 cis-1,3-Dichloropropene	75		14.002				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		14.327				ND	7
	62 Toluene	92	14.642	14.647	0.021	94	3077	0.0267	
	66 trans-1,3-Dichloropropene	75		15.213				ND	7
	67 1,1,2-Trichloroethane	83		15.571				ND	
	68 Tetrachloroethene	166	15.763	15.773	0.011	90	9310	0.1140	
	69 2-Hexanone	43		16.088				ND	7
	70 Chlorodibromomethane	129		16.344				ND	
	71 Ethylene Dibromide	107		16.590				ND	
*	72 Chlorobenzene-d5	117	17.535	17.529	0.006	95	2018646	20.0	
	73 Chlorobenzene	112		17.593				ND	7
	74 Ethylbenzene	91	17.796	17.796	0.021	22	3245	0.0125	M
	76 m-Xylene & p-Xylene	106	18.047	18.063	0.016	0	3526	0.0379	
	77 o-Xylene	106	18.880	18.880	0.022	91	787	0.008633	7M
	78 Styrene	104		18.906				ND	
	80 Bromoform	173		19.306				ND	
	81 Isopropylbenzene	105		19.611				ND	7
S	82 Xylenes, Total	106				0		0.0465	
	83 1,1,2,2-Tetrachloroethane	83		20.315				ND	7
	85 N-Propylbenzene	91		20.432				ND	7
	86 2-Chlorotoluene	91		20.630				ND	7
	87 4-Ethyltoluene	105		20.646				ND	7
	89 1,3,5-Trimethylbenzene	105		20.769				ND	7
	91 tert-Butylbenzene	119		21.297				ND	7
	92 1,2,4-Trimethylbenzene	105		21.398				ND	7
	93 sec-Butylbenzene	105		21.655				ND	7
	95 1,3-Dichlorobenzene	146		21.873				ND	7
	94 4-Isopropyltoluene	119		21.879				ND	7
	96 1,4-Dichlorobenzene	146		22.018				ND	7
	97 Benzyl chloride	91		22.204				ND	7
	98 n-Butylbenzene	91		22.466				ND	7
	100 1,2-Dichlorobenzene	146		22.546				ND	7
	102 1,2,4-Trichlorobenzene	180		24.841				ND	7
	103 Hexachlorobutadiene	225		25.049				ND	
	104 Naphthalene	128		25.236				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

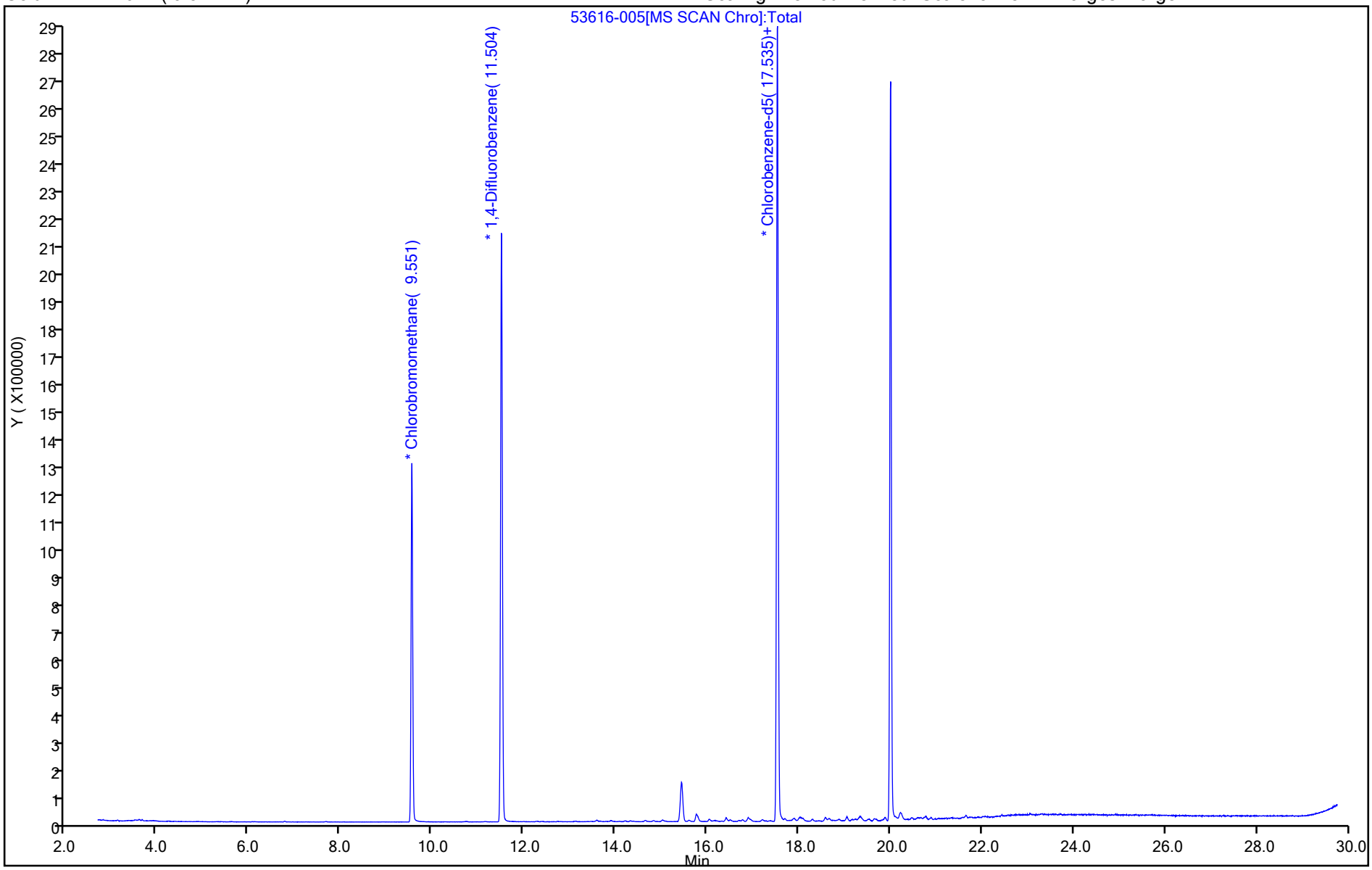
ATTO15CISs_00011 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-Dec-2022 10:54:54 Chrom Revision: 2.3 01-Dec-2022 08:01:02

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\53616-005.D				
Injection Date:	09-Dec-2022 13:17:30	Instrument ID:	CHC.i	Operator ID:	vtp
Lims ID:	200-66029-A-6	Lab Sample ID:	200-66029-6	Worklist Smp#:	5
Client ID:	5983				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



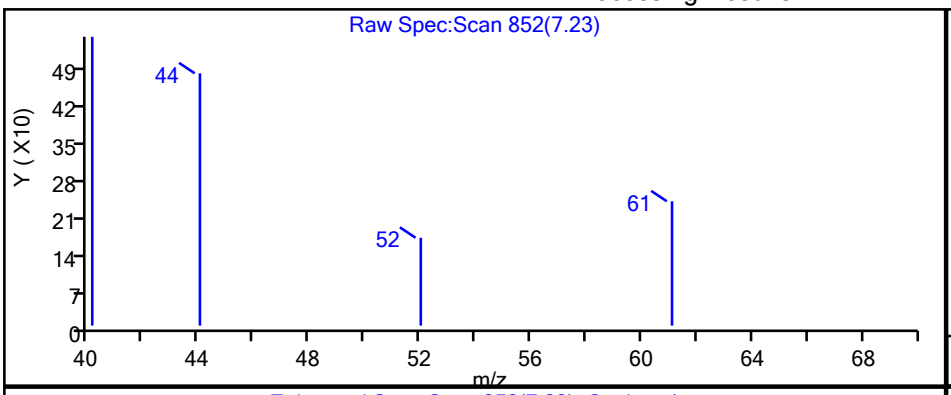
User Disabled Compound Report

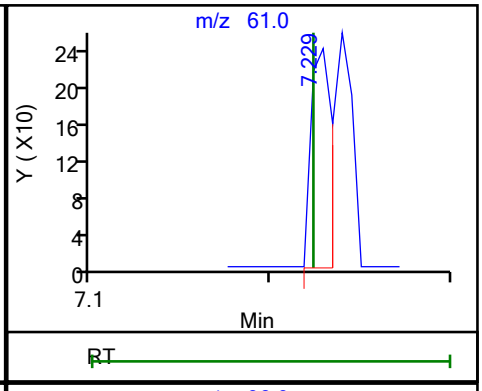
Eurofins Burlington

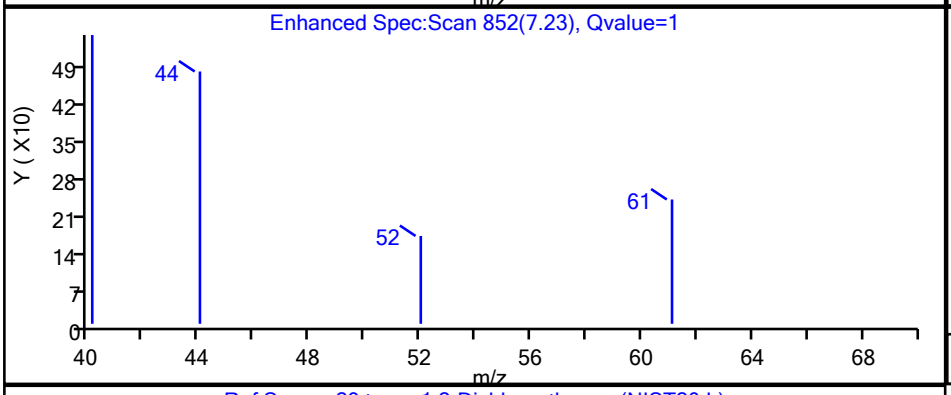
Data File:	\\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\53616-005.D				
Injection Date:	09-Dec-2022 13:17:30	Instrument ID:	CHC.i		
Lims ID:	200-66029-A-6	Lab Sample ID:	200-66029-6		
Client ID:	5983				
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

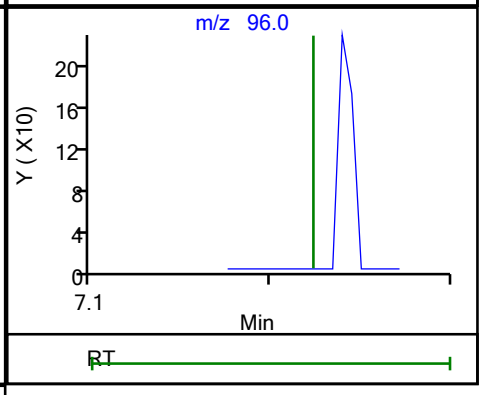
29 trans-1,2-Dichloroethene, CAS: 156-60-5

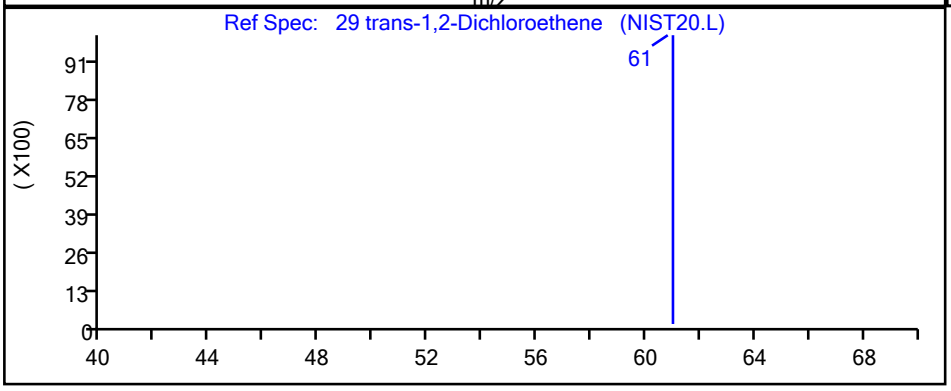
Processing Results











RT	Mass	Response	Amount
7.23	61.00	192	0.003088
7.22	96.00	0	

Reviewer: bunmaa, 12-Dec-2022 10:51:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

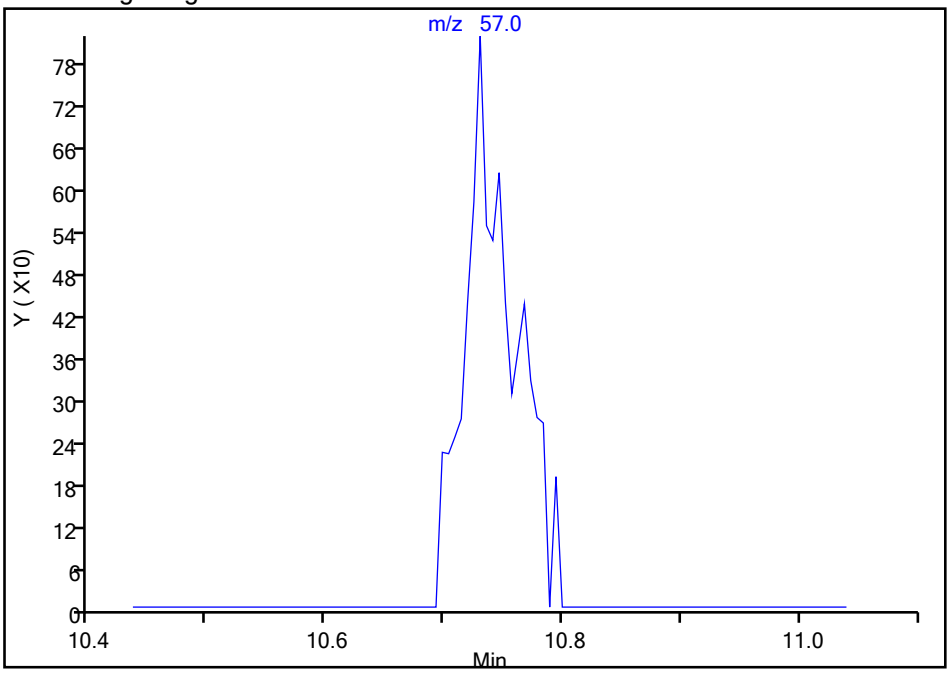
Data File:	\\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\53616-005.D				
Injection Date:	09-Dec-2022 13:17:30	Instrument ID:	CHC.i		
Lims ID:	200-66029-A-6	Lab Sample ID:	200-66029-6		
Client ID:	5983				
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Isooctane, CAS: 540-84-1

Signal: 1

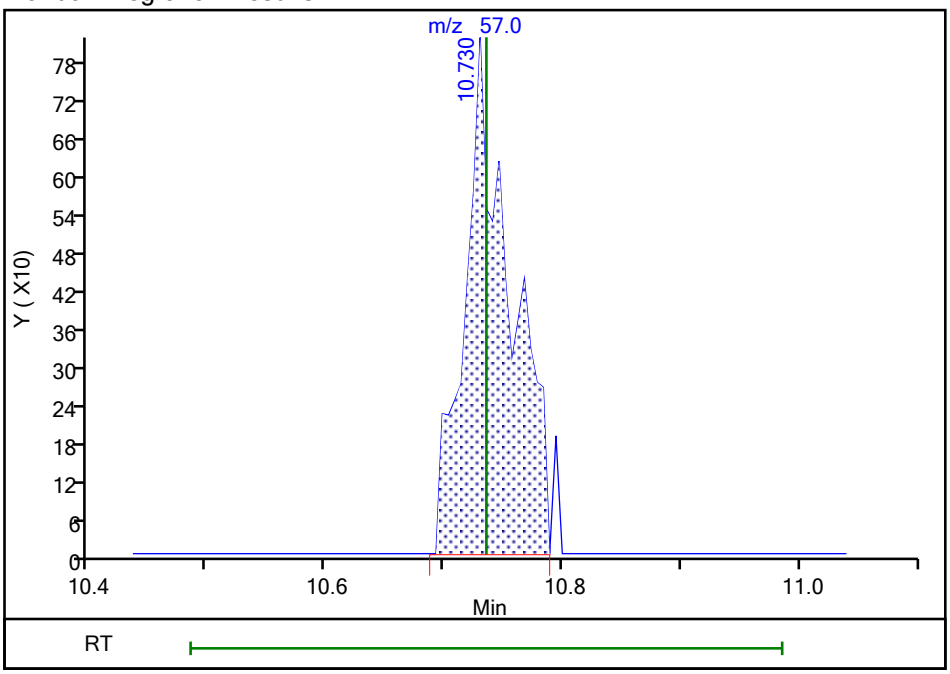
Processing Integration Results

Not Detected
Expected RT: 10.74



Manual Integration Results

RT: 10.73
Area: 2209
Amount: 0.008557
Amount Units: ppb v/v



Reviewer: bunmaa, 12-Dec-2022 10:51:57
Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins Burlington

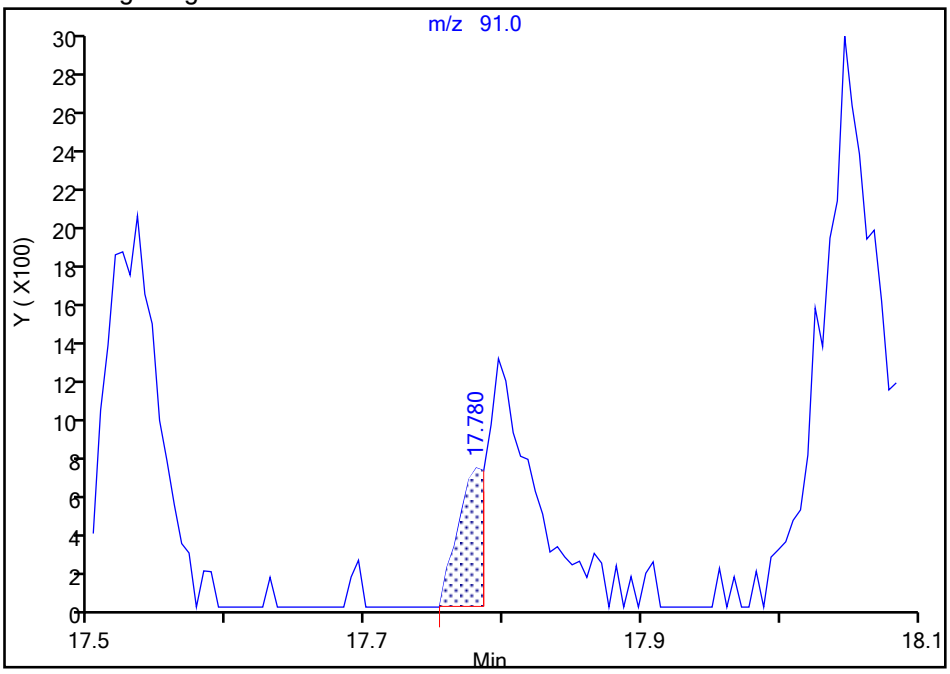
Data File:	\\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\53616-005.D				
Injection Date:	09-Dec-2022 13:17:30	Instrument ID:	CHC.i		
Lims ID:	200-66029-A-6	Lab Sample ID:	200-66029-6		
Client ID:	5983				
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Signal: 1

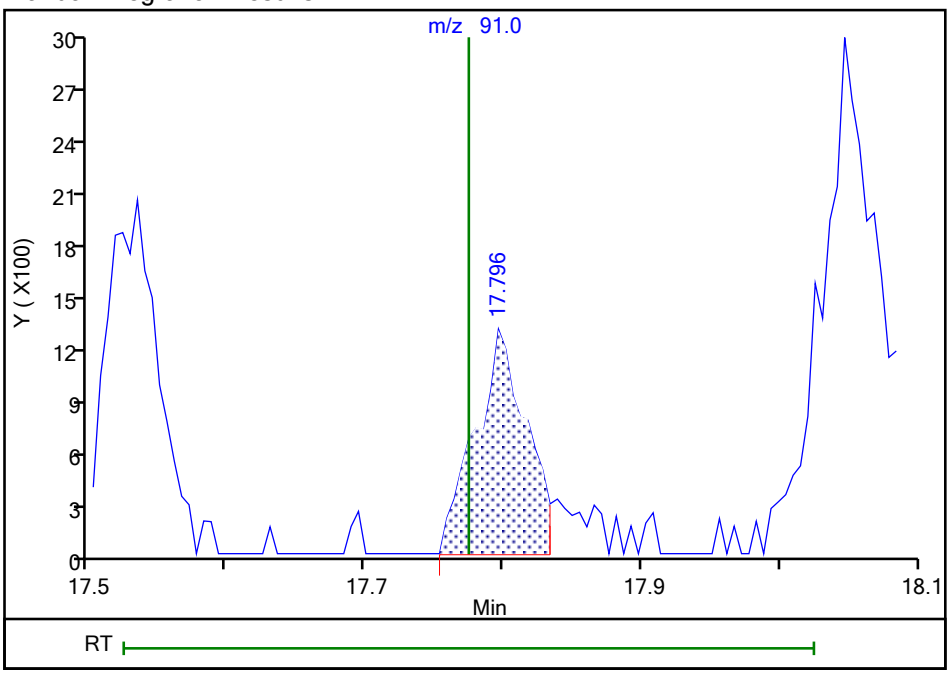
Processing Integration Results

RT: 17.78
Area: 975
Amount: 0.003748
Amount Units: ppb v/v



Manual Integration Results

RT: 17.80
Area: 3245
Amount: 0.012475
Amount Units: ppb v/v



Reviewer: bunmaa, 12-Dec-2022 10:53:32
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

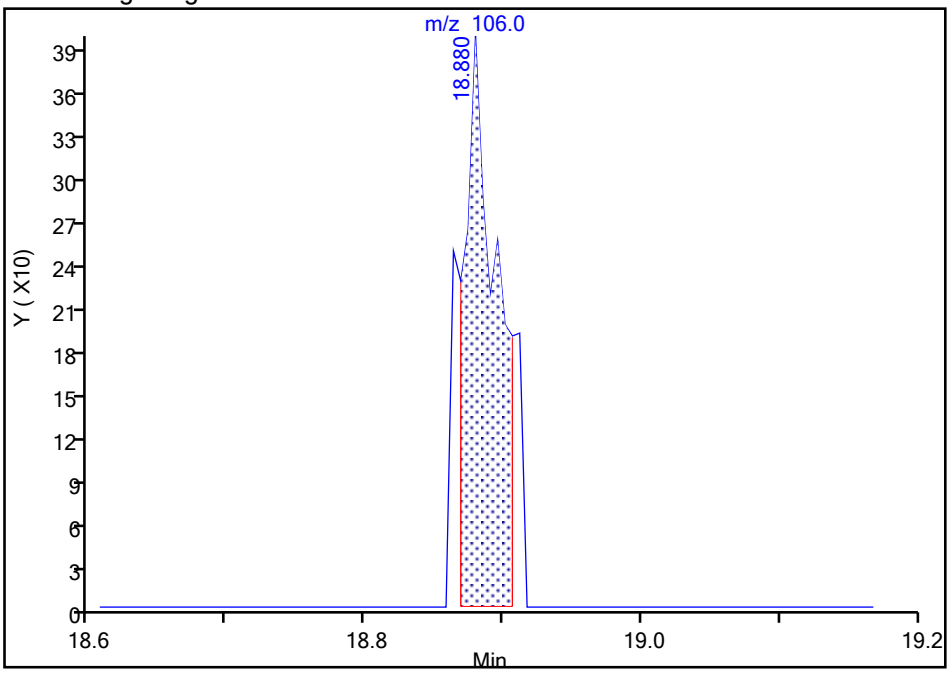
Data File:	\\chromfs\Burlington\ChromData\CHC.i\20221209-53616.b\53616-005.D				
Injection Date:	09-Dec-2022 13:17:30	Instrument ID:	CHC.i		
Lims ID:	200-66029-A-6	Lab Sample ID:	200-66029-6		
Client ID:	5983				
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

77 o-Xylene, CAS: 95-47-6

Signal: 1

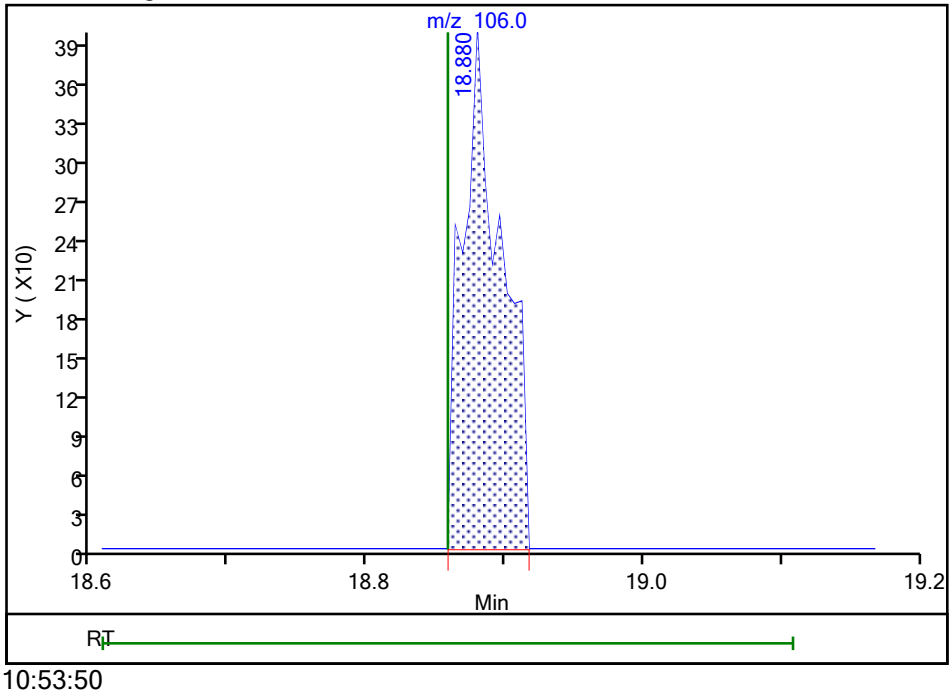
Processing Integration Results

RT: 18.88
Area: 647
Amount: 0.007097
Amount Units: ppb v/v



Manual Integration Results

RT: 18.88
Area: 787
Amount: 0.008633
Amount Units: ppb v/v



Reviewer: bunmaa, 12-Dec-2022 10:53:50
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66193-1

SDG No.:

Client Sample ID: 4566 Lab Sample ID: 200-66193-3

Matrix: Air Lab File ID: 53728-020.d

Analysis Method: TO-15 Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/20/2022 00:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66193-1

SDG No.:

Client Sample ID: 4566 | Lab Sample ID: 200-66193-3

Matrix: Air | Lab File ID: 53728-020.d

Analysis Method: TO-15 | Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 12/20/2022 00:08

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 186829 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66193-1

SDG No.:

Client Sample ID: 4566 Lab Sample ID: 200-66193-3

Matrix: Air Lab File ID: 53728-020.d

Analysis Method: TO-15 Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/20/2022 00:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d
Lims ID: 200-66193-A-3
Client ID: 4566
Sample Type: Client
Inject. Date: 20-Dec-2022 00:08:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0053728-020
Misc. Info.: 66193-3
Operator ID: vtp Instrument ID: CHW.i

Method: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\TO15_TO3_MasterMethod_W.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Dec-2022 08:40:03 Calib Date: 15-Dec-2022 23:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHW.i\20221215-53700.b\53700-013.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: BKZ7 Date: 20-Dec-2022 08:40:03

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		4.083				ND	
	2 Dichlorodifluoromethane	85		4.174				ND	MU
	3 Chlorodifluoromethane	51		4.217				ND	7
	4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.517				ND	7
	5 Chloromethane	50		4.629				ND	MU
	6 Vinyl chloride	62		4.928				ND	MU
	7 Butane	43		4.934				ND	7
	8 Butadiene	54		5.041				ND	MU
	9 Bromomethane	94		5.742				ND	7
	10 Chloroethane	64		6.009				ND	MU
	13 Vinyl bromide	106		6.421				ND	MU
	14 Trichlorofluoromethane	101		6.587				ND	MU
	16 Ethanol	45		6.956				ND	7
	20 1,1-Dichloroethene	96		7.635				ND	MU
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		7.678				ND	7
	22 Acetone	43		7.710				ND	7
	23 Isopropyl alcohol	45		8.010				ND	7
	24 Carbon disulfide	76		8.042				ND	MU
	26 3-Chloro-1-propene	41		8.325				ND	7
	27 Methylene Chloride	49		8.556				ND	MU
	28 2-Methyl-2-propanol	59		8.775				ND	
	30 trans-1,2-Dichloroethene	61		9.053				ND	7
	31 Methyl tert-butyl ether	73		9.069				ND	7
	32 Hexane	57		9.561				ND	7
	33 1,1-Dichloroethane	63		9.807				ND	7
	34 Vinyl acetate	43		9.823				ND	7
S	35 1,2-Dichloroethene, Total	61		10.200				ND	7
	36 2-Butanone (MEK)	72		10.765				ND	MU
	37 cis-1,2-Dichloroethene	96		10.792				ND	MU
	38 Ethyl acetate	88		10.856				ND	MU
*	39 Chlorobromomethane	128	11.204	11.204	0.000	77	69003	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.252				ND	MU
	41 Chloroform	83		11.380				ND	7
	42 1,1,1-Trichloroethane	97		11.680				ND	7
	43 Cyclohexane	84		11.819				ND	MU
	44 Carbon tetrachloride	117		11.958				ND	MU
	45 Benzene	78		12.300				ND	7
	46 1,2-Dichloroethane	62		12.375				ND	MU
	47 Isooctane	57		12.525				ND	
	48 n-Heptane	43		12.835				ND	7
*	49 1,4-Difluorobenzene	114	13.044	13.044	0.000	93	343491	10.0	
	51 Trichloroethene	95		13.472				ND	7
	53 1,2-Dichloropropane	63		13.921				ND	
	54 Methyl methacrylate	69		14.023				ND	7
	55 1,4-Dioxane	88		14.060				ND	7
	57 Dibromomethane	174		14.082				ND	MU
	58 Dichlorobromomethane	83		14.392				ND	MU
	59 cis-1,3-Dichloropropene	75		15.189				ND	7
	61 4-Methyl-2-pentanone (MIBK)	43		15.457				ND	7
	62 Toluene	92		15.831				ND	7
	66 trans-1,3-Dichloropropene	75		16.248				ND	7
	67 1,1,2-Trichloroethane	83		16.623				ND	MU
	68 Tetrachloroethene	166		16.821				ND	7
	69 2-Hexanone	43		17.040				ND	7
	70 Chlorodibromomethane	129		17.356				ND	7
	71 Ethylene Dibromide	107		17.591				ND	MU
*	73 Chlorobenzene-d5	117	18.506	18.506	0.000	90	286122	10.0	
	74 Chlorobenzene	112		18.565				ND	7
	75 Ethylbenzene	91		18.763				ND	7
	76 m-Xylene & p-Xylene	106		19.025				ND	7
	78 o-Xylene	106		19.795				ND	MU
	79 Styrene	104		19.833				ND	7
S	80 Xylenes, Total	106		20.100				ND	7
	81 Bromoform	173		20.186				ND	7
	82 Isopropylbenzene	105		20.523				ND	7
	83 1,1,2,2-Tetrachloroethane	83		21.052				ND	7
	85 N-Propylbenzene	91		21.261				ND	7
	86 2-Chlorotoluene	91		21.411				ND	7
	87 4-Ethyltoluene	105		21.464				ND	7
	88 1,3,5-Trimethylbenzene	105		21.566				ND	MU
	91 tert-Butylbenzene	119		22.053				ND	7
	92 1,2,4-Trimethylbenzene	105		22.144				ND	7
	93 sec-Butylbenzene	105		22.385				ND	7
	94 1,3-Dichlorobenzene	146		22.556				ND	7
	95 4-Isopropyltoluene	119		22.604				ND	7
	96 1,4-Dichlorobenzene	146		22.700				ND	MU
	97 Benzyl chloride	91		22.850				ND	7
	98 n-Butylbenzene	91		23.160				ND	7
	99 1,2-Dichlorobenzene	146		23.182				ND	MU
	102 1,2,4-Trichlorobenzene	180		25.562				ND	7
	103 Hexachlorobutadiene	225		25.803				ND	
	104 Naphthalene	128		26.022				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

ATTO15WISs_00010	Amount Added:	20.00	Units: mL	Run Reagent

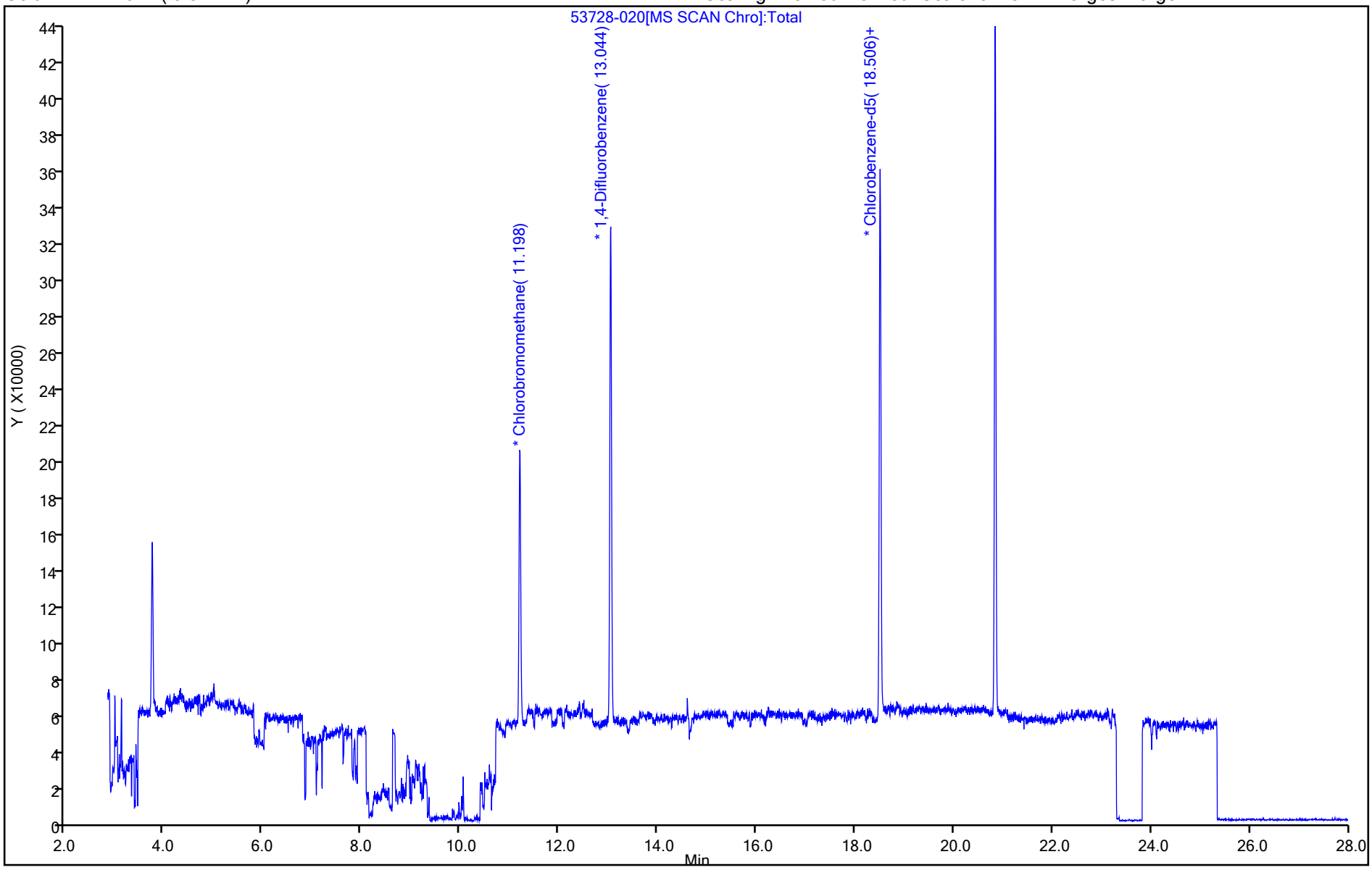
Report Date: 20-Dec-2022 08:40:03 Chrom Revision: 2.3 01-Dec-2022 08:01:02

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d

Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i	Operator ID:	vtp
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3	Worklist Smp#:	20
Client ID:	4566				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	19
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



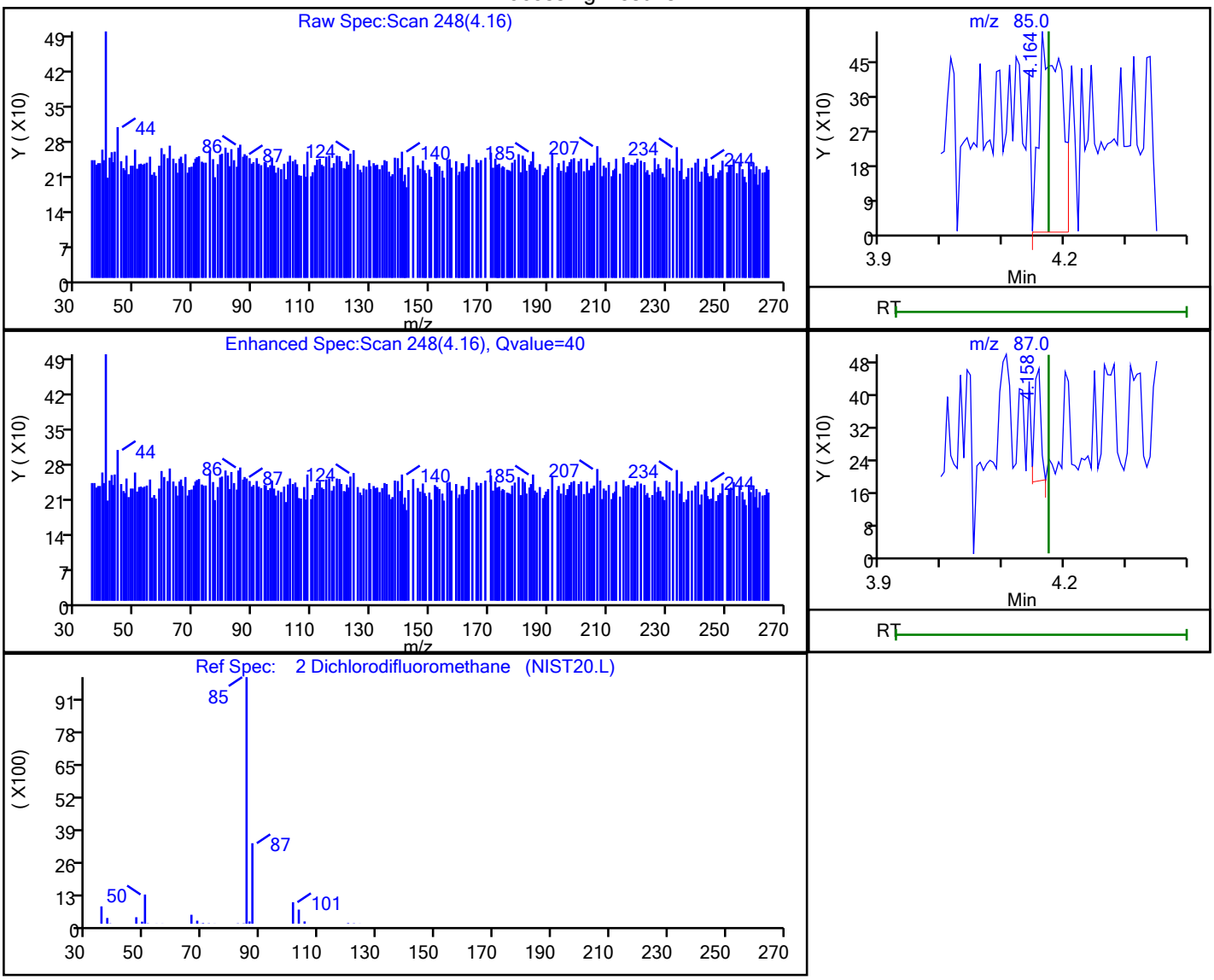
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
4.16	85.00	1293	0.041838
4.16	87.00	205	

Reviewer: BKZ7, 20-Dec-2022 08:39:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

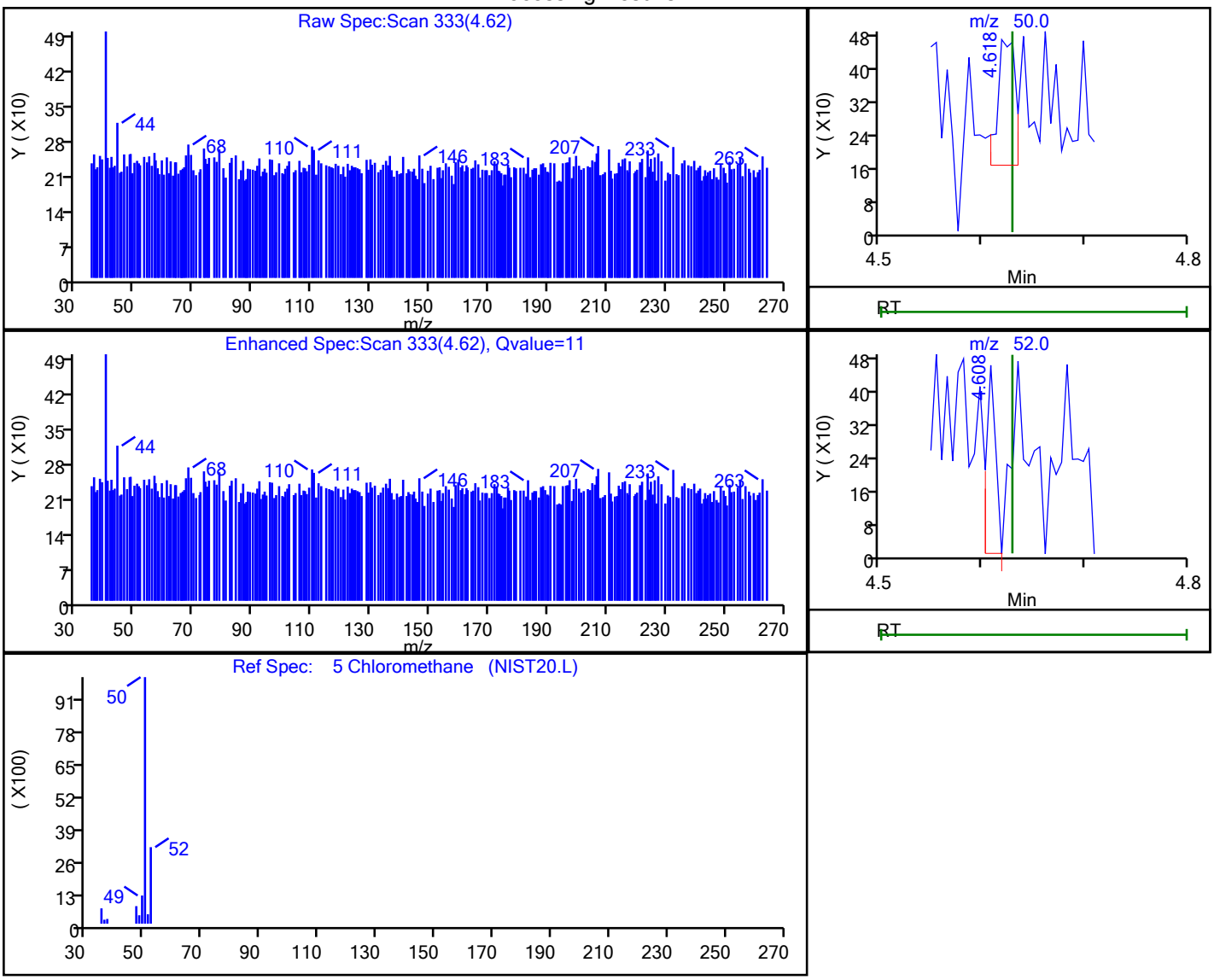
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
4.62	50.00	376	0.034427
4.61	52.00	292	

Reviewer: BKZ7, 20-Dec-2022 08:39:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

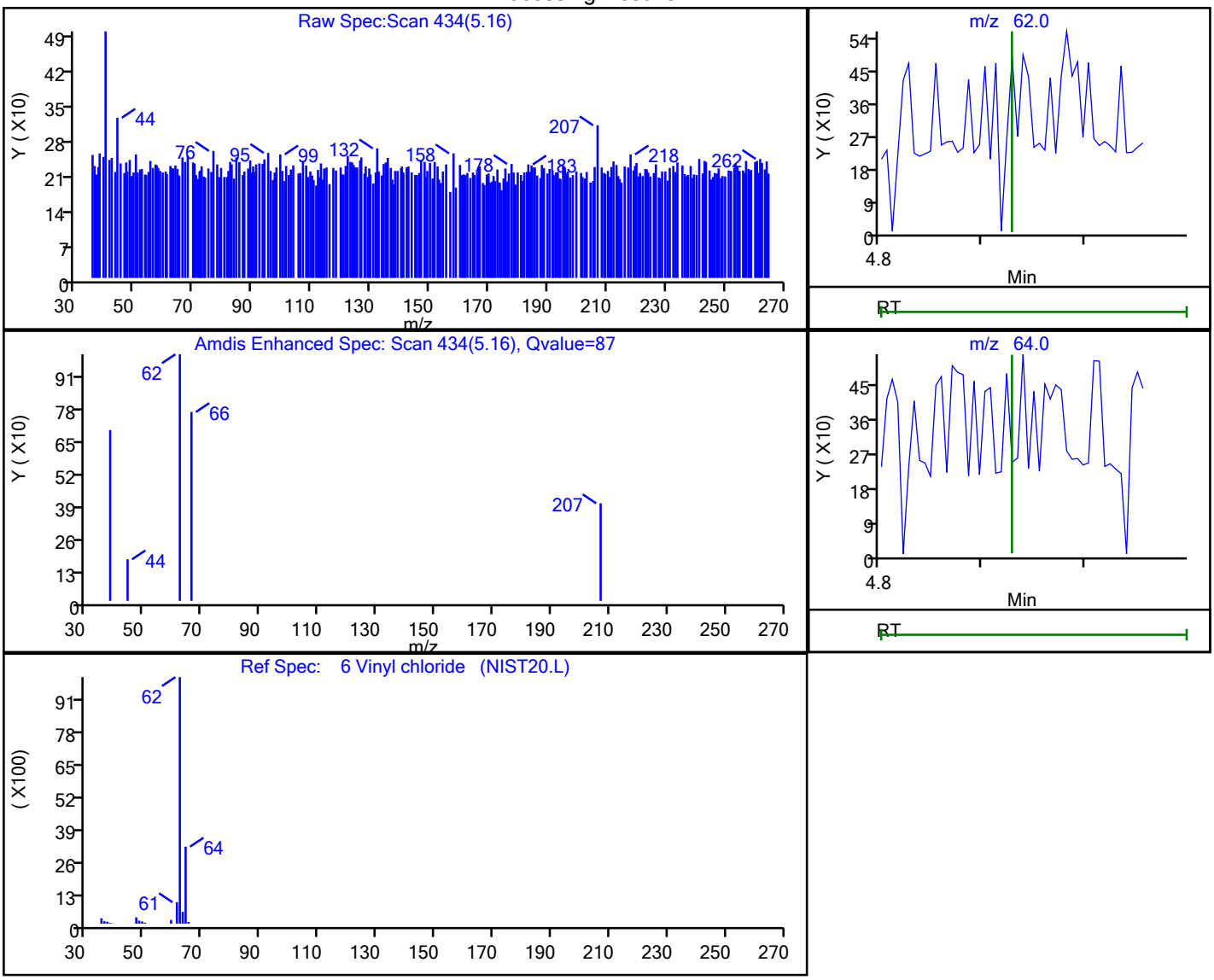
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
5.16	62.00	571	0.042981
5.17	64.00	550	

Reviewer: BKZ7, 20-Dec-2022 08:39:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

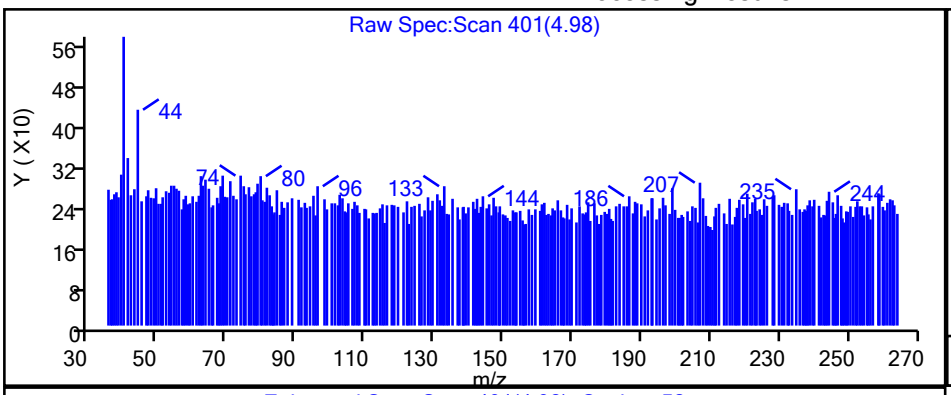
User Disabled Compound Report

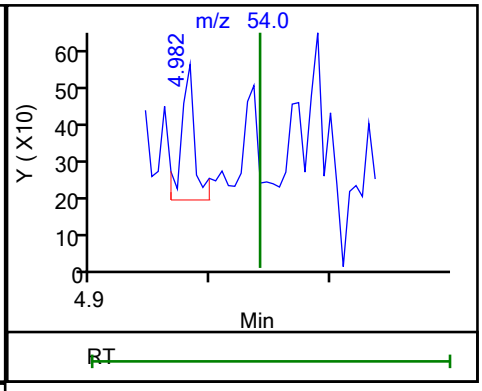
Eurofins Burlington

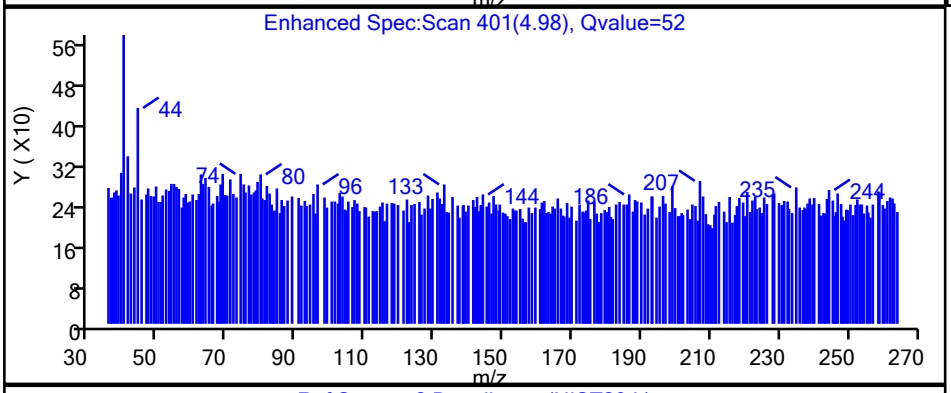
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

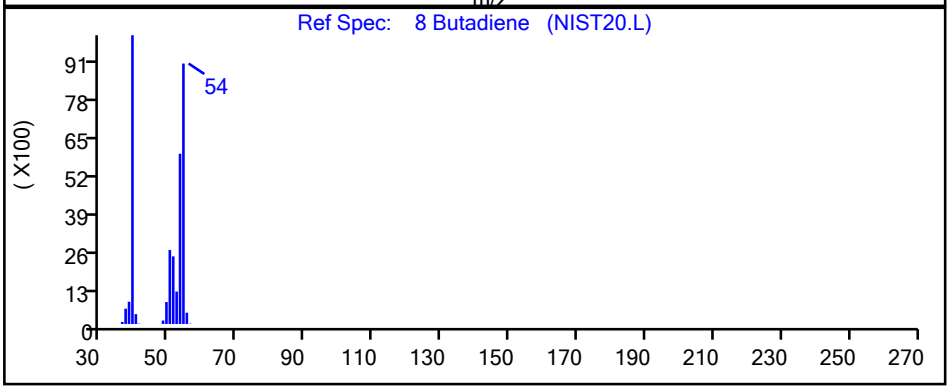
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
4.98	54.00	286	0.029936

Reviewer: BKZ7, 20-Dec-2022 08:39:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

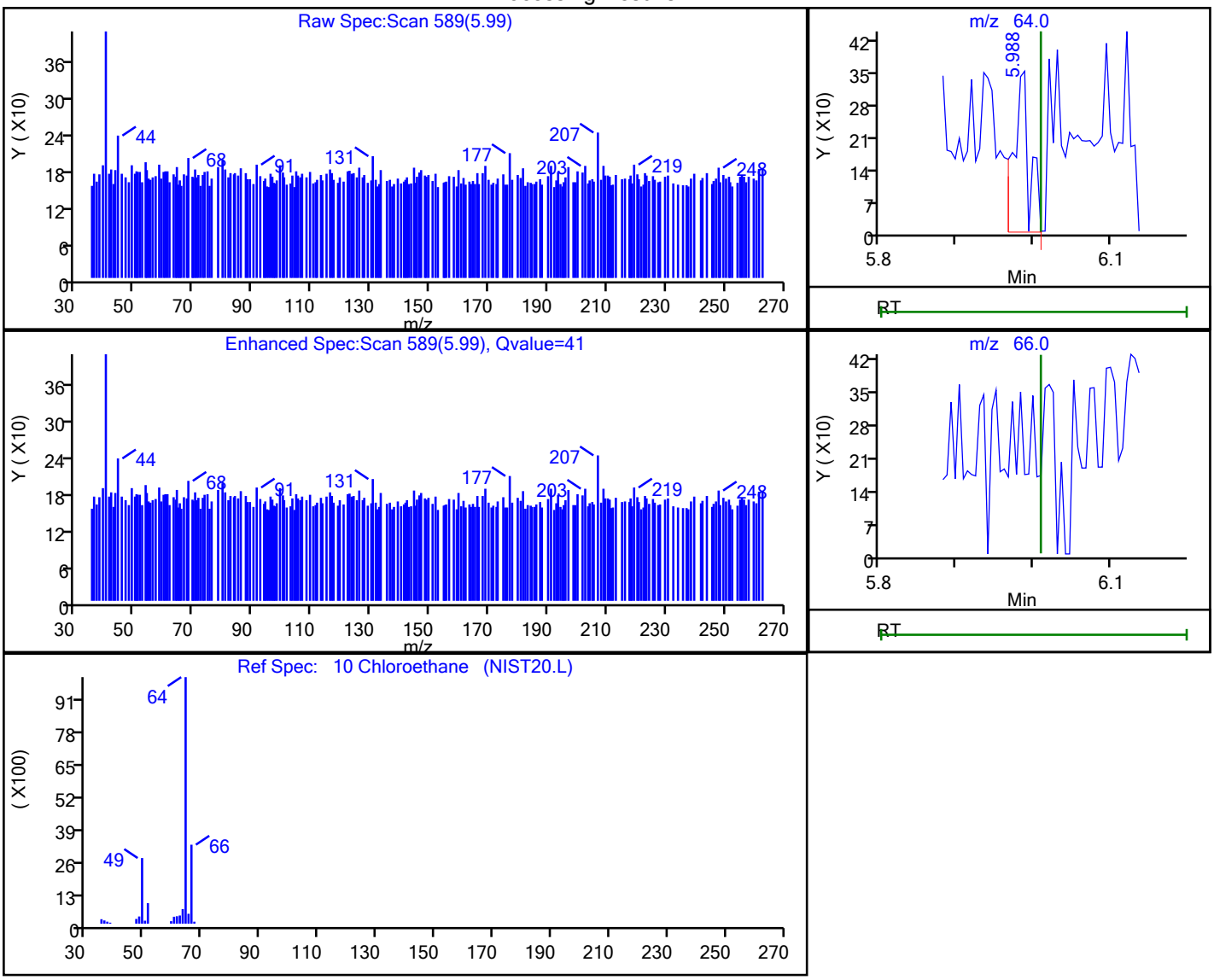
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

10 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
5.99	64.00	482	0.071412
6.01	66.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:39:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

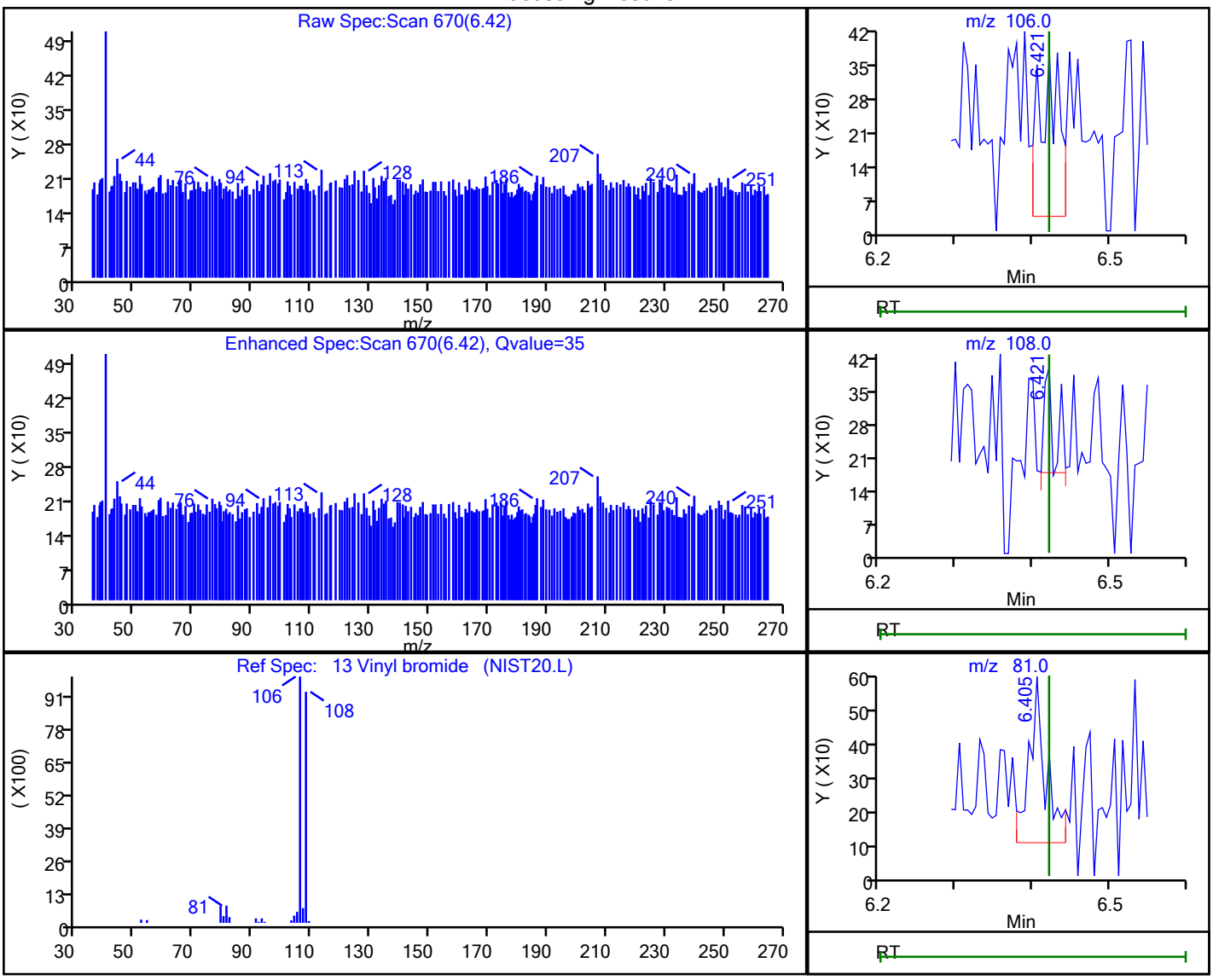
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

13 Vinyl bromide, CAS: 593-60-2

Processing Results



RT	Mass	Response	Amount
6.42	106.00	628	0.047414
6.42	108.00	202	
6.41	81.00	744	

Reviewer: BKZ7, 20-Dec-2022 08:39:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

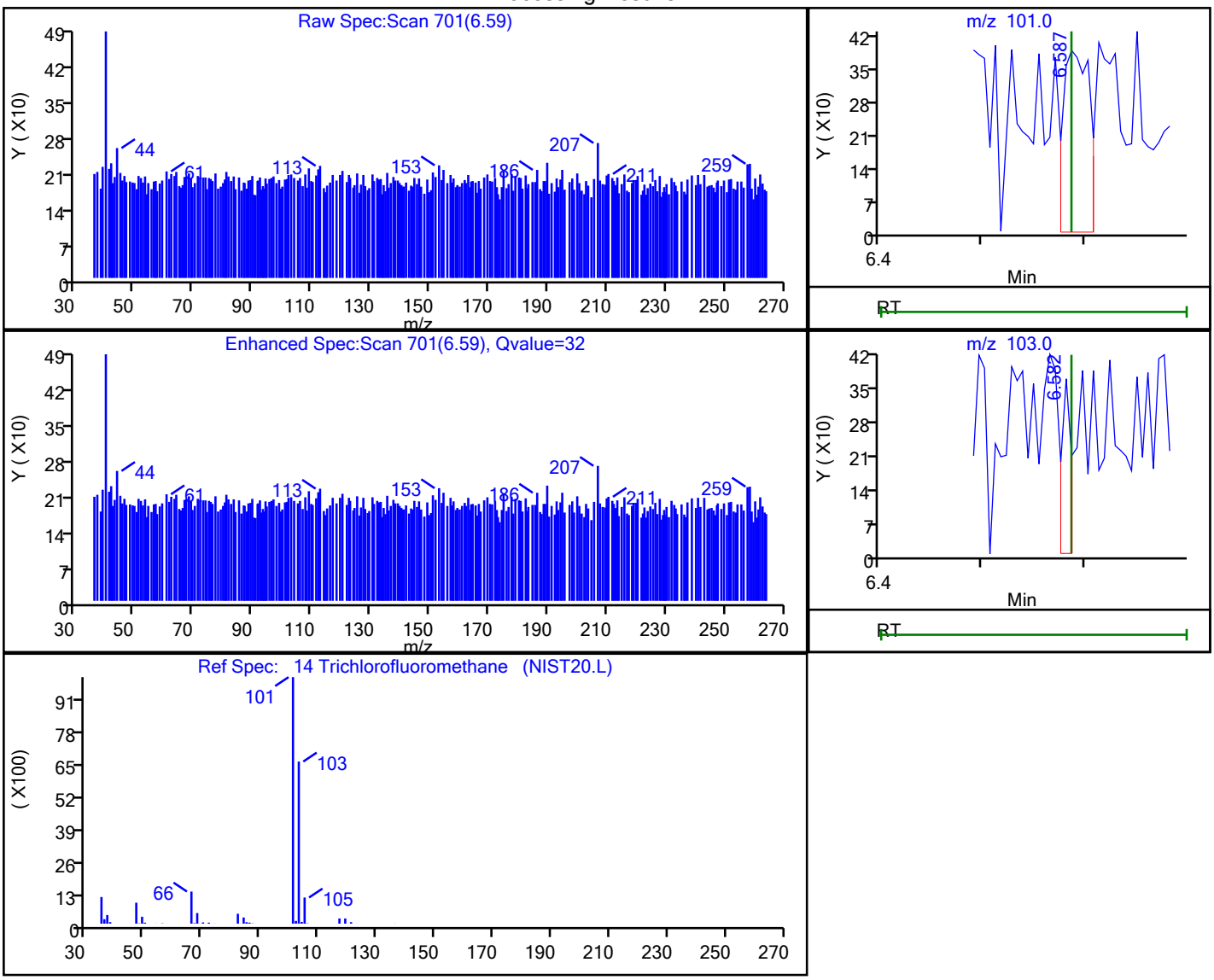
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

14 Trichlorofluoromethane, CAS: 75-69-4

Processing Results



RT	Mass	Response	Amount
6.59	101.00	713	0.025571
6.58	103.00	244	

Reviewer: BKZ7, 20-Dec-2022 08:39:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

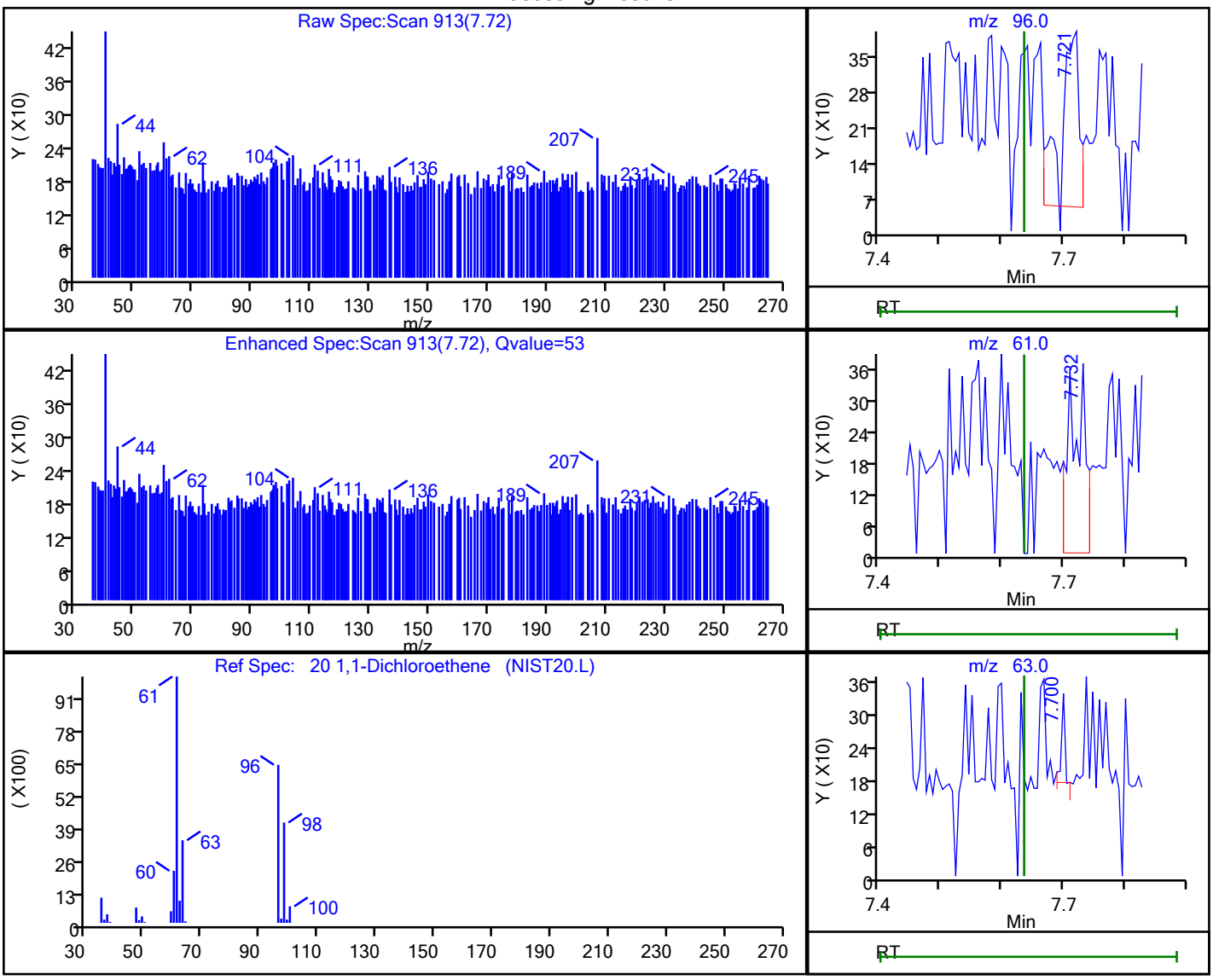
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
7.72	96.00	723	0.058399
7.73	61.00	626	
7.70	63.00	64	

Reviewer: BKZ7, 20-Dec-2022 08:39:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

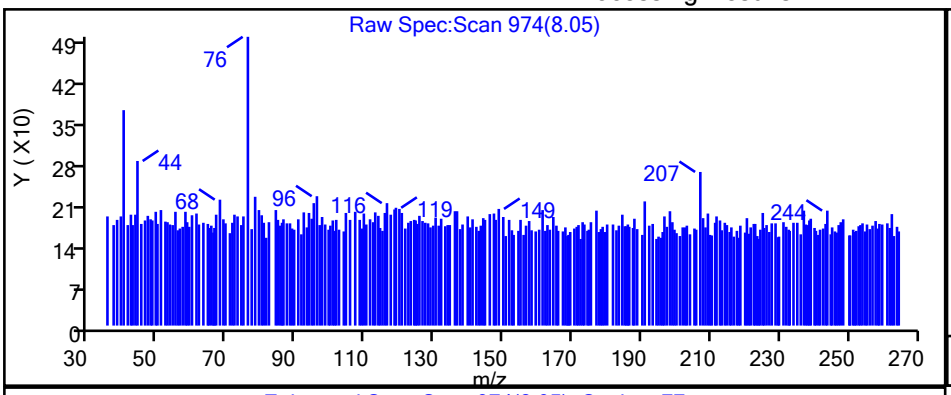
User Disabled Compound Report

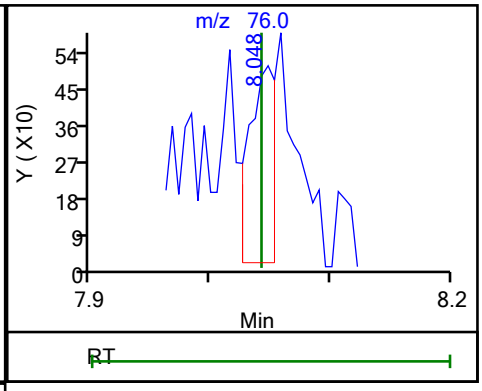
Eurofins Burlington

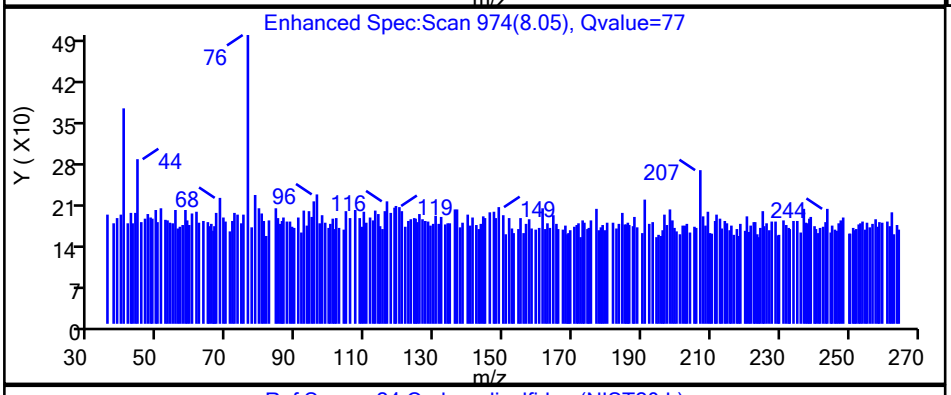
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

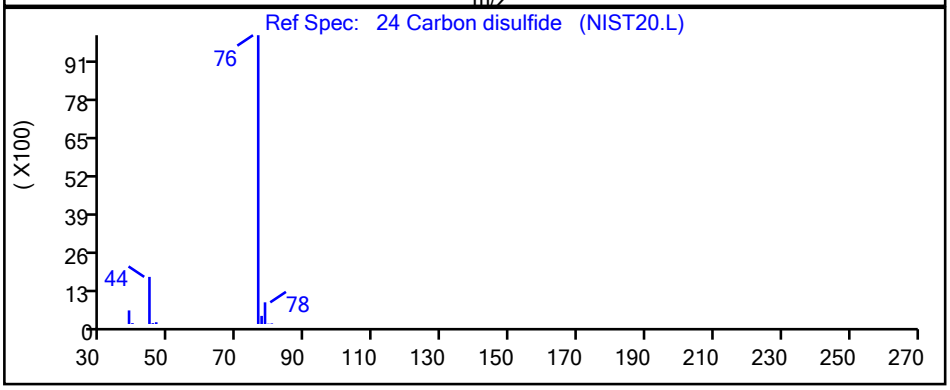
24 Carbon disulfide, CAS: 75-15-0

Processing Results









RT	Mass	Response	Amount
8.05	76.00	760	0.026332

Reviewer: BKZ7, 20-Dec-2022 08:39:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

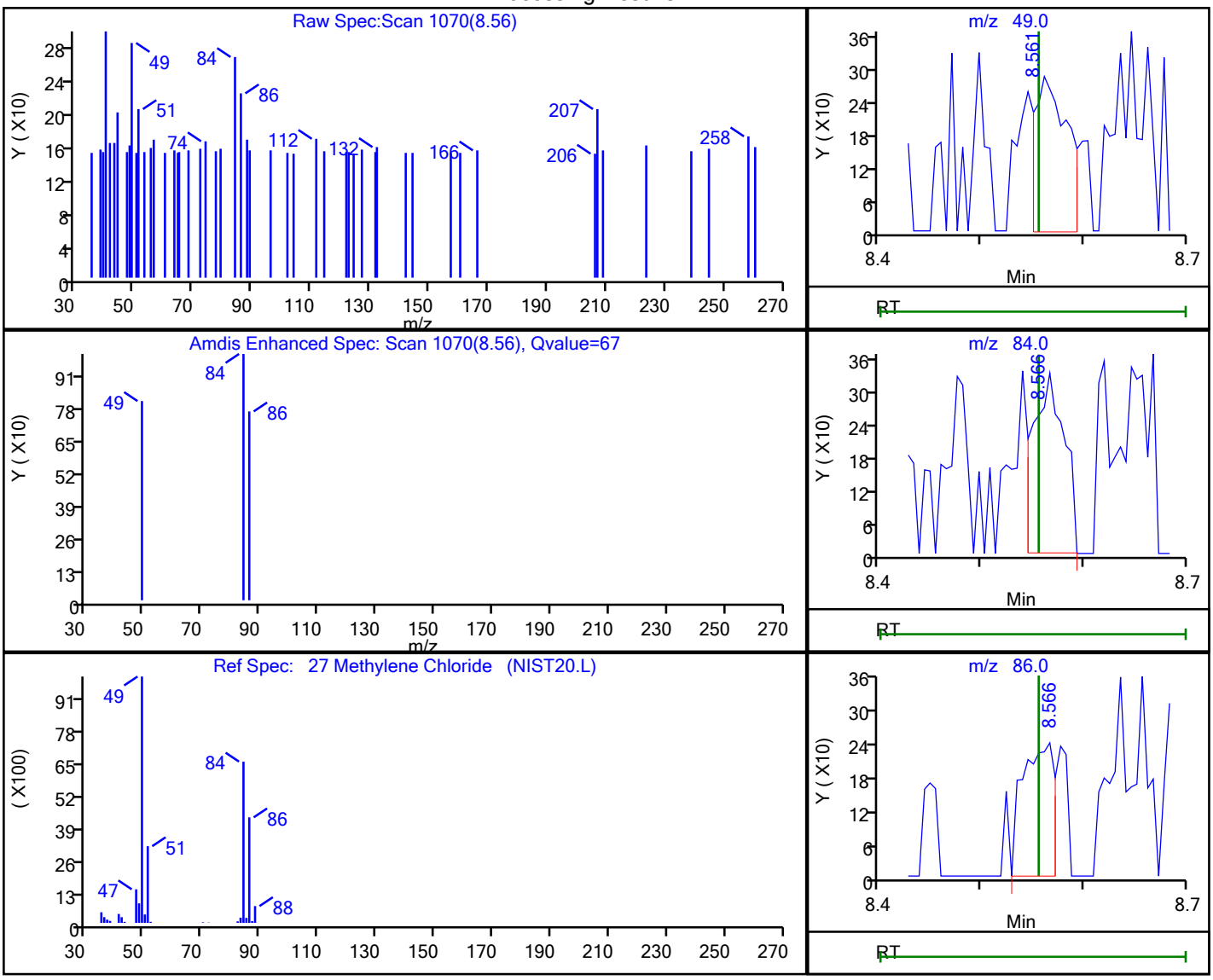
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
8.56	49.00	633	0.071836
8.57	84.00	699	
8.57	86.00	518	

Reviewer: BKZ7, 20-Dec-2022 08:39:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

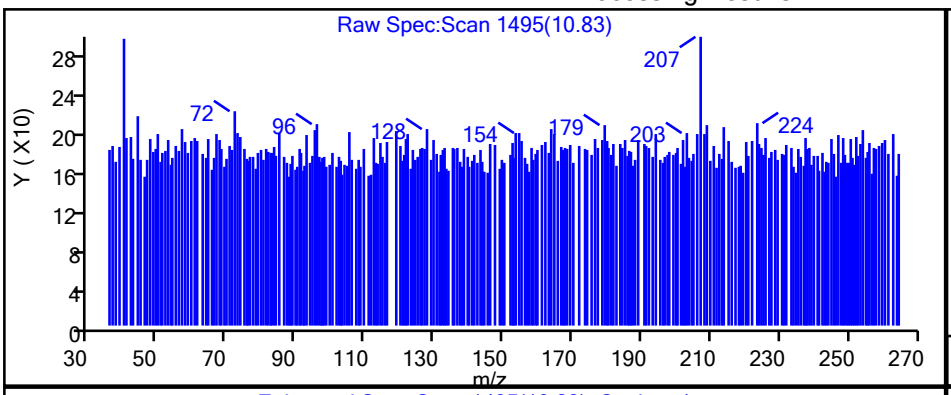
User Disabled Compound Report

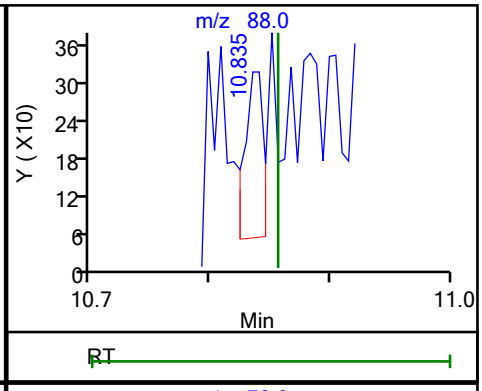
Eurofins Burlington

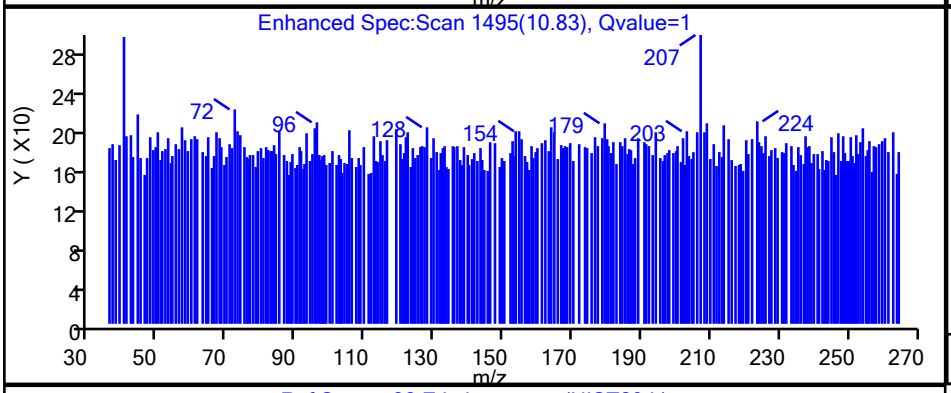
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

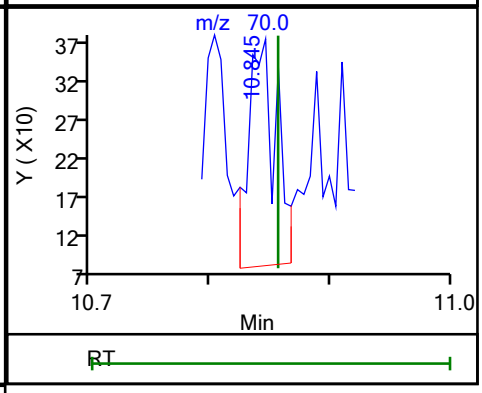
38 Ethyl acetate, CAS: 141-78-6

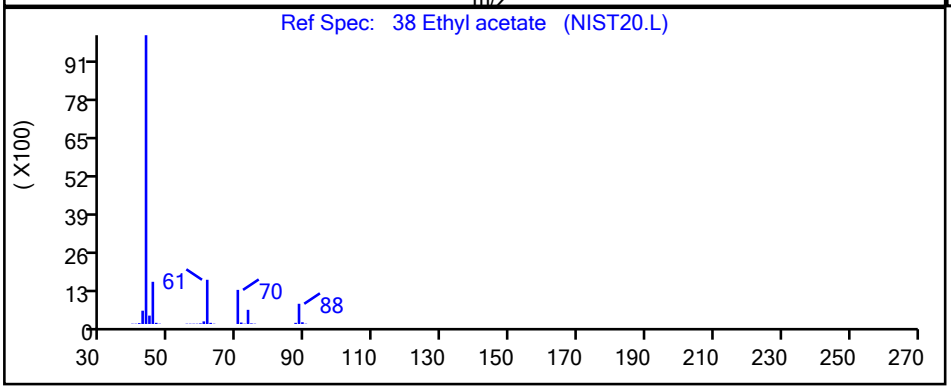
Processing Results











RT	Mass	Response	Amount
10.83	88.00	293	0.333980
10.85	70.00	473	

Reviewer: BKZ7, 20-Dec-2022 08:39:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

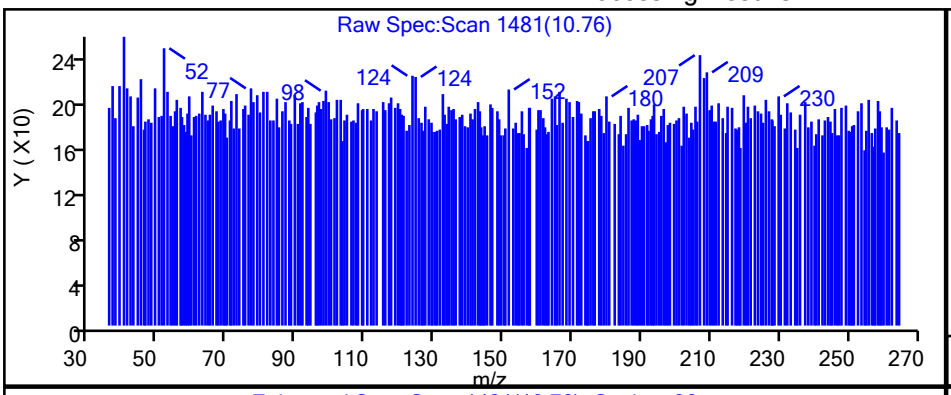
User Disabled Compound Report

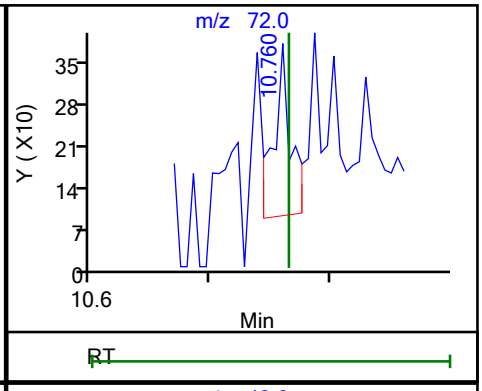
Eurofins Burlington

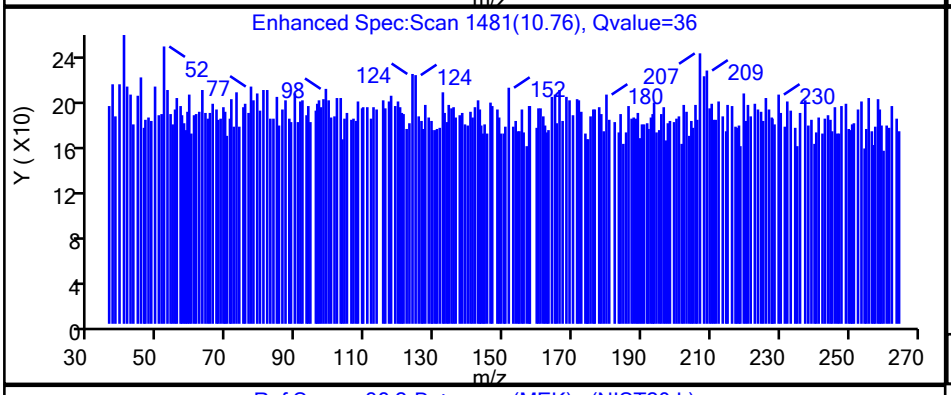
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

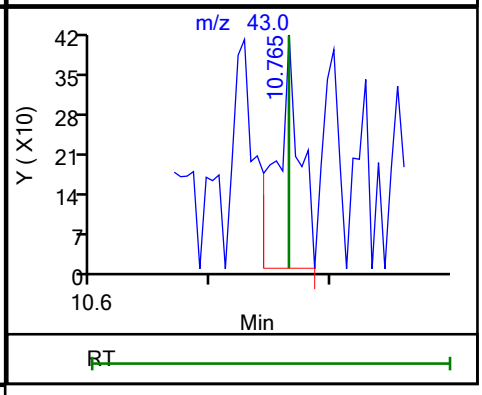
36 2-Butanone (MEK), CAS: 78-93-3

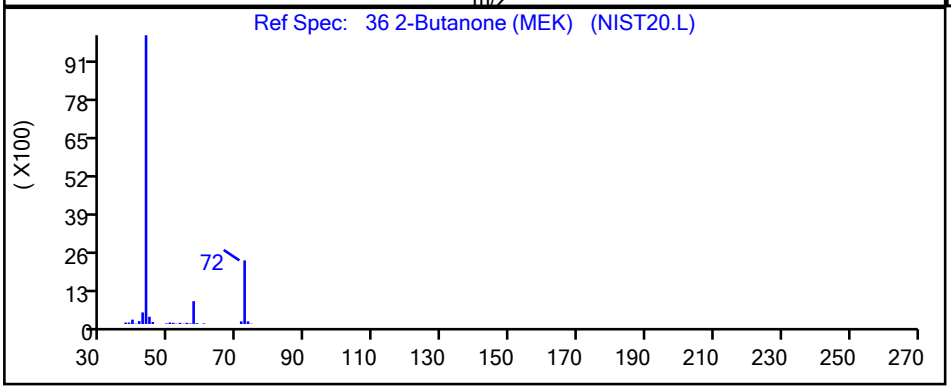
Processing Results











RT	Mass	Response	Amount
10.76	72.00	290	0.066147
10.77	43.00	555	

Reviewer: BKZ7, 20-Dec-2022 08:39:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

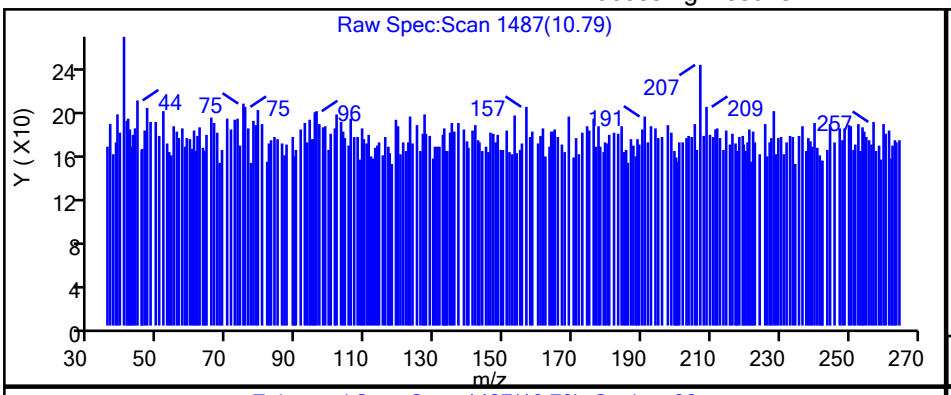
User Disabled Compound Report

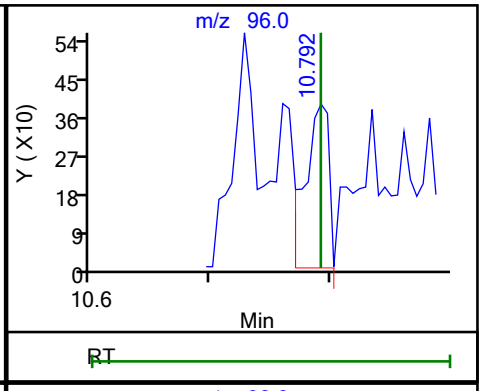
Eurofins Burlington

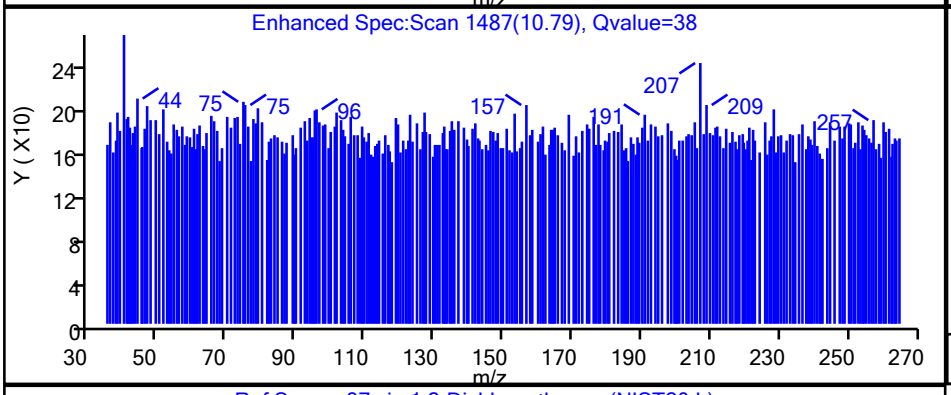
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

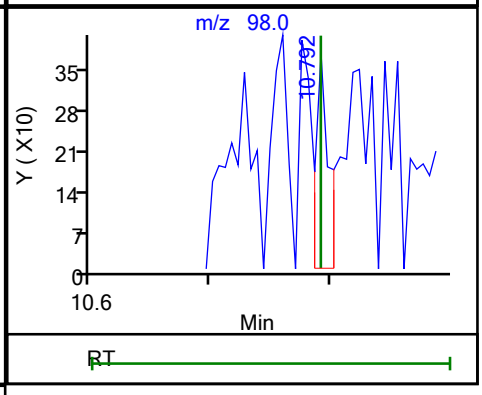
37 cis-1,2-Dichloroethene, CAS: 156-59-2

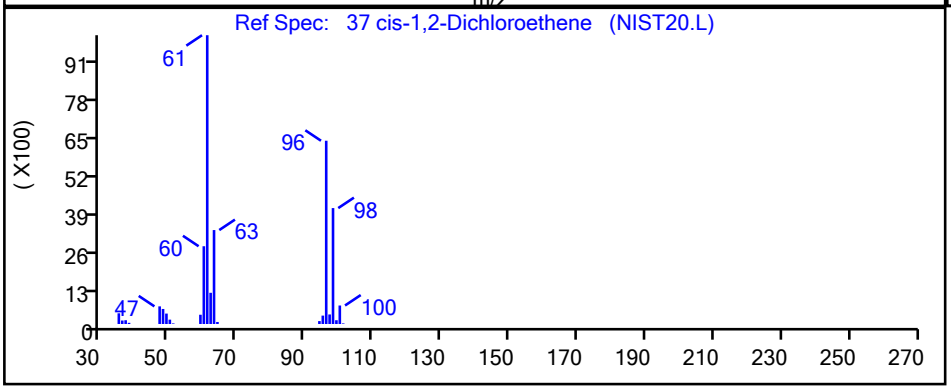
Processing Results











RT	Mass	Response	Amount
10.79	96.00	536	0.049969
10.79	98.00	282	

Reviewer: BKZ7, 20-Dec-2022 08:39:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

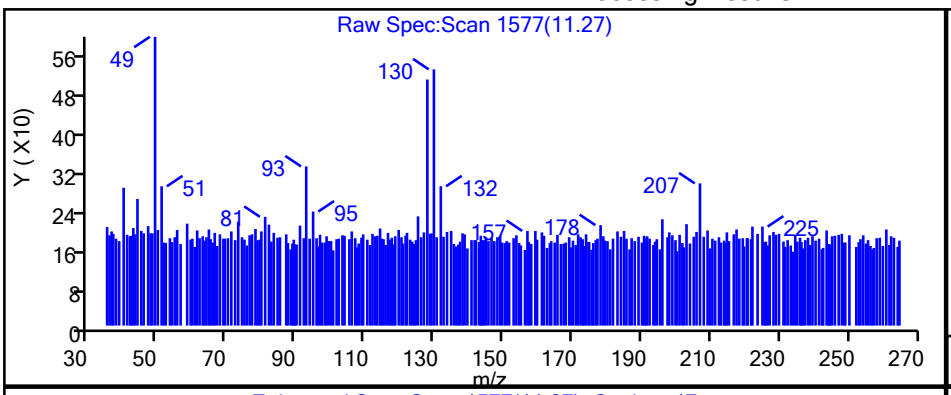
User Disabled Compound Report

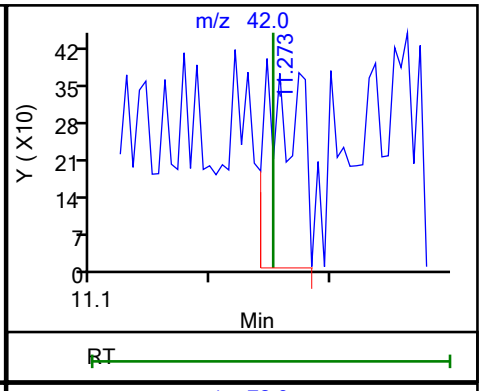
Eurofins Burlington

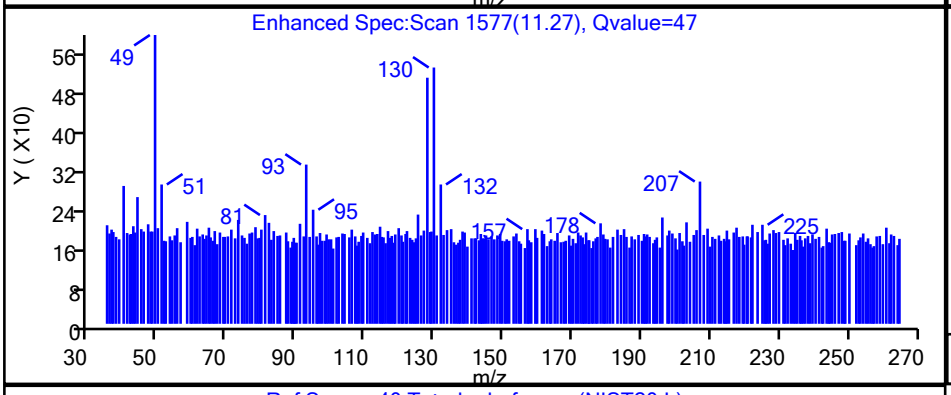
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

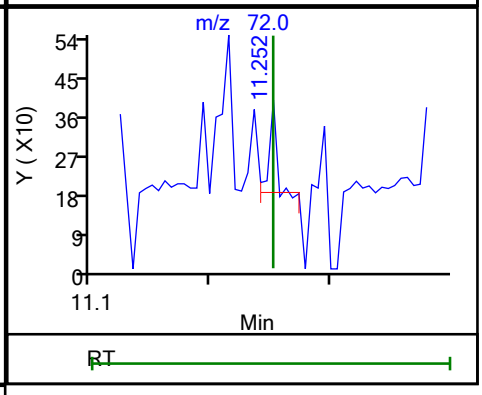
40 Tetrahydrofuran, CAS: 109-99-9

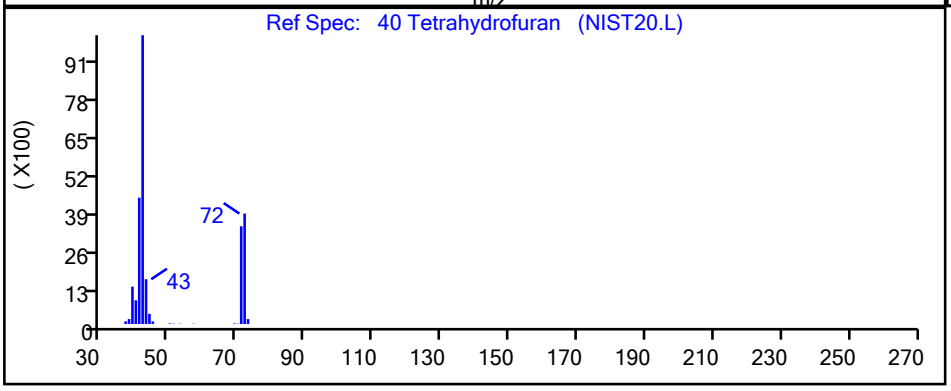
Processing Results











RT	Mass	Response	Amount
11.27	42.00	734	0.100036
11.25	72.00	87	

Reviewer: BKZ7, 20-Dec-2022 08:39:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

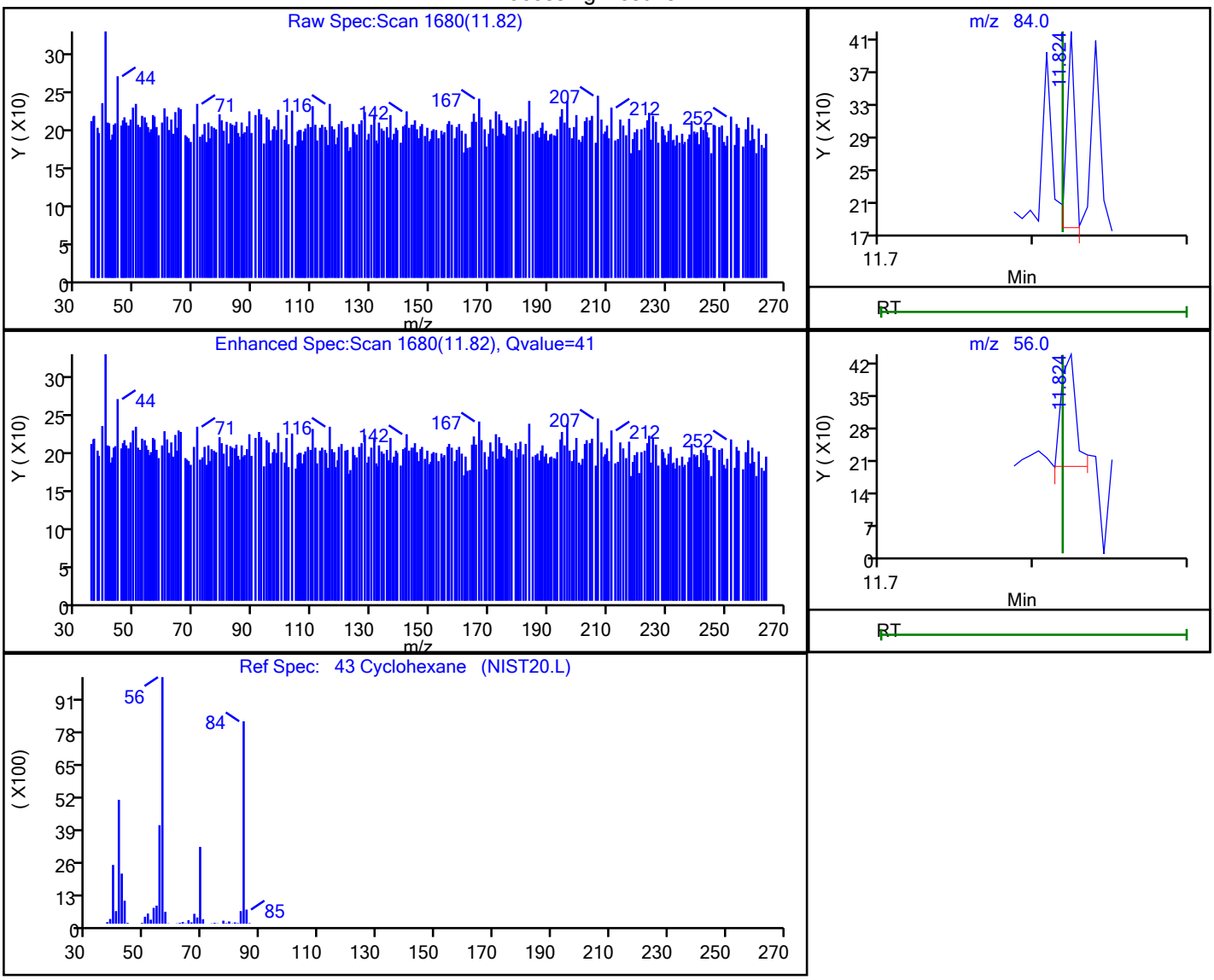
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
11.82	84.00	84	0.006126
11.82	56.00	165	

Reviewer: BKZ7, 20-Dec-2022 08:39:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

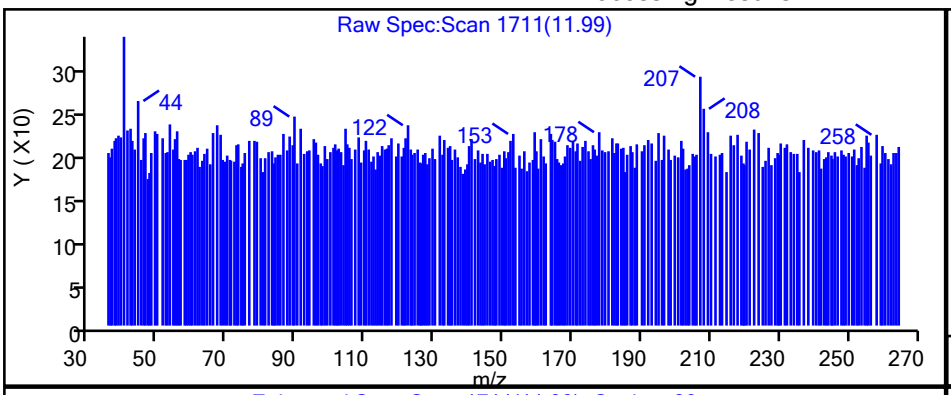
User Disabled Compound Report

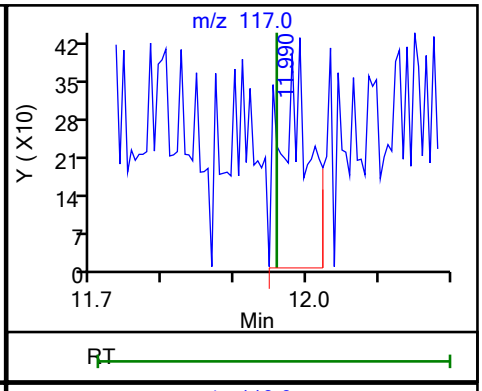
Eurofins Burlington

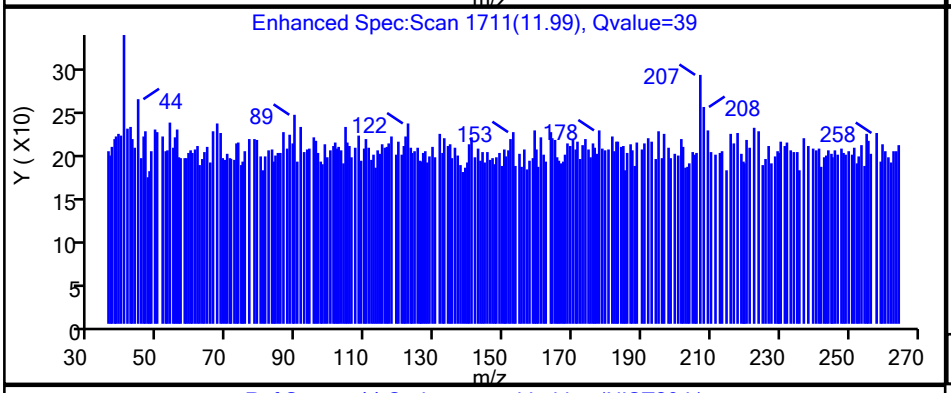
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

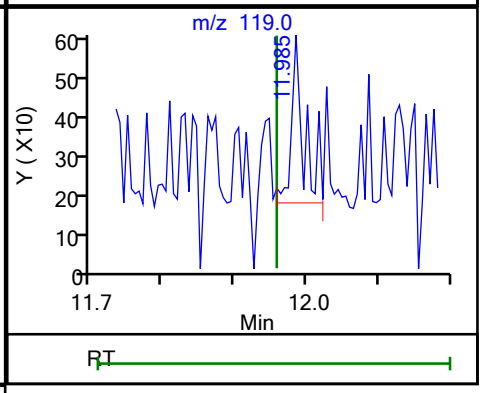
44 Carbon tetrachloride, CAS: 56-23-5

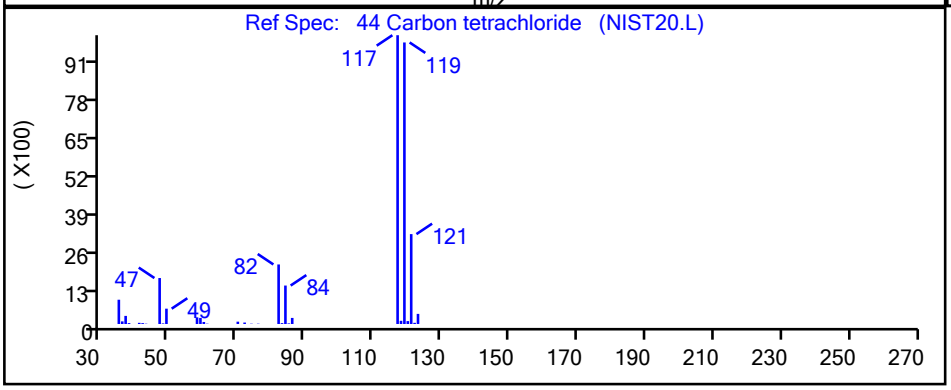
Processing Results











RT	Mass	Response	Amount
11.99	117.00	1070	0.052168
11.98	119.00	533	

Reviewer: BKZ7, 20-Dec-2022 08:39:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

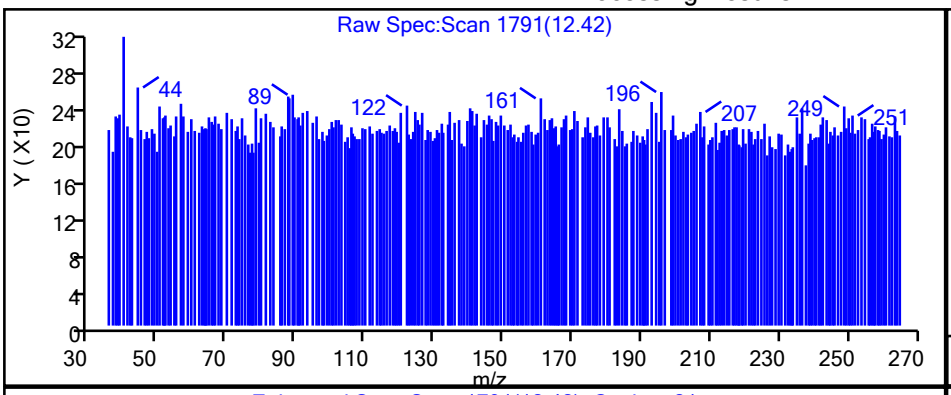
User Disabled Compound Report

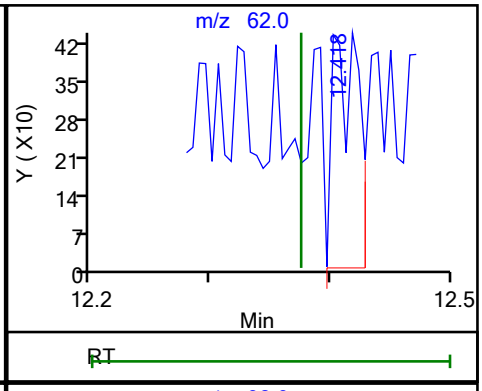
Eurofins Burlington

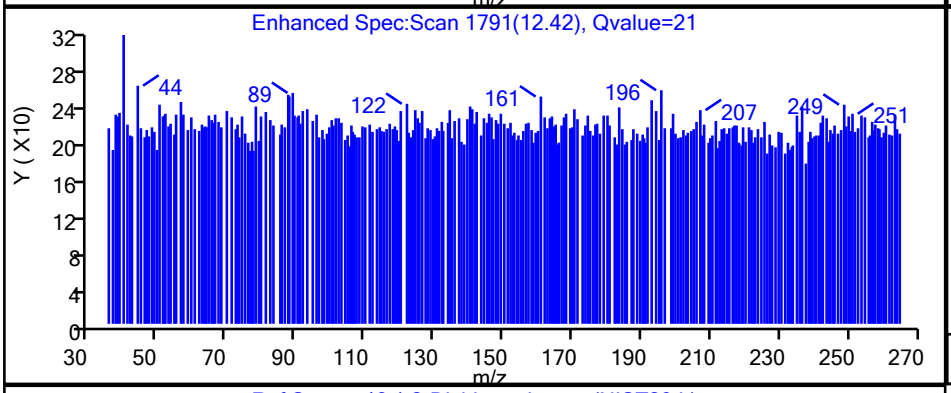
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

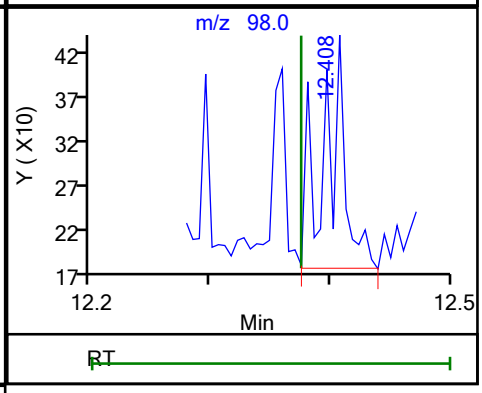
46 1,2-Dichloroethane, CAS: 107-06-2

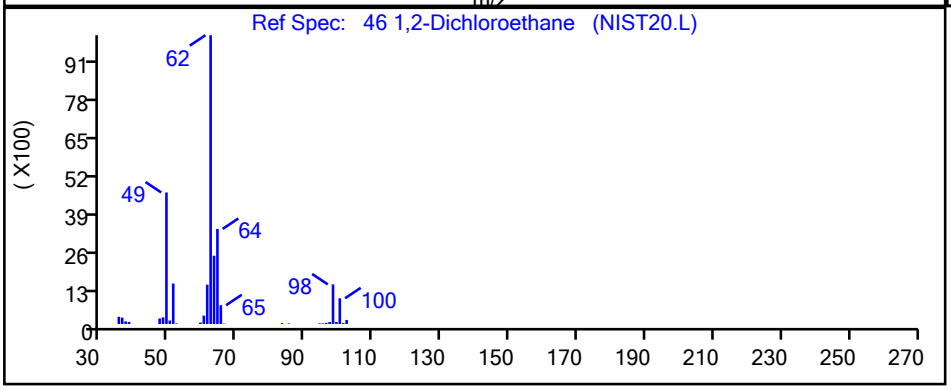
Processing Results











RT	Mass	Response	Amount
12.42	62.00	656	0.060765
12.41	98.00	332	

Reviewer: BKZ7, 20-Dec-2022 08:39:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

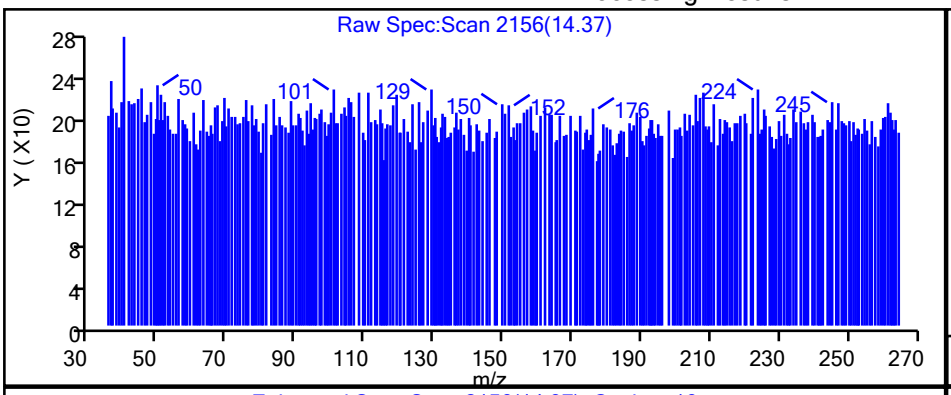
User Disabled Compound Report

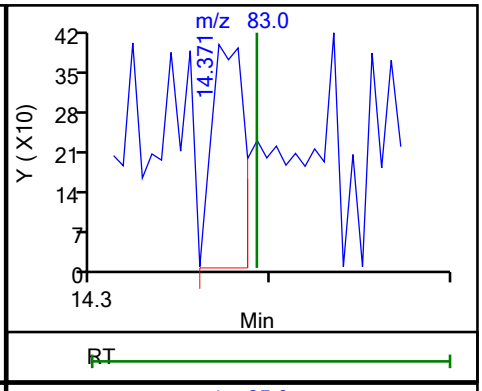
Eurofins Burlington

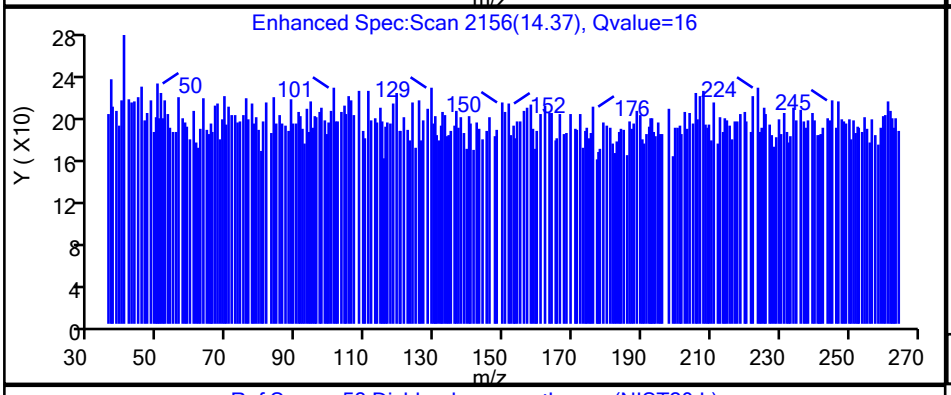
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

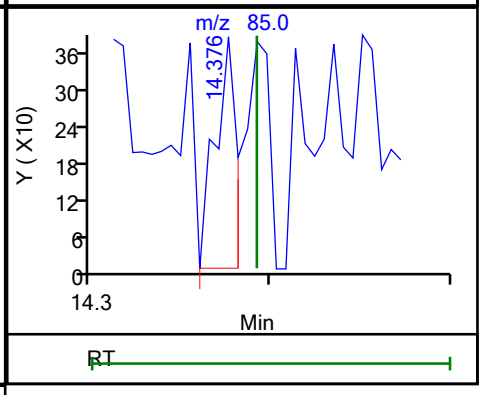
58 Dichlorobromomethane, CAS: 75-27-4

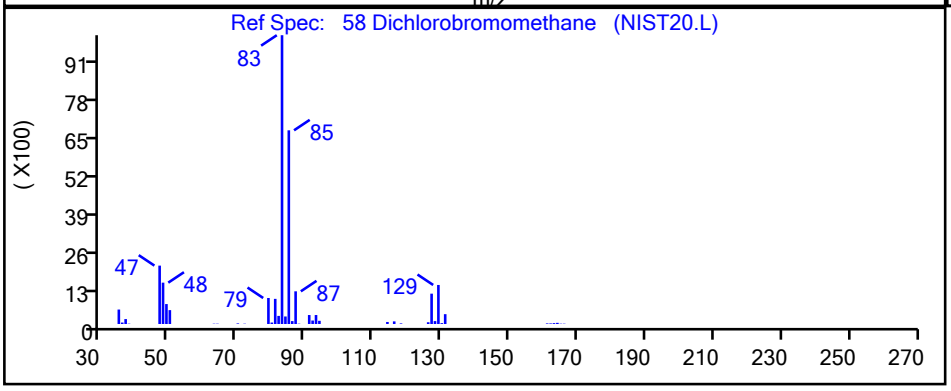
Processing Results











RT	Mass	Response	Amount
14.37	83.00	497	0.024459
14.38	85.00	314	

Reviewer: BKZ7, 20-Dec-2022 08:38:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

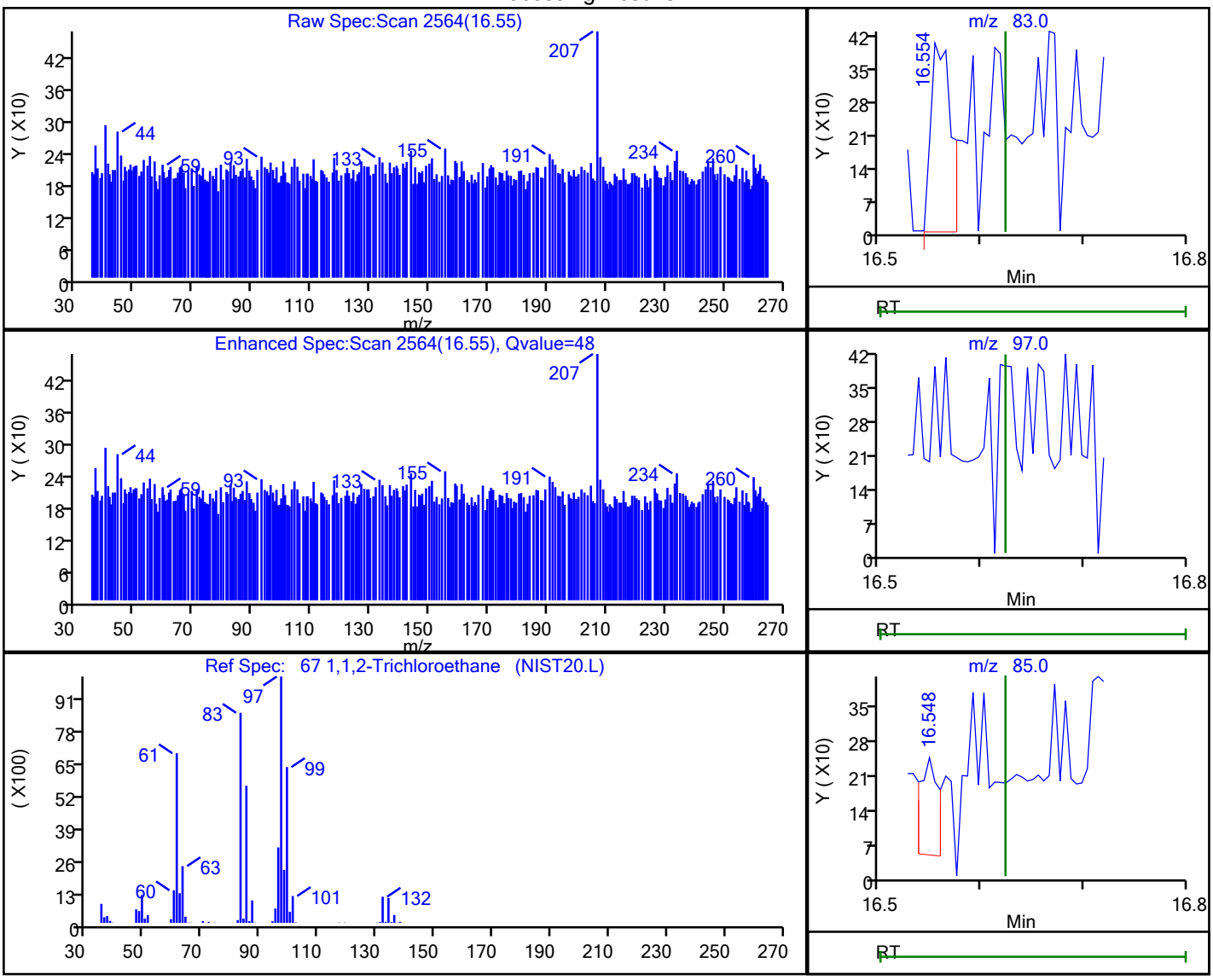
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

67 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
16.55	83.00	551	0.053000
16.62	97.00	0	
16.55	85.00	248	

Reviewer: BKZ7, 20-Dec-2022 08:38:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

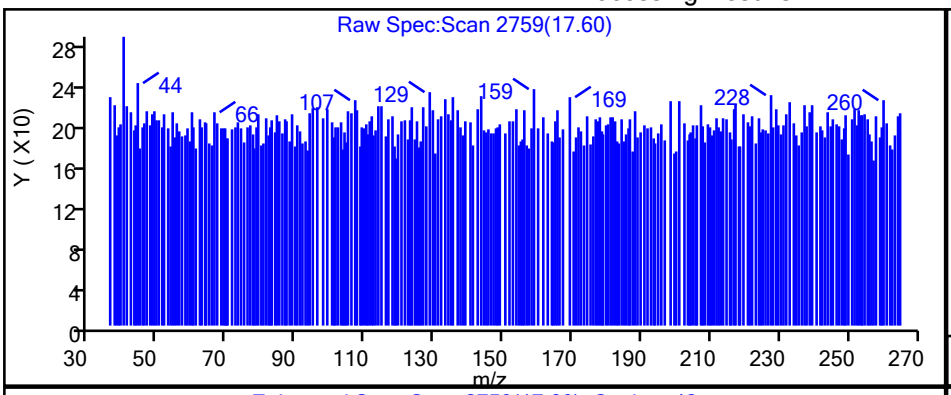
User Disabled Compound Report

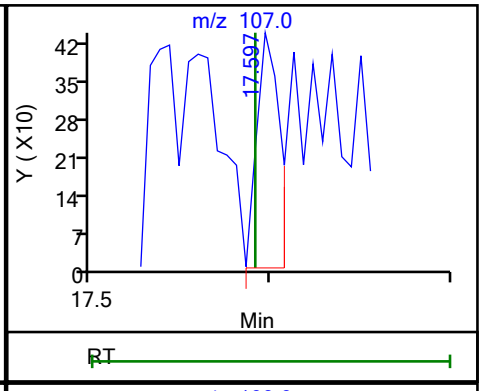
Eurofins Burlington

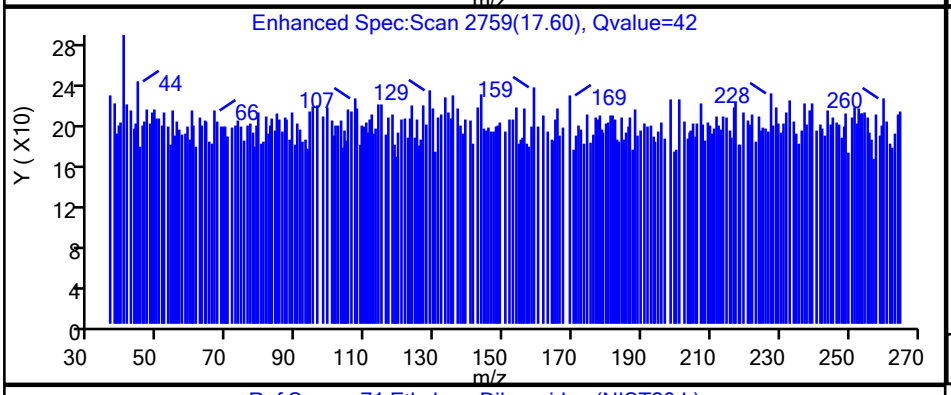
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

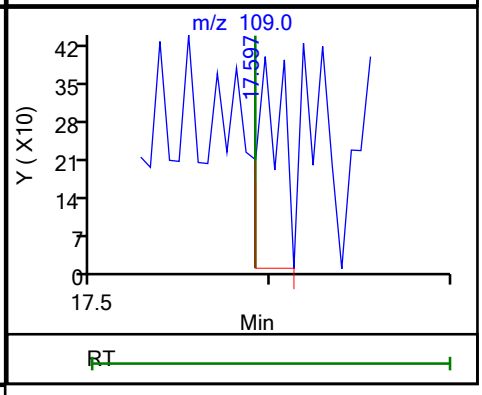
71 Ethylene Dibromide, CAS: 106-93-4

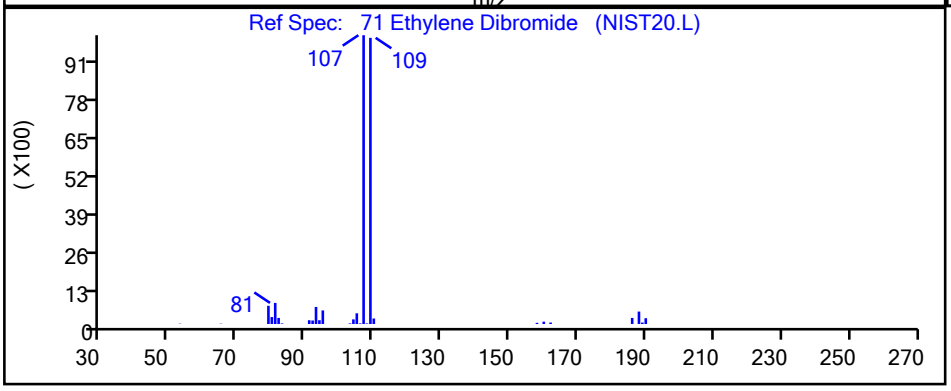
Processing Results











RT	Mass	Response	Amount
17.60	107.00	390	0.020088
17.60	109.00	374	

Reviewer: BKZ7, 20-Dec-2022 08:38:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

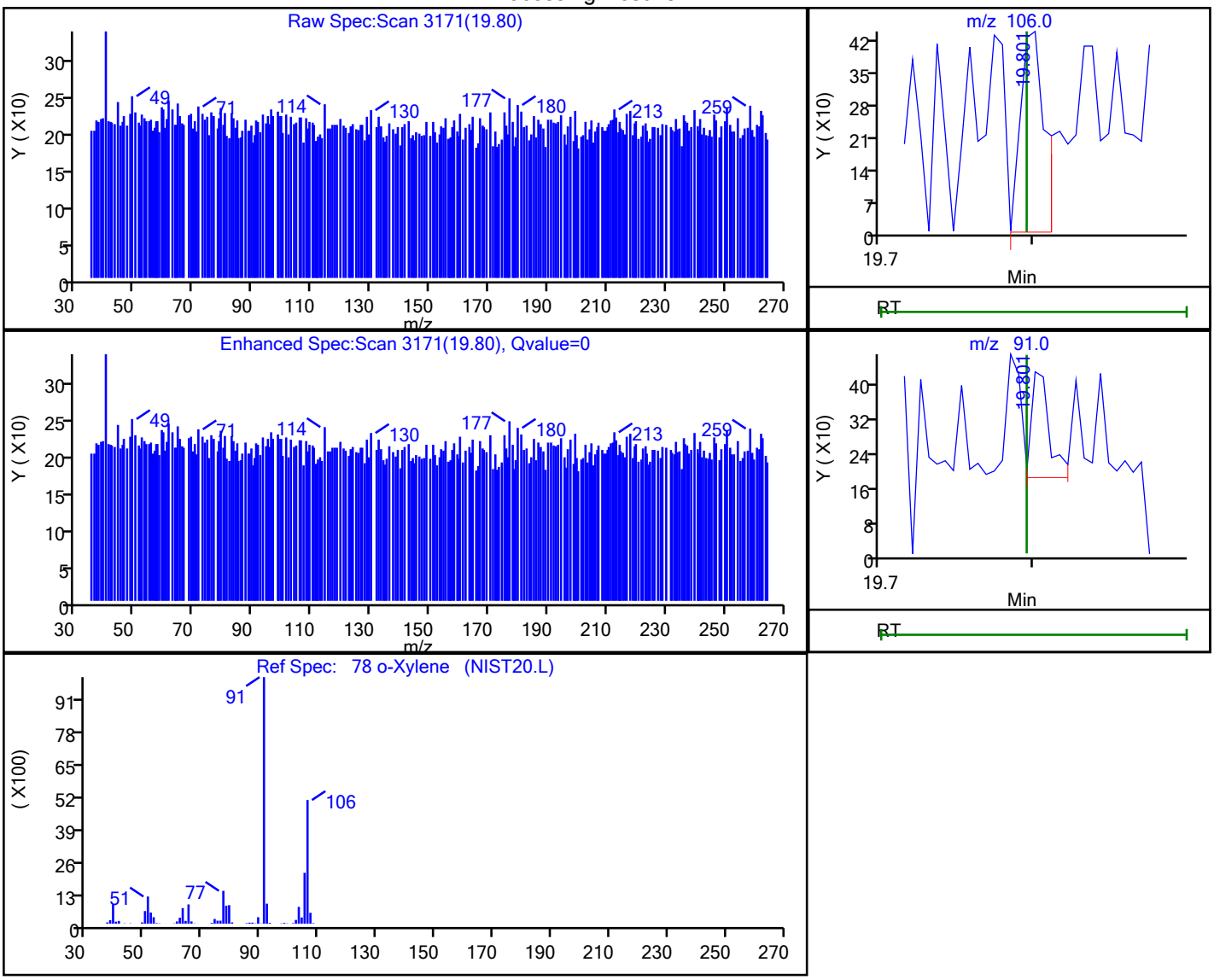
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
19.80	106.00	482	0.025112
19.80	91.00	205	

Reviewer: BKZ7, 20-Dec-2022 08:38:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

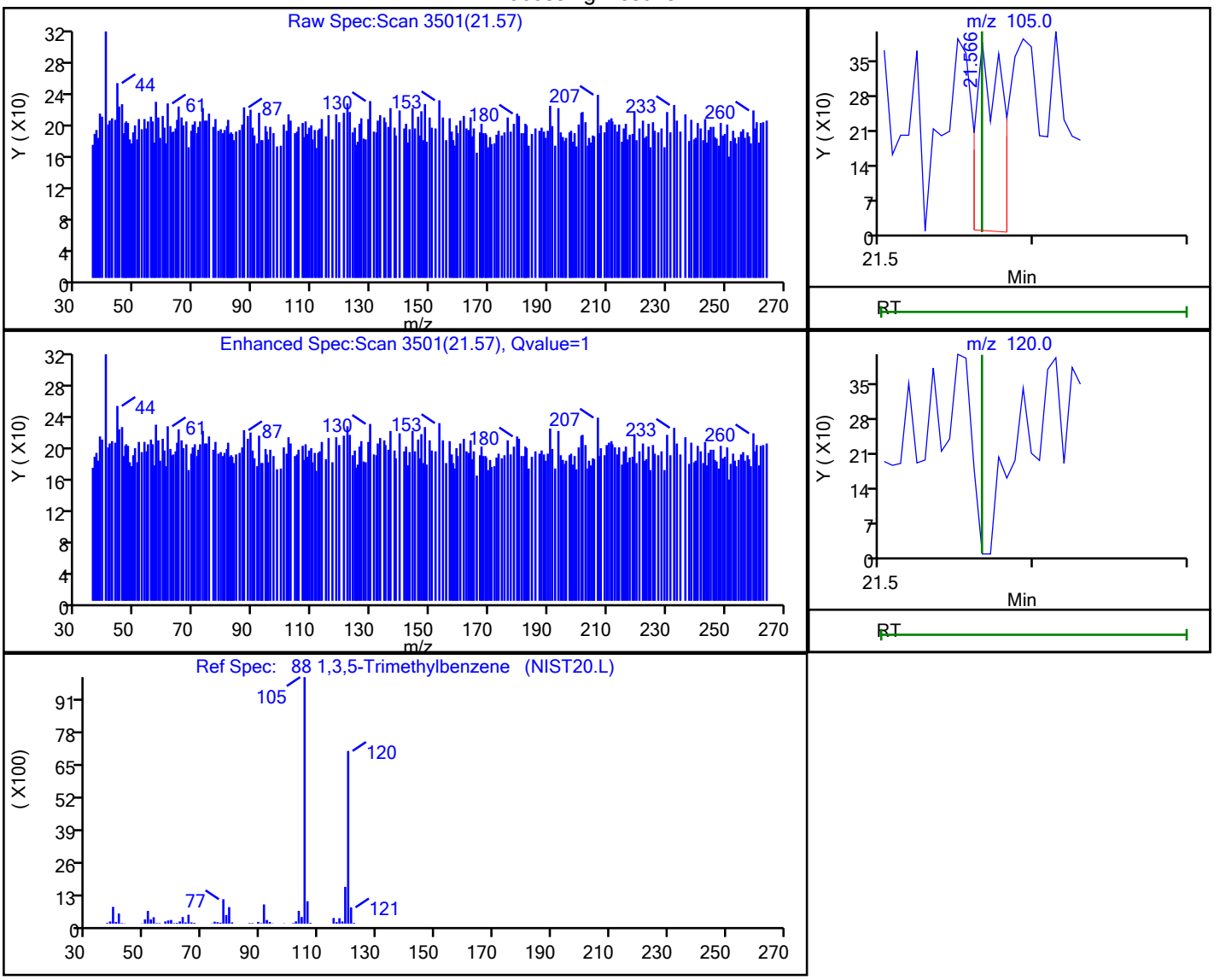
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
21.57	105.00	443	0.009733
21.57	120.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:38:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

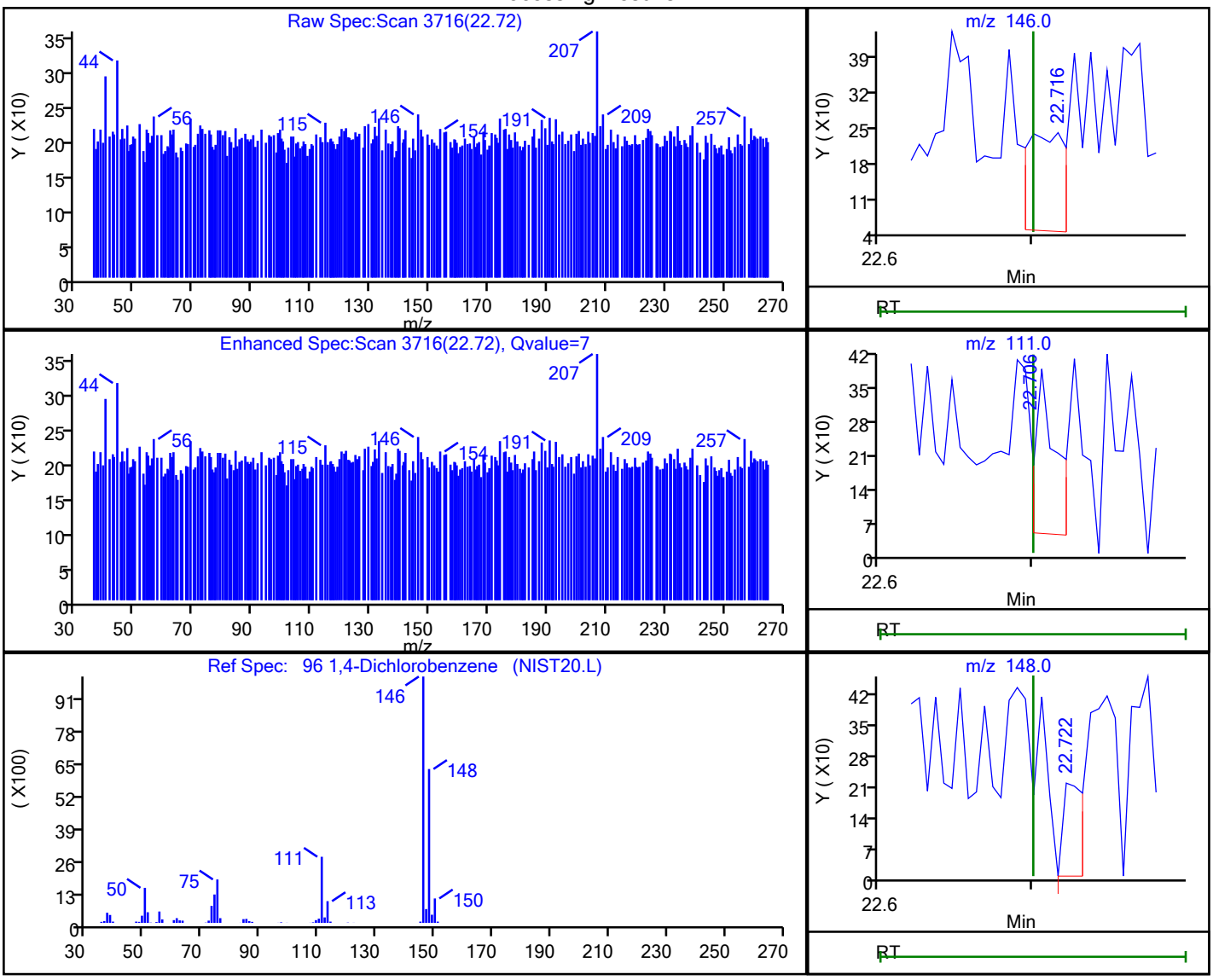
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
22.72	146.00	342	0.011077
22.71	111.00	314	
22.72	148.00	194	

Reviewer: BKZ7, 20-Dec-2022 08:38:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

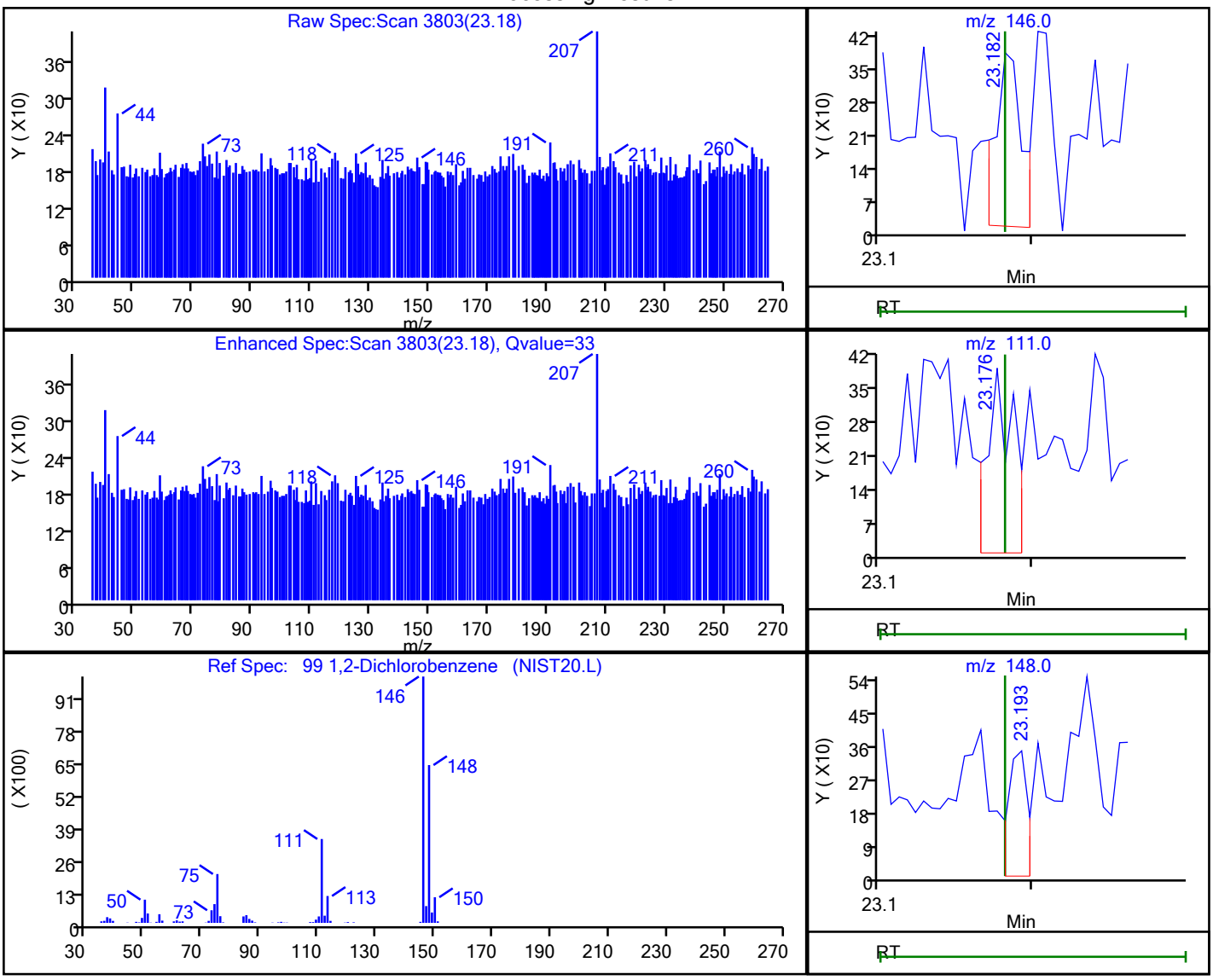
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-020.d				
Injection Date:	20-Dec-2022 00:08:30	Instrument ID:	CHW.i		
Lims ID:	200-66193-A-3	Lab Sample ID:	200-66193-3		
Client ID:	4566				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

99 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
23.18	146.00	457	0.014785
23.18	111.00	462	
23.19	148.00	307	

Reviewer: BKZ7, 20-Dec-2022 08:38:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66195-1

SDG No.:

Client Sample ID: 5408 Lab Sample ID: 200-66195-3

Matrix: Air Lab File ID: 53728-021.d

Analysis Method: TO-15 Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/20/2022 01:14

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66195-1

SDG No.:

Client Sample ID: 5408 | Lab Sample ID: 200-66195-3

Matrix: Air | Lab File ID: 53728-021.d

Analysis Method: TO-15 | Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 12/20/2022 01:14

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 186829 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66195-1

SDG No.:

Client Sample ID: 5408 Lab Sample ID: 200-66195-3

Matrix: Air Lab File ID: 53728-021.d

Analysis Method: TO-15 Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/20/2022 01:14

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d
Lims ID: 200-66195-A-3
Client ID: 5408
Sample Type: Client
Inject. Date: 20-Dec-2022 01:14:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0053728-021
Misc. Info.: 66195-3
Operator ID: vtp Instrument ID: CHW.i

Method: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\TO15_TO3_MasterMethod_W.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Dec-2022 08:49:10 Calib Date: 15-Dec-2022 23:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHW.i\20221215-53700.b\53700-013.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: BKZ7 Date: 20-Dec-2022 08:49:10

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		4.083				ND	7
	2 Dichlorodifluoromethane	85		4.174				ND	
	3 Chlorodifluoromethane	51		4.217				ND	
	4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.517				ND	
	5 Chloromethane	50		4.629				ND	
	6 Vinyl chloride	62		4.928				ND	
	7 Butane	43		4.934				ND	7
	8 Butadiene	54		5.041				ND	
	9 Bromomethane	94		5.742				ND	
	10 Chloroethane	64		6.009				ND	7
	13 Vinyl bromide	106		6.421				ND	MU
	14 Trichlorofluoromethane	101		6.587				ND	7
	16 Ethanol	45		6.956				ND	MU
	20 1,1-Dichloroethene	96		7.635				ND	MU
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		7.678				ND	7
	22 Acetone	43		7.710				ND	7
	23 Isopropyl alcohol	45		8.010				ND	MU
	24 Carbon disulfide	76	8.047	8.038	0.005	98	2188	0.0764	
	26 3-Chloro-1-propene	41		8.325				ND	7
	27 Methylene Chloride	49	8.556	8.551	0.000	36	767	0.0877	
	28 2-Methyl-2-propanol	59		8.775				ND	
	30 trans-1,2-Dichloroethene	61		9.053				ND	7
	31 Methyl tert-butyl ether	73		9.069				ND	7
	32 Hexane	57		9.561				ND	MU
	33 1,1-Dichloroethane	63		9.807				ND	
	34 Vinyl acetate	43		9.823				ND	7
S	35 1,2-Dichloroethene, Total	61		10.200				ND	7
	36 2-Butanone (MEK)	72		10.765				ND	MU
	37 cis-1,2-Dichloroethene	96		10.792				ND	7
	38 Ethyl acetate	88		10.856				ND	
*	39 Chlorobromomethane	128	11.198	11.204	-0.006	77	68501	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.252				ND	7
	41 Chloroform	83		11.380				ND	
	42 1,1,1-Trichloroethane	97		11.680				ND	7
	43 Cyclohexane	84		11.819				ND	MU
	44 Carbon tetrachloride	117		11.958				ND	7
	45 Benzene	78		12.300				ND	7
	46 1,2-Dichloroethane	62		12.375				ND	
	47 Isooctane	57		12.525				ND	MU
	48 n-Heptane	43		12.835				ND	7
*	49 1,4-Difluorobenzene	114	13.039	13.044	-0.005	92	342527	10.0	
	51 Trichloroethene	95		13.472				ND	MU
	53 1,2-Dichloropropane	63		13.921				ND	
	54 Methyl methacrylate	69		14.023				ND	
	55 1,4-Dioxane	88		14.060				ND	
	57 Dibromomethane	174		14.082				ND	7
	58 Dichlorobromomethane	83		14.392				ND	
	59 cis-1,3-Dichloropropene	75		15.189				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		15.457				ND	7
	62 Toluene	92	15.842	15.831	0.011	42	590	0.0263	
	66 trans-1,3-Dichloropropene	75		16.248				ND	7
	67 1,1,2-Trichloroethane	83		16.623				ND	
	68 Tetrachloroethene	166	16.816	16.821	-0.005	96	3680	0.1610	
	69 2-Hexanone	43		17.040				ND	7
	70 Chlorodibromomethane	129		17.356				ND	
	71 Ethylene Dibromide	107		17.591				ND	7
*	73 Chlorobenzene-d5	117	18.506	18.506	0.000	83	285304	10.0	
	74 Chlorobenzene	112		18.565				ND	
	75 Ethylbenzene	91		18.763				ND	7
	76 m-Xylene & p-Xylene	106		19.025				ND	MU
	78 o-Xylene	106		19.795				ND	7
	79 Styrene	104		19.833				ND	7
S	80 Xylenes, Total	106		20.100				ND	7
	81 Bromoform	173		20.186				ND	
	82 Isopropylbenzene	105		20.523				ND	7
	83 1,1,2,2-Tetrachloroethane	83		21.052				ND	7
	85 N-Propylbenzene	91		21.261				ND	7
	86 2-Chlorotoluene	91		21.411				ND	7
	87 4-Ethyltoluene	105		21.464				ND	7
	88 1,3,5-Trimethylbenzene	105		21.566				ND	7
	91 tert-Butylbenzene	119		22.053				ND	
	92 1,2,4-Trimethylbenzene	105		22.144				ND	7
	93 sec-Butylbenzene	105		22.385				ND	7
	94 1,3-Dichlorobenzene	146		22.556				ND	
	95 4-Isopropyltoluene	119		22.604				ND	7
	96 1,4-Dichlorobenzene	146		22.700				ND	
	97 Benzyl chloride	91		22.850				ND	
	98 n-Butylbenzene	91		23.160				ND	
	99 1,2-Dichlorobenzene	146		23.182				ND	
	102 1,2,4-Trichlorobenzene	180		25.562				ND	
	103 Hexachlorobutadiene	225		25.803				ND	
	104 Naphthalene	128		26.022				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

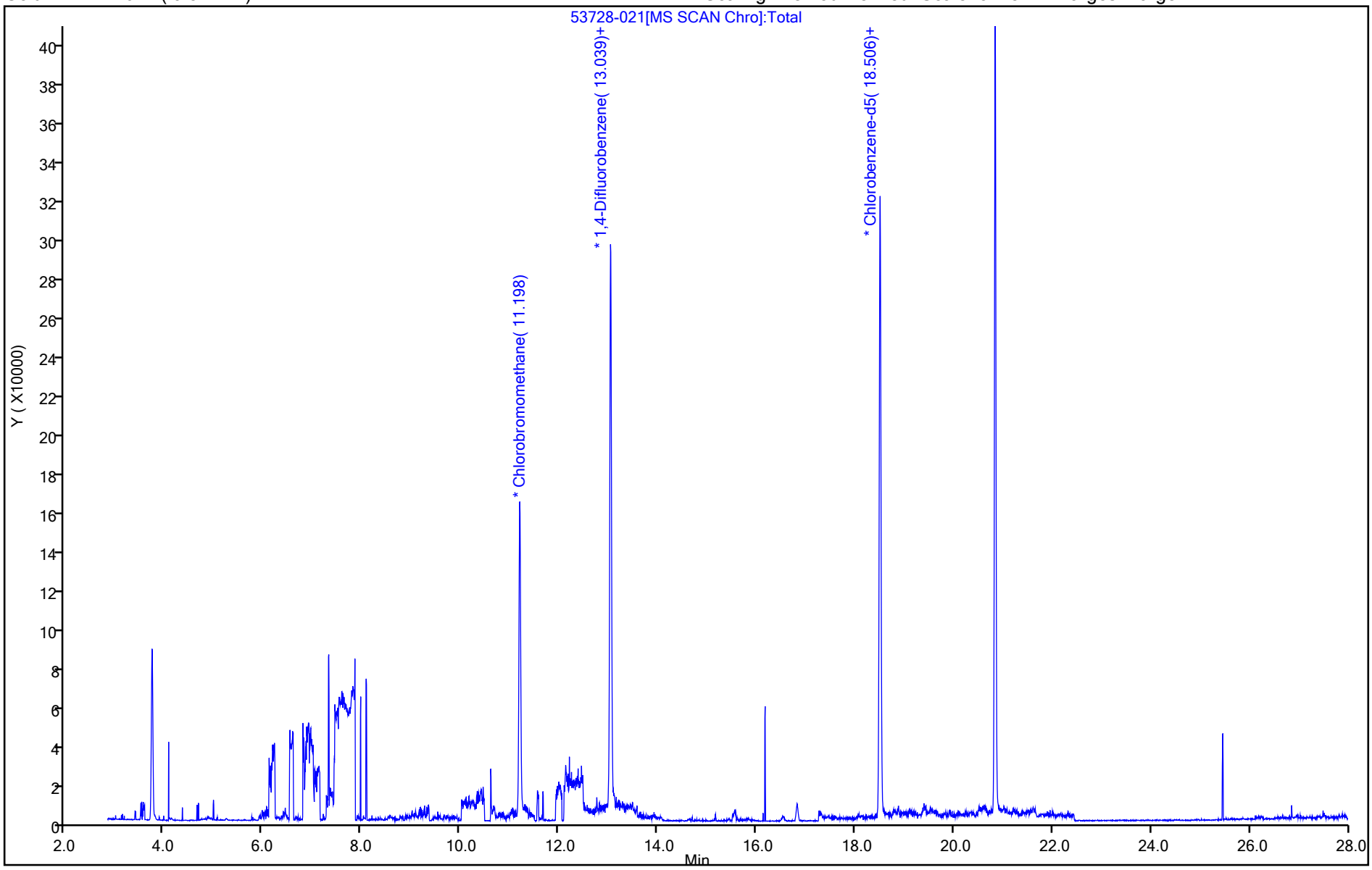
ATTO15WISs_00010	Amount Added: 20.00	Units: mL	Run Reagent

Report Date: 20-Dec-2022 08:49:10 Chrom Revision: 2.3 01-Dec-2022 08:01:02

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i	Operator ID:	vtp
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3	Worklist Smp#:	21
Client ID:	5408				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	20
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



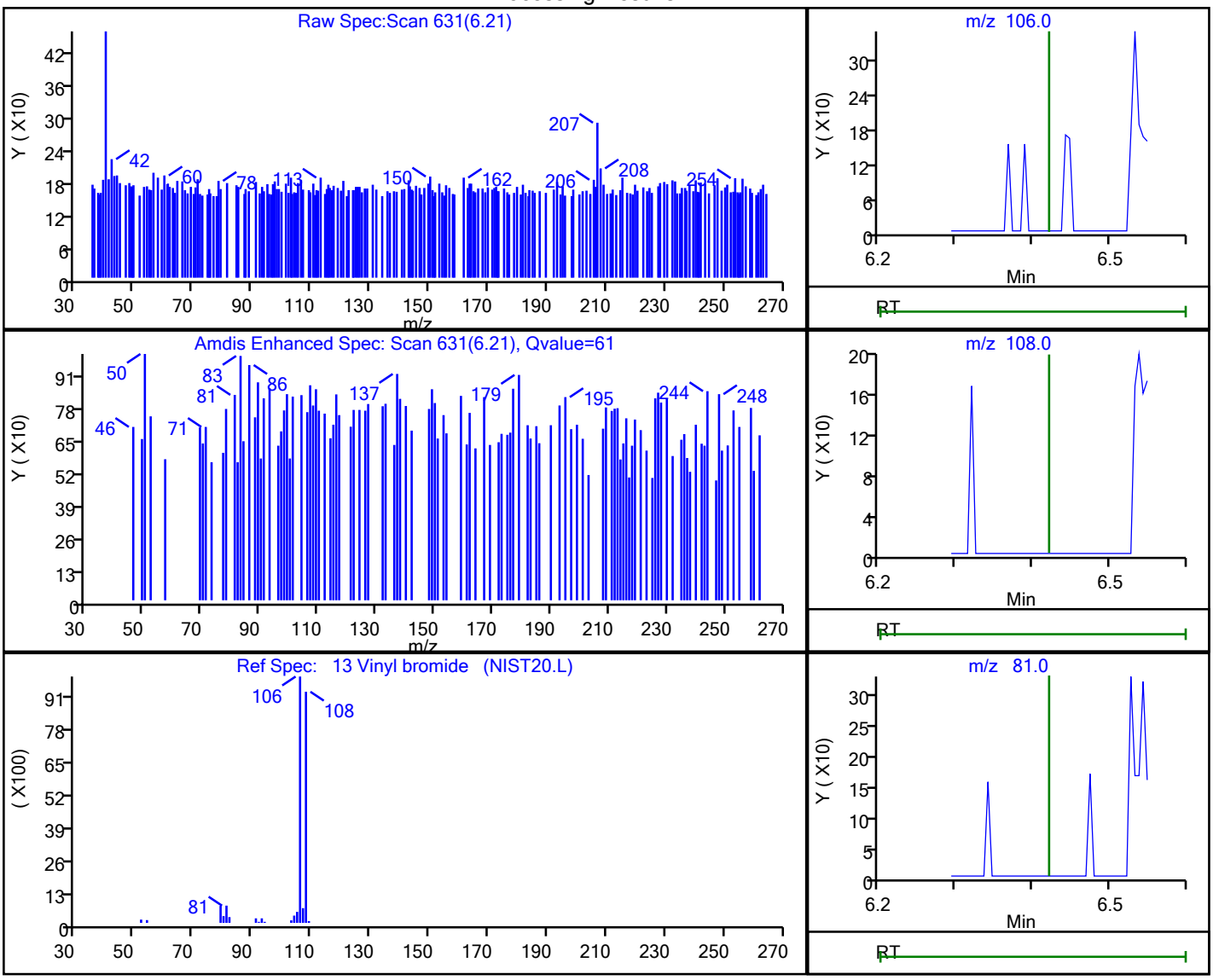
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

13 Vinyl bromide, CAS: 593-60-2

Processing Results



RT	Mass	Response	Amount
6.21	106.00	372	0.028292
6.22	108.00	630	
6.22	81.00	692	

Reviewer: BKZ7, 20-Dec-2022 08:48:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

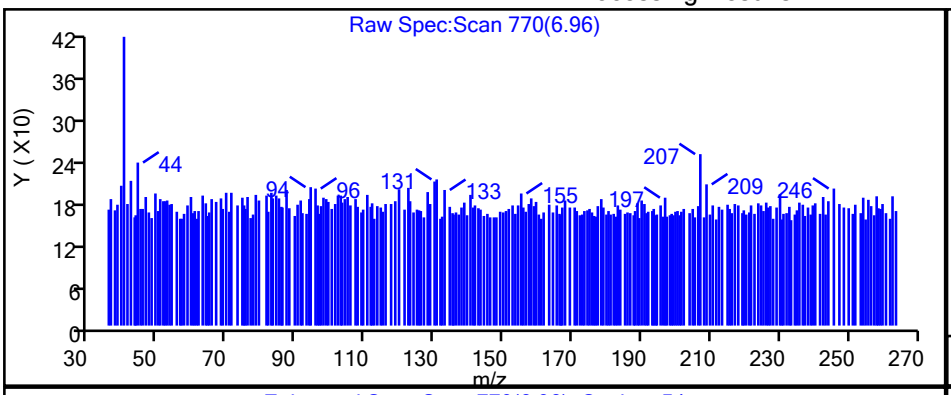
User Disabled Compound Report

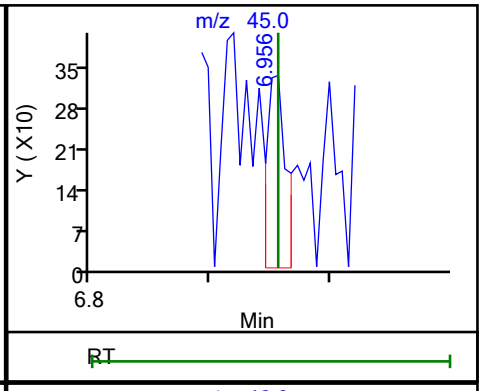
Eurofins Burlington

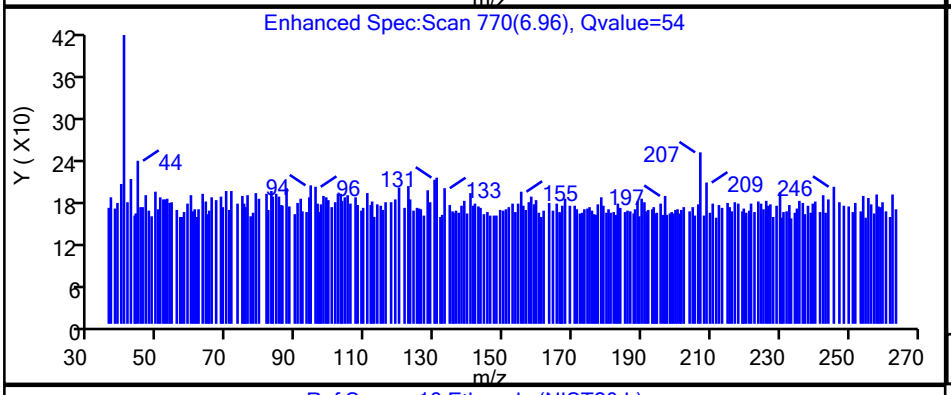
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

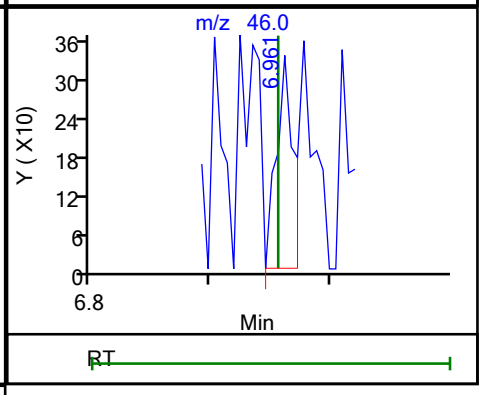
16 Ethanol, CAS: 64-17-5

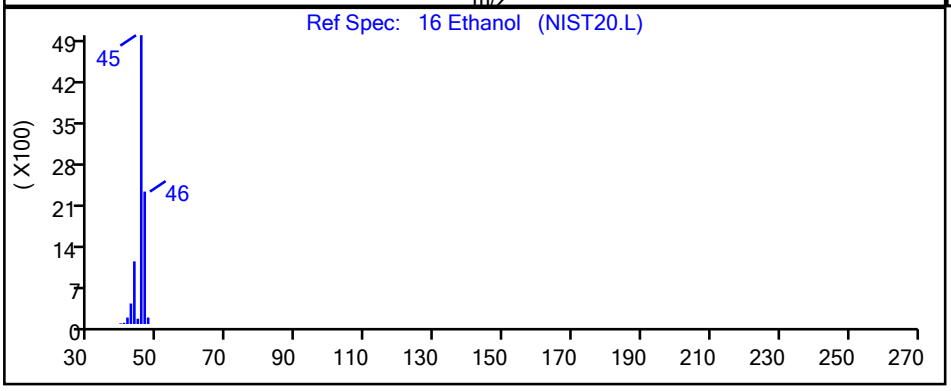
Processing Results











RT	Mass	Response	Amount
6.96	45.00	376	0.088091
6.96	46.00	331	

Reviewer: BKZ7, 20-Dec-2022 08:48:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

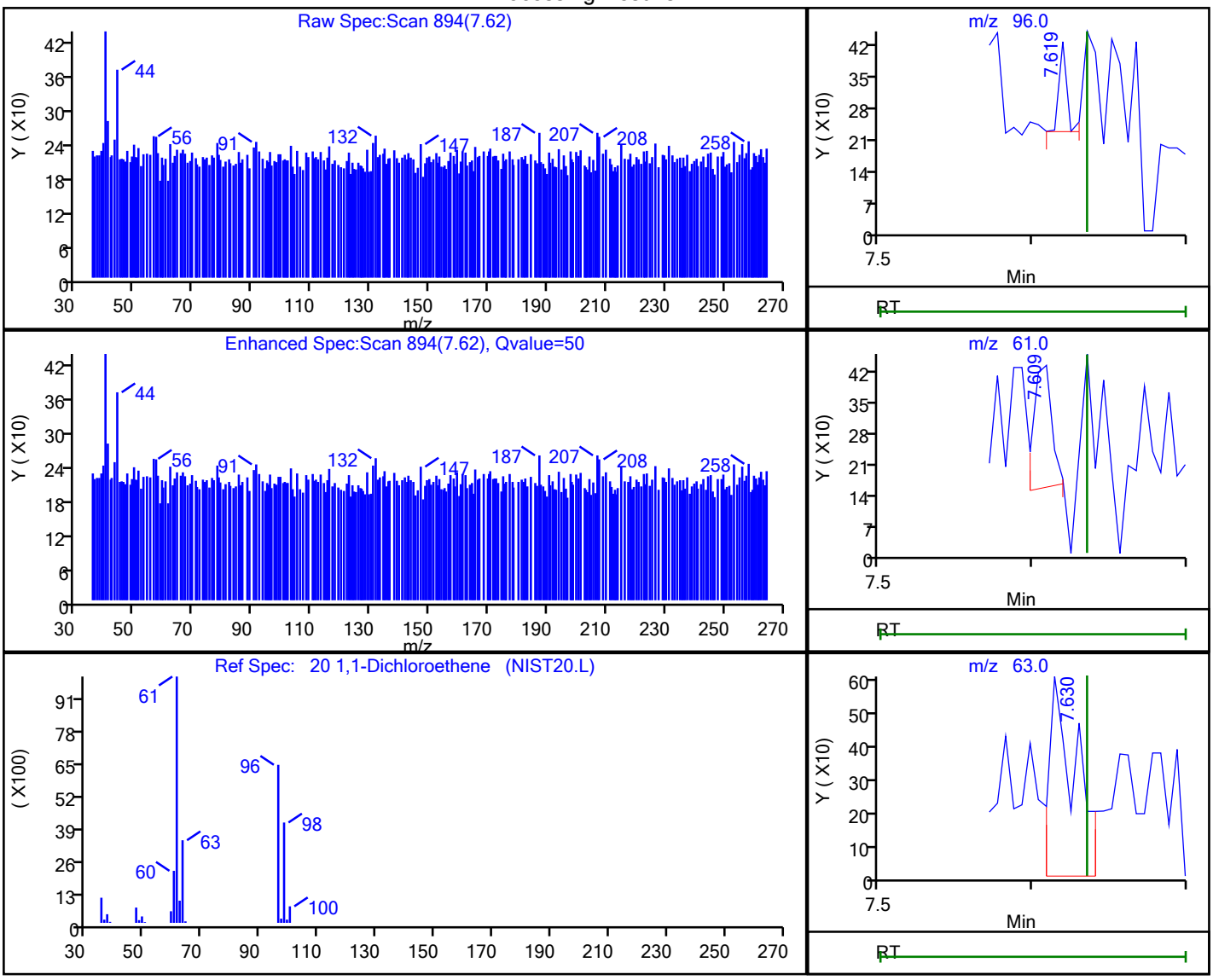
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
7.62	96.00	72	0.005858
7.61	61.00	232	
7.63	63.00	737	

Reviewer: BKZ7, 20-Dec-2022 08:48:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

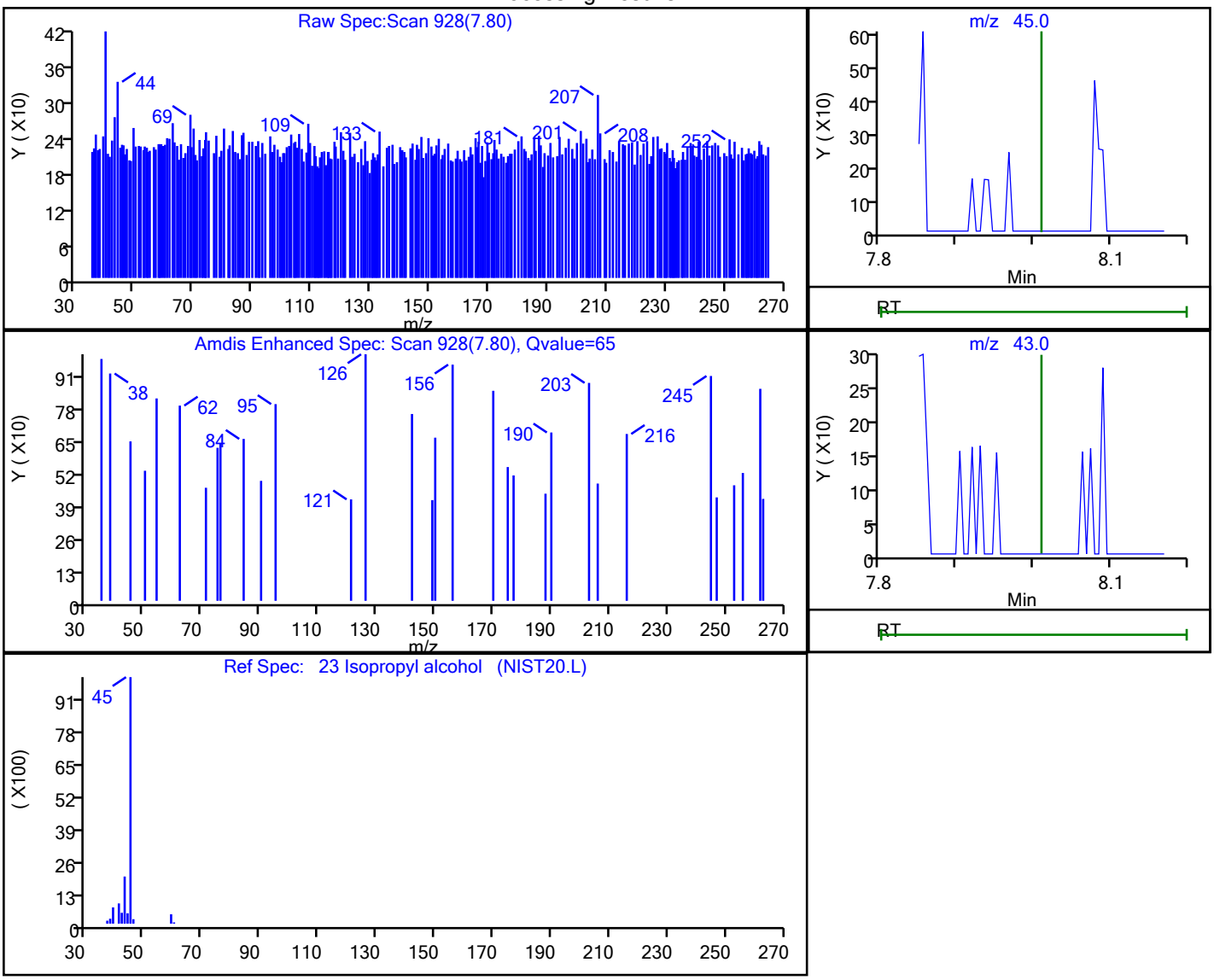
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

23 Isopropyl alcohol, CAS: 67-63-0

Processing Results



RT	Mass	Response	Amount
7.80	45.00	1100	0.081034
7.80	43.00	608	

Reviewer: BKZ7, 20-Dec-2022 08:48:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

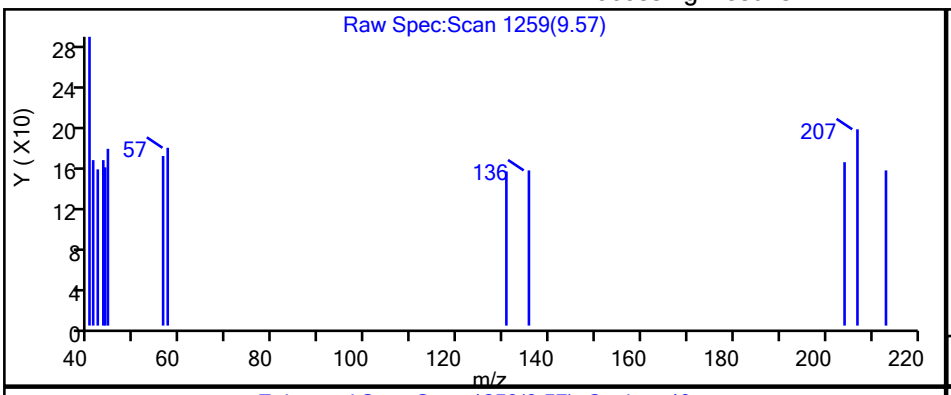
User Disabled Compound Report

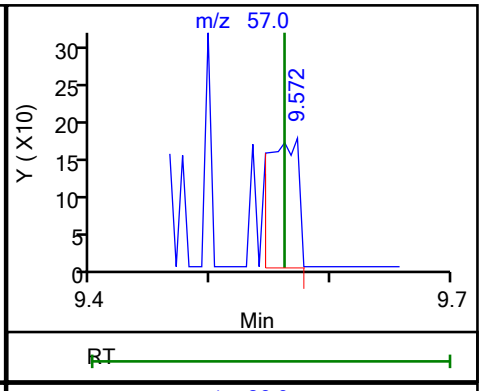
Eurofins Burlington

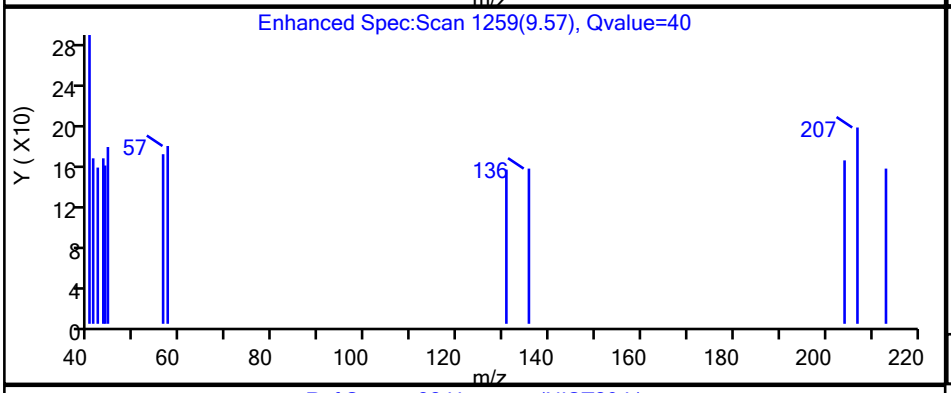
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

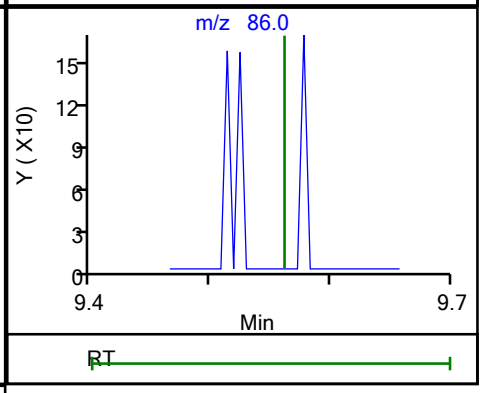
32 Hexane, CAS: 110-54-3

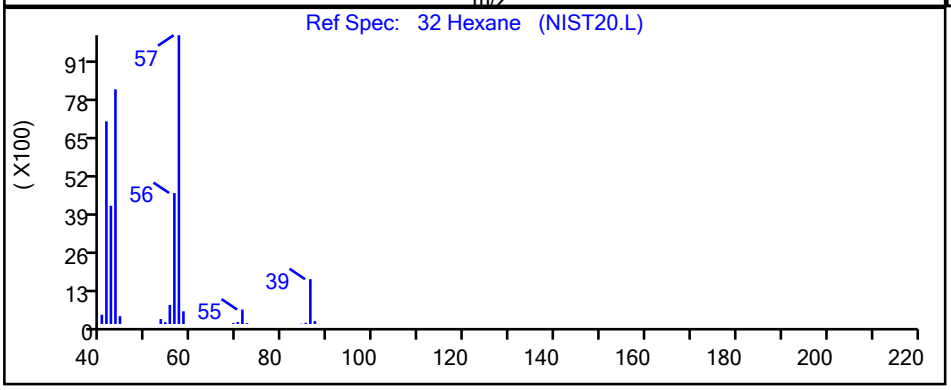
Processing Results











RT	Mass	Response	Amount
9.57	57.00	306	0.022846
9.56	86.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:48:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

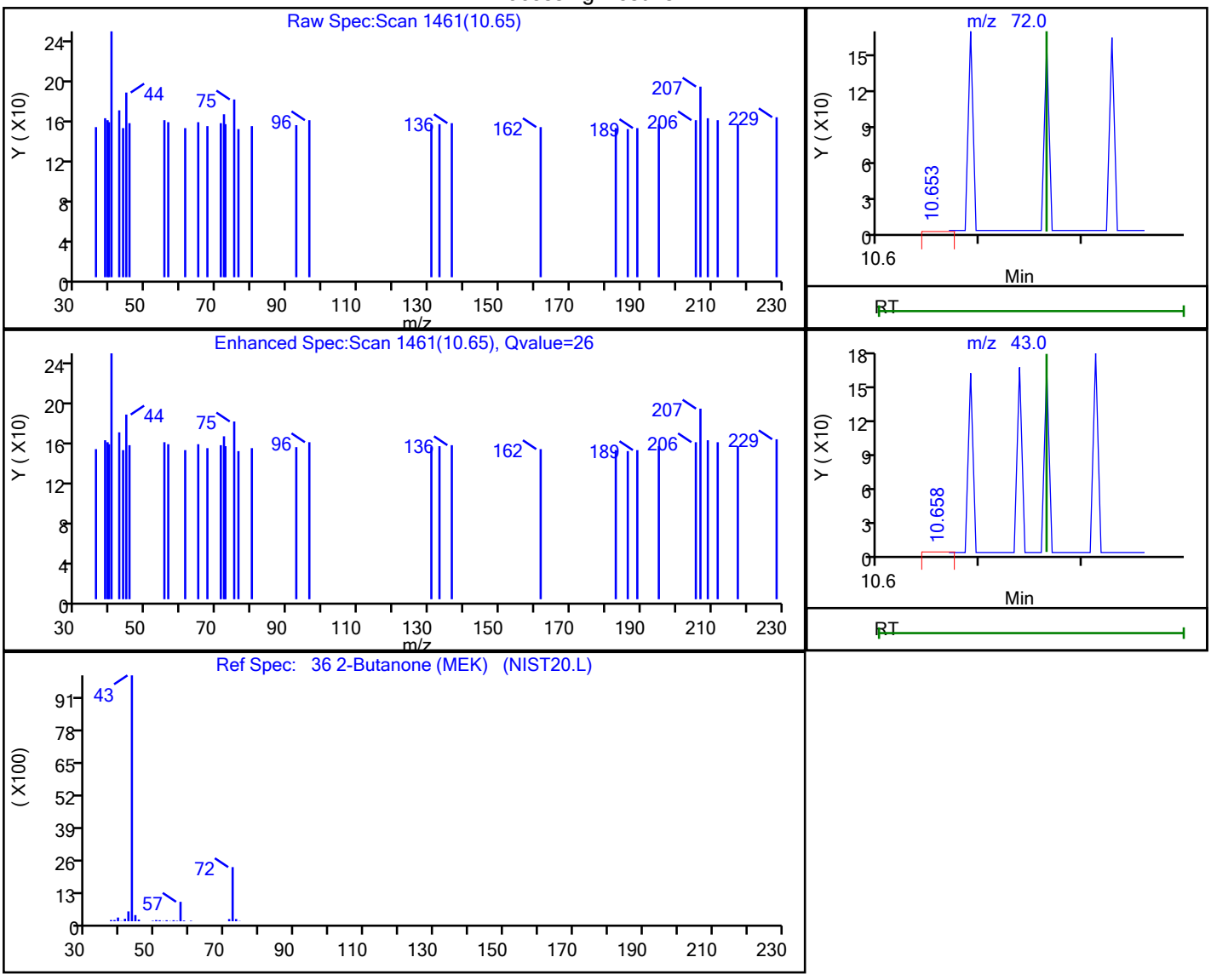
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
10.65	72.00	204	0.046872
10.66	43.00	152	

Reviewer: BKZ7, 20-Dec-2022 08:48:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

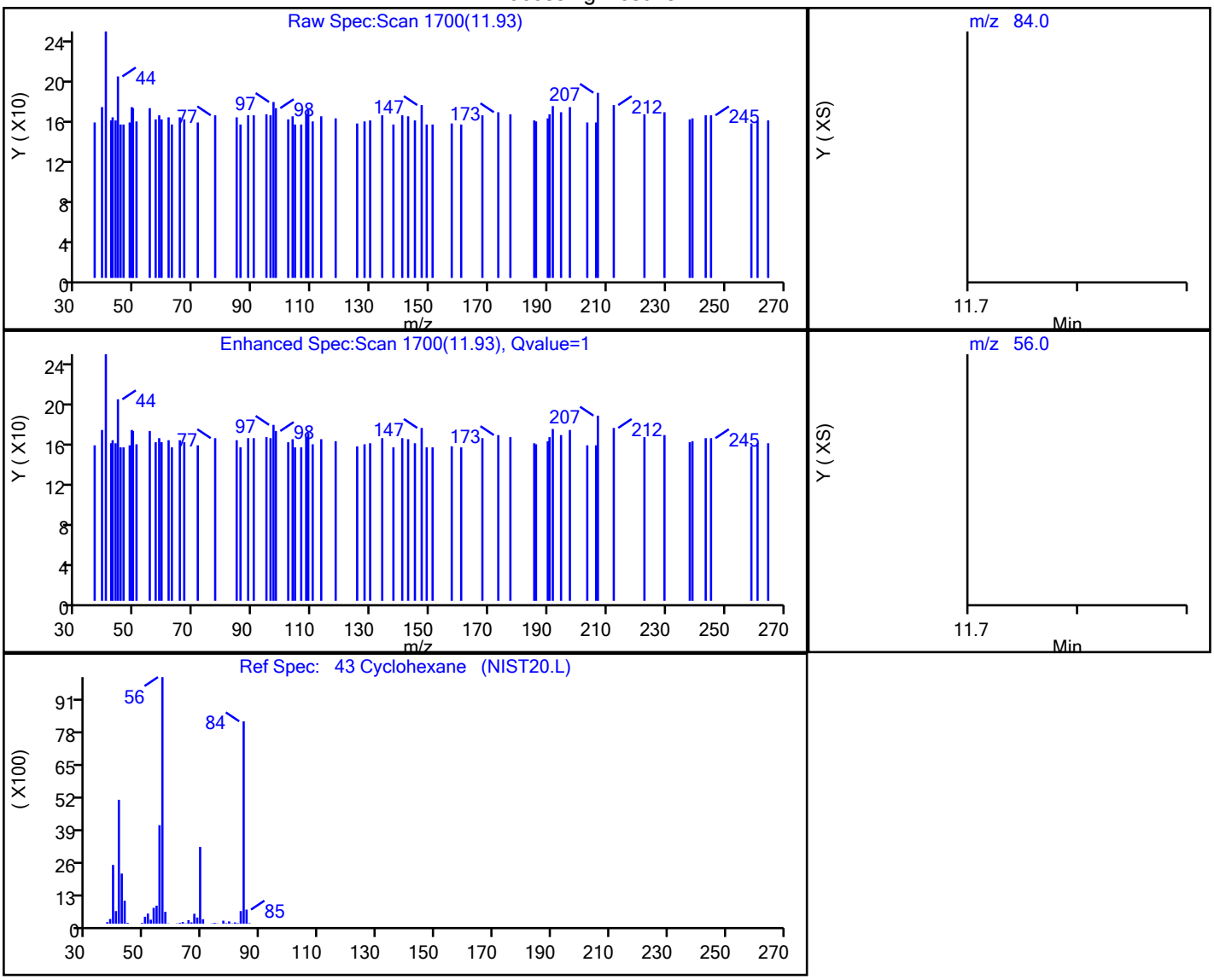
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
11.93	84.00	100	0.007313
11.94	56.00	51	

Reviewer: BKZ7, 20-Dec-2022 08:48:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

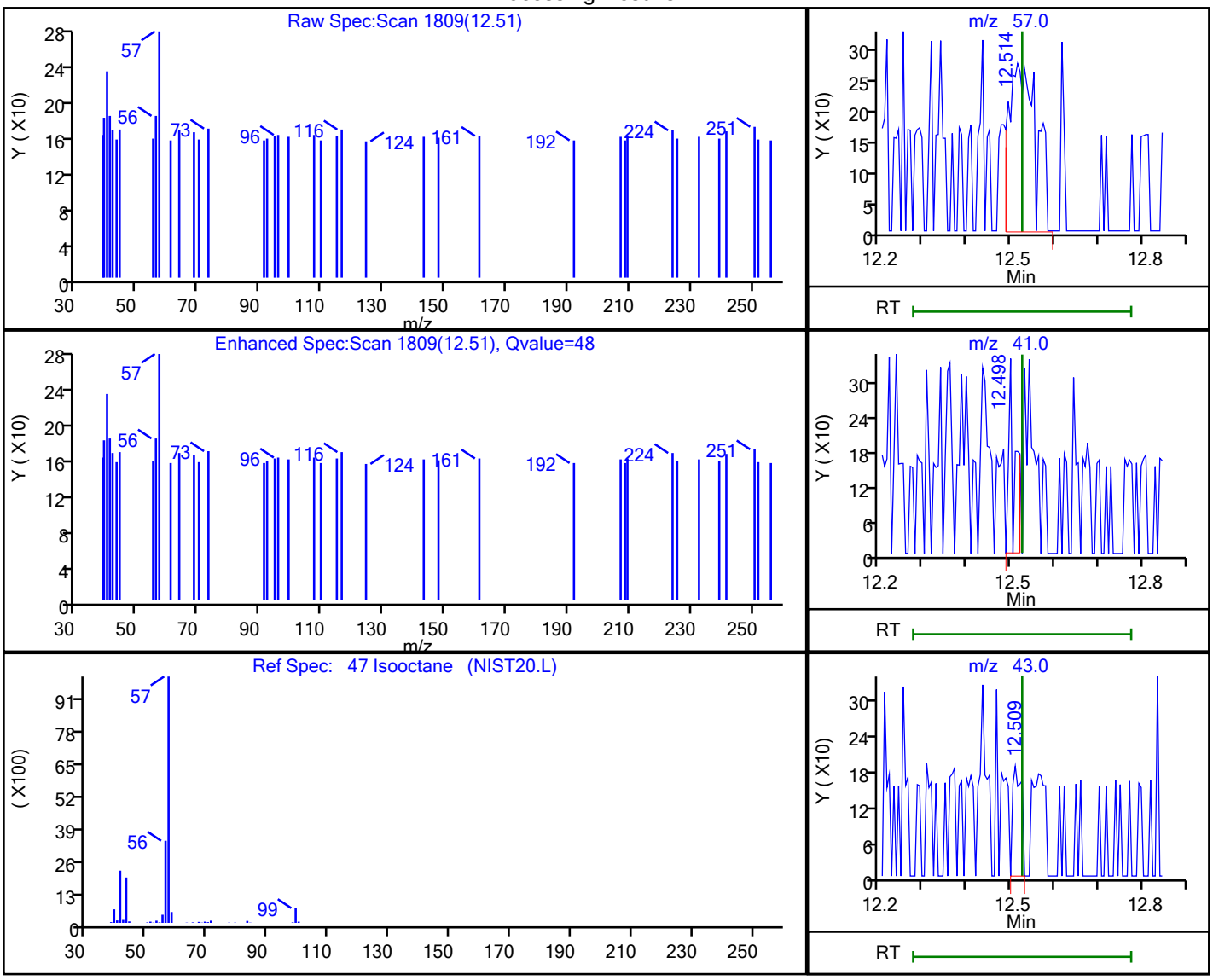
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
12.51	57.00	1165	0.027313
12.50	41.00	327	
12.51	43.00	261	

Reviewer: BKZ7, 20-Dec-2022 08:48:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

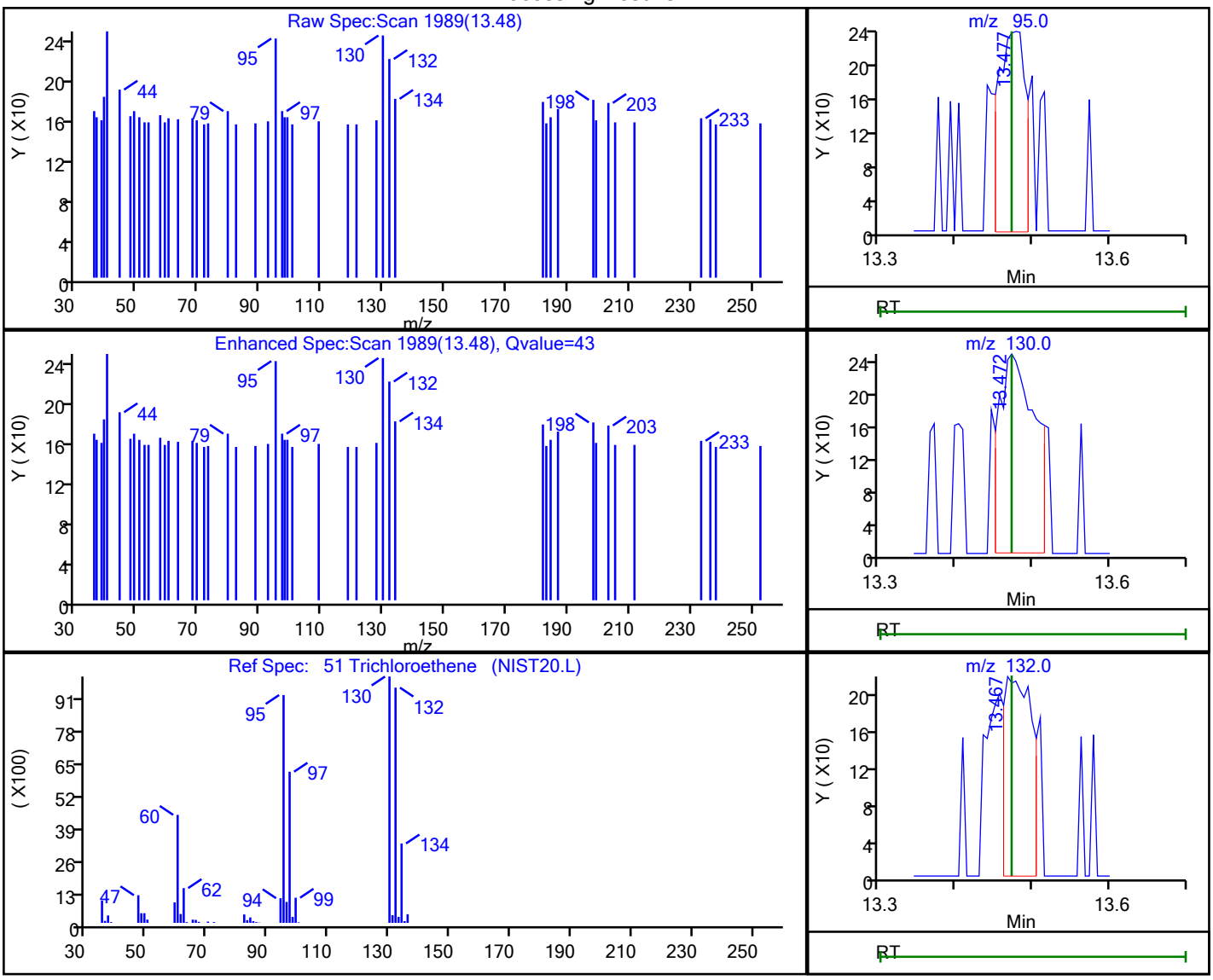
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
13.48	95.00	577	0.041112
13.47	130.00	804	
13.47	132.00	565	

Reviewer: BKZ7, 20-Dec-2022 08:48:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

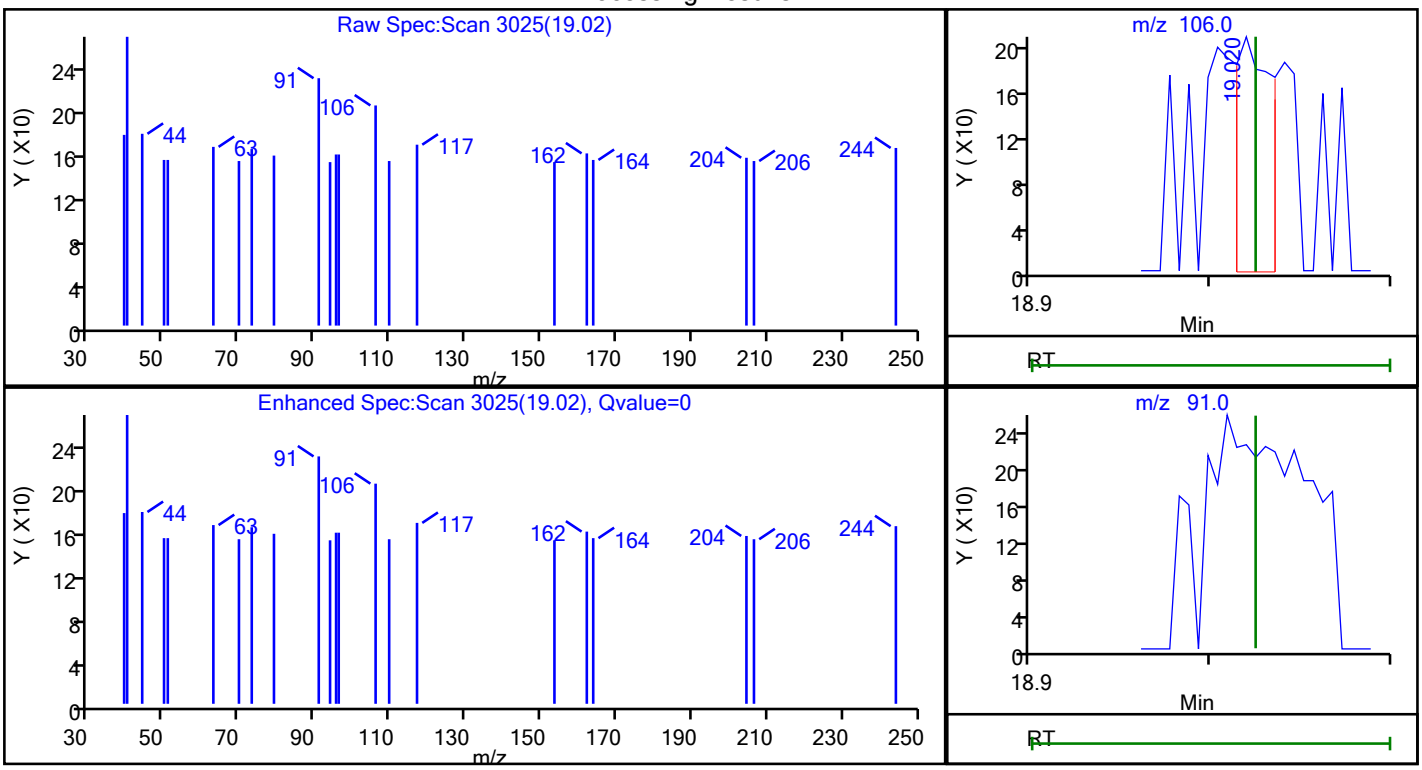
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-021.d				
Injection Date:	20-Dec-2022 01:14:30	Instrument ID:	CHW.i		
Lims ID:	200-66195-A-3	Lab Sample ID:	200-66195-3		
Client ID:	5408				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
19.02	106.00	287	0.014640
19.02	91.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:48:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66197-1

SDG No.:

Client Sample ID: 2637 | Lab Sample ID: 200-66197-3

Matrix: Air | Lab File ID: 53728-018.d

Analysis Method: TO-15 | Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 12/19/2022 21:56

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 186829 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66197-1

SDG No.:

Client Sample ID: 2637 Lab Sample ID: 200-66197-3

Matrix: Air Lab File ID: 53728-018.d

Analysis Method: TO-15 Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/19/2022 21:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66197-1

SDG No.:

Client Sample ID: 2637 Lab Sample ID: 200-66197-3

Matrix: Air Lab File ID: 53728-018.d

Analysis Method: TO-15 Date Collected: 12/17/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/19/2022 21:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d
Lims ID: 200-66197-A-3
Client ID: 2637
Sample Type: Client
Inject. Date: 19-Dec-2022 21:56:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0053728-018
Misc. Info.: 66197-3
Operator ID: vtp Instrument ID: CHW.i

Method: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\TO15_TO3_MasterMethod_W.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Dec-2022 08:35:25 Calib Date: 15-Dec-2022 23:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHW.i\20221215-53700.b\53700-013.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: BKZ7 Date: 20-Dec-2022 08:35:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		4.083				ND	7
	2 Dichlorodifluoromethane	85		4.174				ND	7
	3 Chlorodifluoromethane	51		4.217				ND	7
	4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.517				ND	7
	5 Chloromethane	50		4.629				ND	MU
	6 Vinyl chloride	62		4.928				ND	MU
	7 Butane	43		4.934				ND	7
	8 Butadiene	54		5.041				ND	MU
	9 Bromomethane	94		5.742				ND	MU
	10 Chloroethane	64		6.009				ND	MU
	13 Vinyl bromide	106		6.421				ND	MU
	14 Trichlorofluoromethane	101		6.587				ND	MU
	16 Ethanol	45		6.956				ND	MU
	20 1,1-Dichloroethene	96		7.635				ND	MU
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		7.678				ND	7
	22 Acetone	43		7.710				ND	
	23 Isopropyl alcohol	45		8.010				ND	7
	24 Carbon disulfide	76		8.042				ND	MU
	26 3-Chloro-1-propene	41		8.325				ND	7
	27 Methylene Chloride	49		8.556				ND	7
	28 2-Methyl-2-propanol	59		8.775				ND	
	30 trans-1,2-Dichloroethene	61		9.053				ND	MU
	31 Methyl tert-butyl ether	73		9.069				ND	MU
	32 Hexane	57		9.561				ND	MU
	33 1,1-Dichloroethane	63		9.807				ND	MU
	34 Vinyl acetate	43		9.823				ND	7
S	35 1,2-Dichloroethene, Total	61		10.200				ND	7
	36 2-Butanone (MEK)	72		10.765				ND	
	37 cis-1,2-Dichloroethene	96		10.792				ND	7
	38 Ethyl acetate	88		10.856				ND	
*	39 Chlorobromomethane	128	11.198	11.204	-0.006	78	68009	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.252				ND	7
	41 Chloroform	83		11.380				ND	7
	42 1,1,1-Trichloroethane	97		11.680				ND	7
	43 Cyclohexane	84		11.819				ND	MU
	44 Carbon tetrachloride	117		11.958				ND	7
	45 Benzene	78		12.300				ND	
	46 1,2-Dichloroethane	62		12.375				ND	
	47 Isooctane	57		12.525				ND	
	48 n-Heptane	43		12.835				ND	7
*	49 1,4-Difluorobenzene	114	13.039	13.044	-0.005	93	340044	10.0	
	51 Trichloroethene	95		13.472				ND	MU
	53 1,2-Dichloropropane	63		13.921				ND	
	54 Methyl methacrylate	69		14.023				ND	MU
	55 1,4-Dioxane	88		14.060				ND	7
	57 Dibromomethane	174		14.082				ND	MU
	58 Dichlorobromomethane	83		14.392				ND	7
	59 cis-1,3-Dichloropropene	75		15.189				ND	7
	61 4-Methyl-2-pentanone (MIBK)	43		15.457				ND	7
	62 Toluene	92		15.831				ND	7
	66 trans-1,3-Dichloropropene	75		16.248				ND	MU
	67 1,1,2-Trichloroethane	83		16.623				ND	MU
	68 Tetrachloroethene	166		16.821				ND	7
	69 2-Hexanone	43		17.040				ND	7
	70 Chlorodibromomethane	129		17.356				ND	MU
	71 Ethylene Dibromide	107		17.591				ND	MU
*	73 Chlorobenzene-d5	117	18.506	18.506	0.000	83	282963	10.0	
	74 Chlorobenzene	112		18.565				ND	MU
	75 Ethylbenzene	91		18.763				ND	MU
	76 m-Xylene & p-Xylene	106		19.025				ND	MU
	78 o-Xylene	106		19.795				ND	MU
	79 Styrene	104		19.833				ND	MU
S	80 Xylenes, Total	106		20.100				ND	7
	81 Bromoform	173		20.186				ND	MU
	82 Isopropylbenzene	105		20.523				ND	MU
	83 1,1,2,2-Tetrachloroethane	83		21.052				ND	7
	85 N-Propylbenzene	91		21.261				ND	7
	86 2-Chlorotoluene	91		21.411				ND	7
	87 4-Ethyltoluene	105		21.464				ND	7
	88 1,3,5-Trimethylbenzene	105		21.566				ND	7
	91 tert-Butylbenzene	119		22.053				ND	MU
	92 1,2,4-Trimethylbenzene	105		22.144				ND	7
	93 sec-Butylbenzene	105		22.385				ND	7
	94 1,3-Dichlorobenzene	146		22.556				ND	7
	95 4-Isopropyltoluene	119		22.604				ND	7
	96 1,4-Dichlorobenzene	146		22.700				ND	MU
	97 Benzyl chloride	91		22.850				ND	MU
	98 n-Butylbenzene	91		23.160				ND	7
	99 1,2-Dichlorobenzene	146		23.182				ND	MU
	102 1,2,4-Trichlorobenzene	180		25.562				ND	7
	103 Hexachlorobutadiene	225		25.803				ND	7
	104 Naphthalene	128		26.022				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

ATTO15WISs_00010	Amount Added: 20.00	Units: mL	Run Reagent

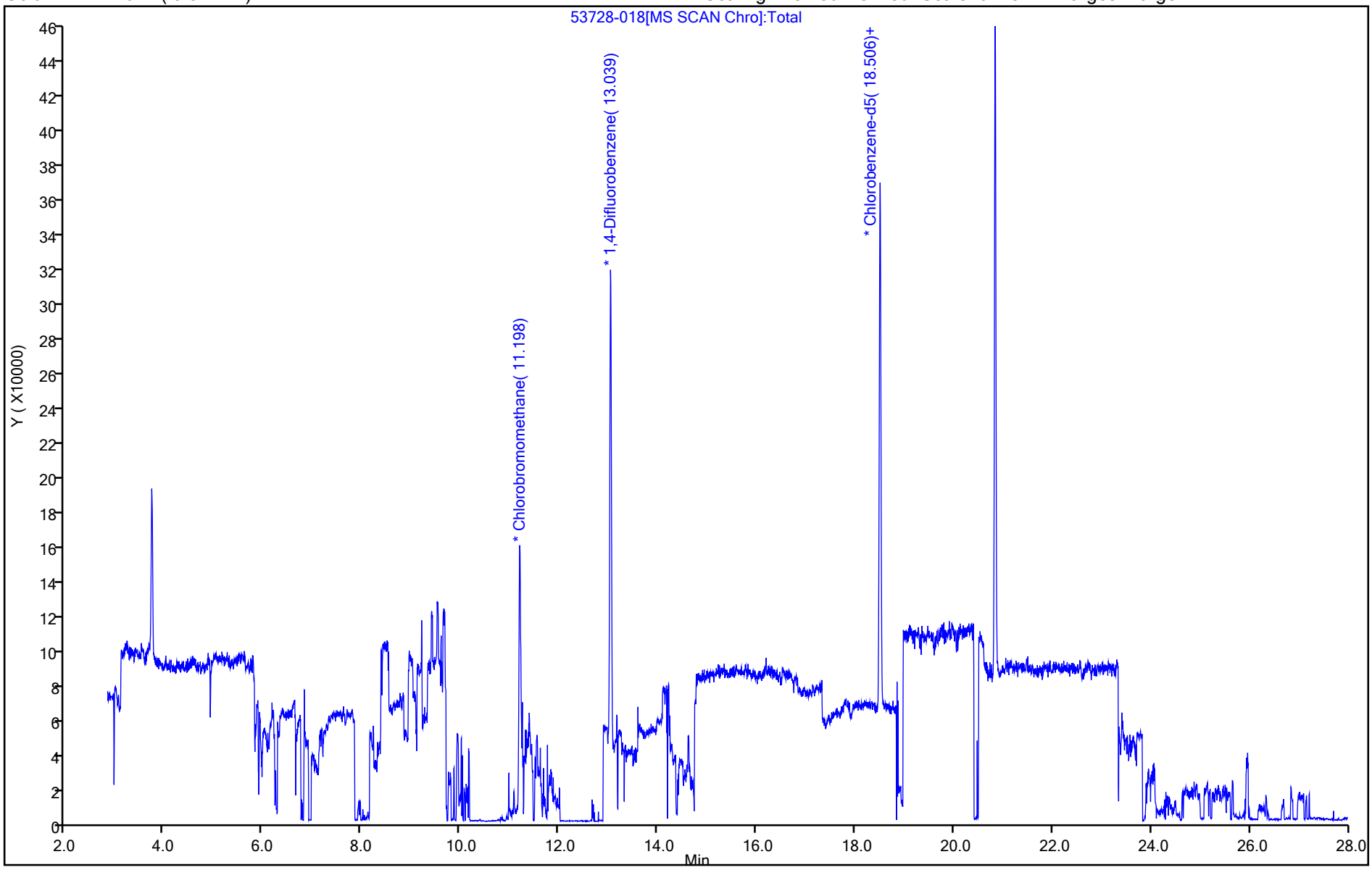
Report Date: 20-Dec-2022 08:35:26 Chrom Revision: 2.3 01-Dec-2022 08:01:02

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d

Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i	Operator ID:	vtp
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3	Worklist Smp#:	18
Client ID:	2637				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	17
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



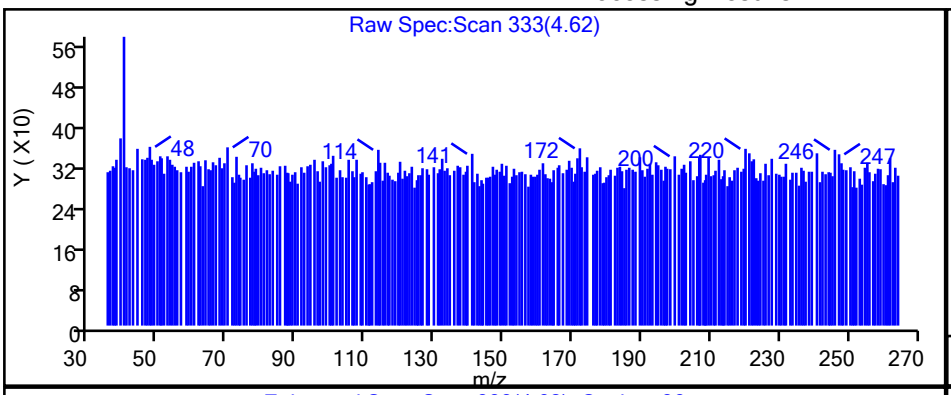
User Disabled Compound Report

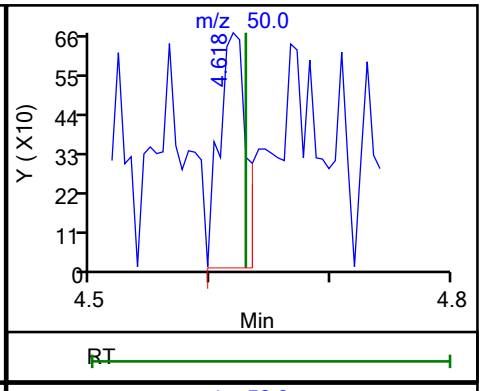
Eurofins Burlington

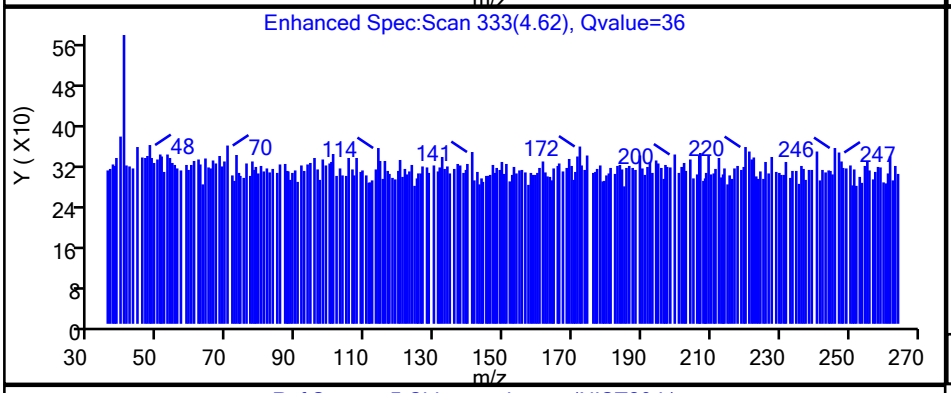
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

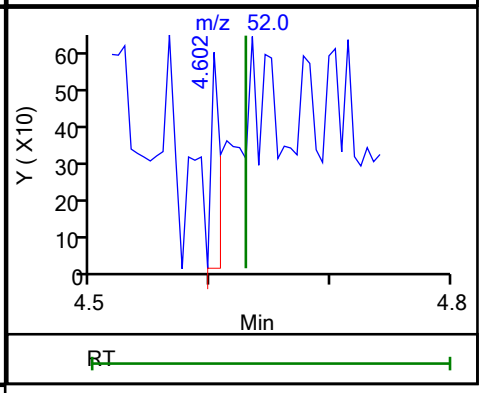
5 Chloromethane, CAS: 74-87-3

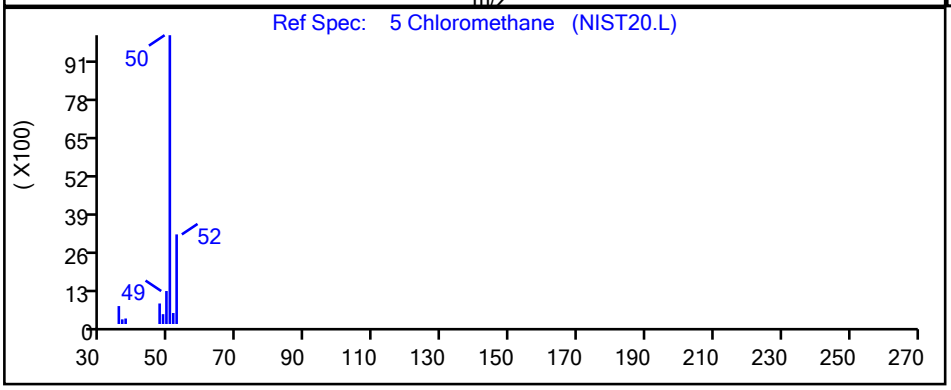
Processing Results











RT	Mass	Response	Amount
4.62	50.00	1037	0.096336
4.60	52.00	295	

Reviewer: BKZ7, 20-Dec-2022 08:35:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

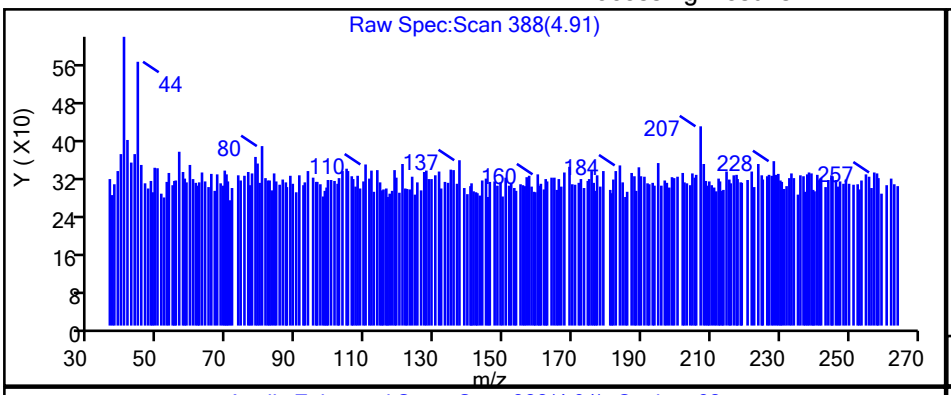
User Disabled Compound Report

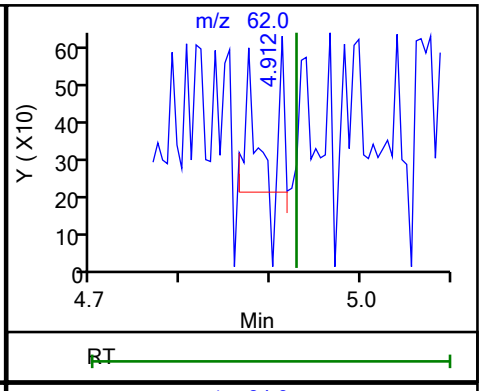
Eurofins Burlington

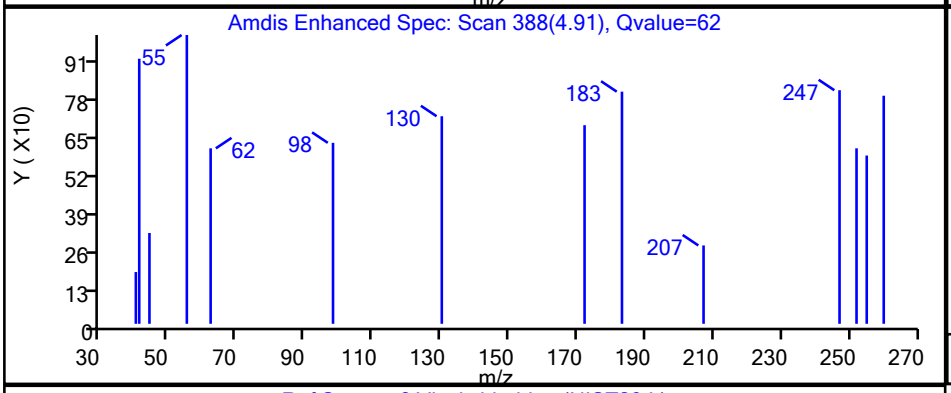
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

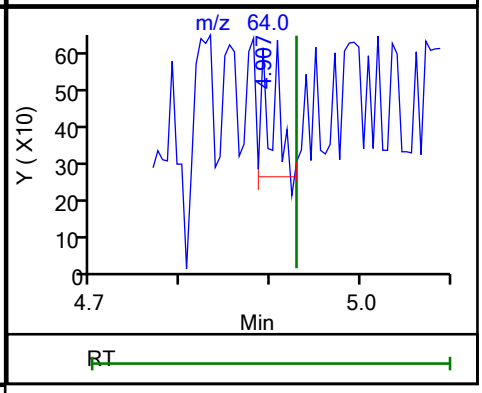
6 Vinyl chloride, CAS: 75-01-4

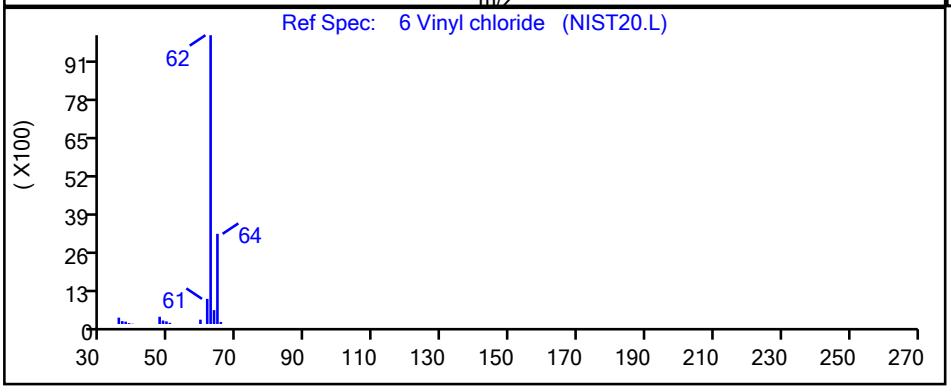
Processing Results











RT	Mass	Response	Amount
4.91	62.00	416	0.031772
4.91	64.00	349	

Reviewer: BKZ7, 20-Dec-2022 08:35:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

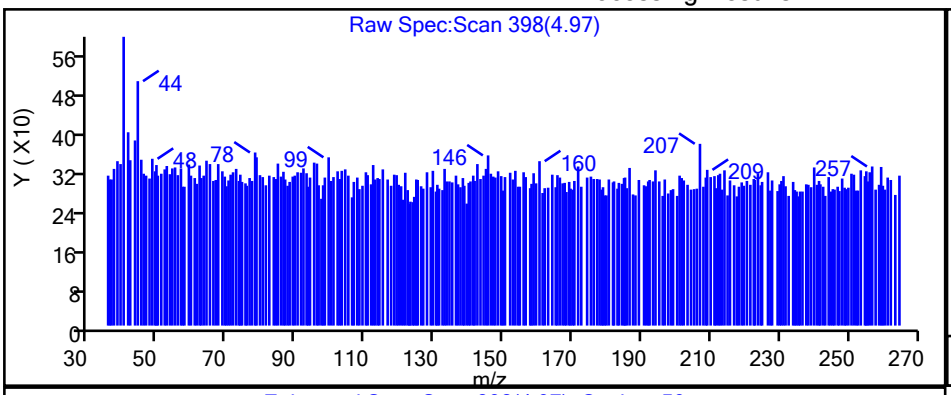
User Disabled Compound Report

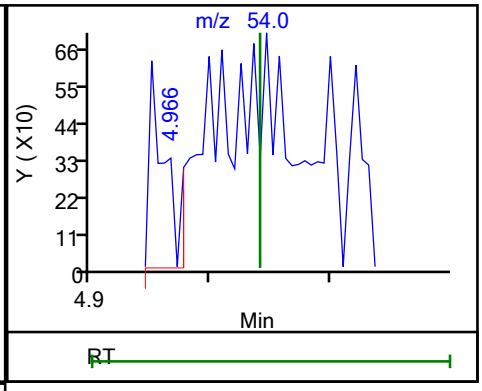
Eurofins Burlington

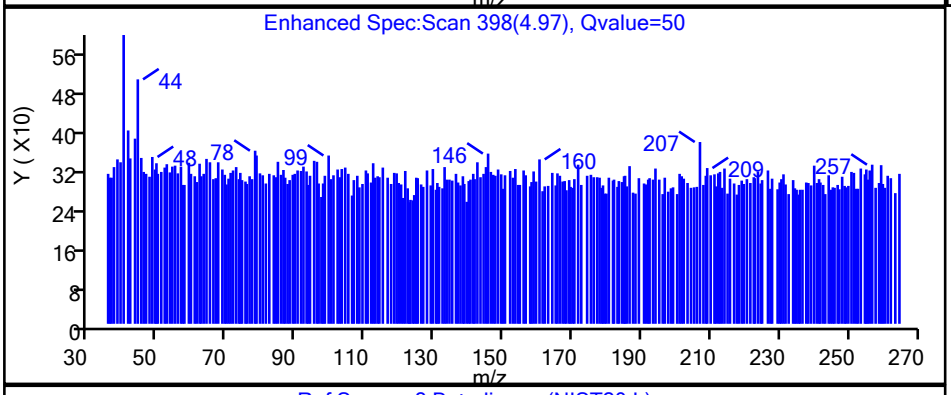
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

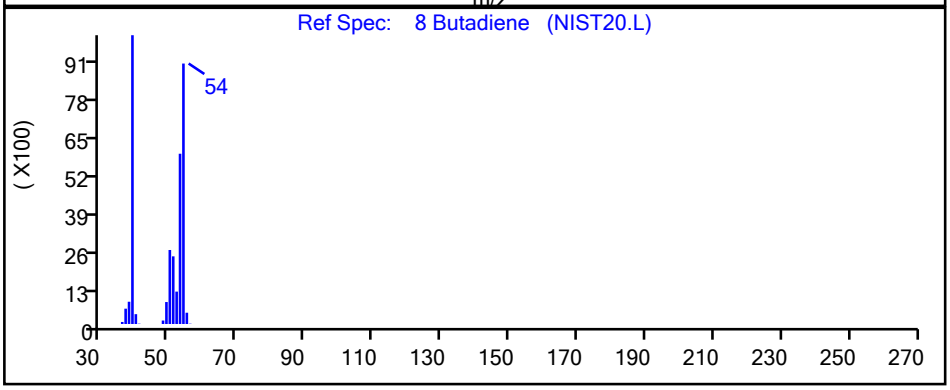
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
4.97	54.00	598	0.063509

Reviewer: BKZ7, 20-Dec-2022 08:35:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

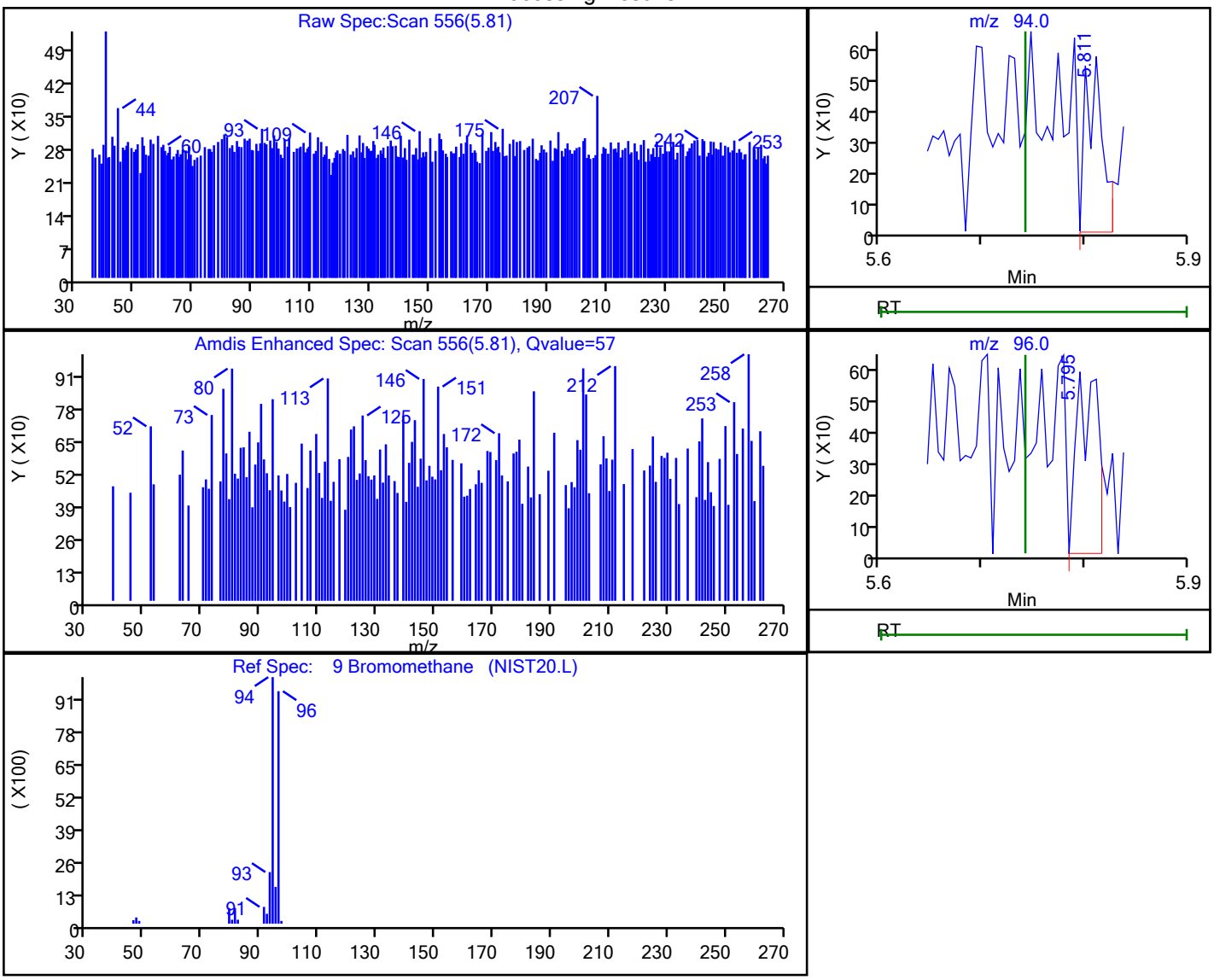
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

9 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
5.81	94.00	645	0.048263
5.80	96.00	848	

Reviewer: BKZ7, 20-Dec-2022 08:35:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

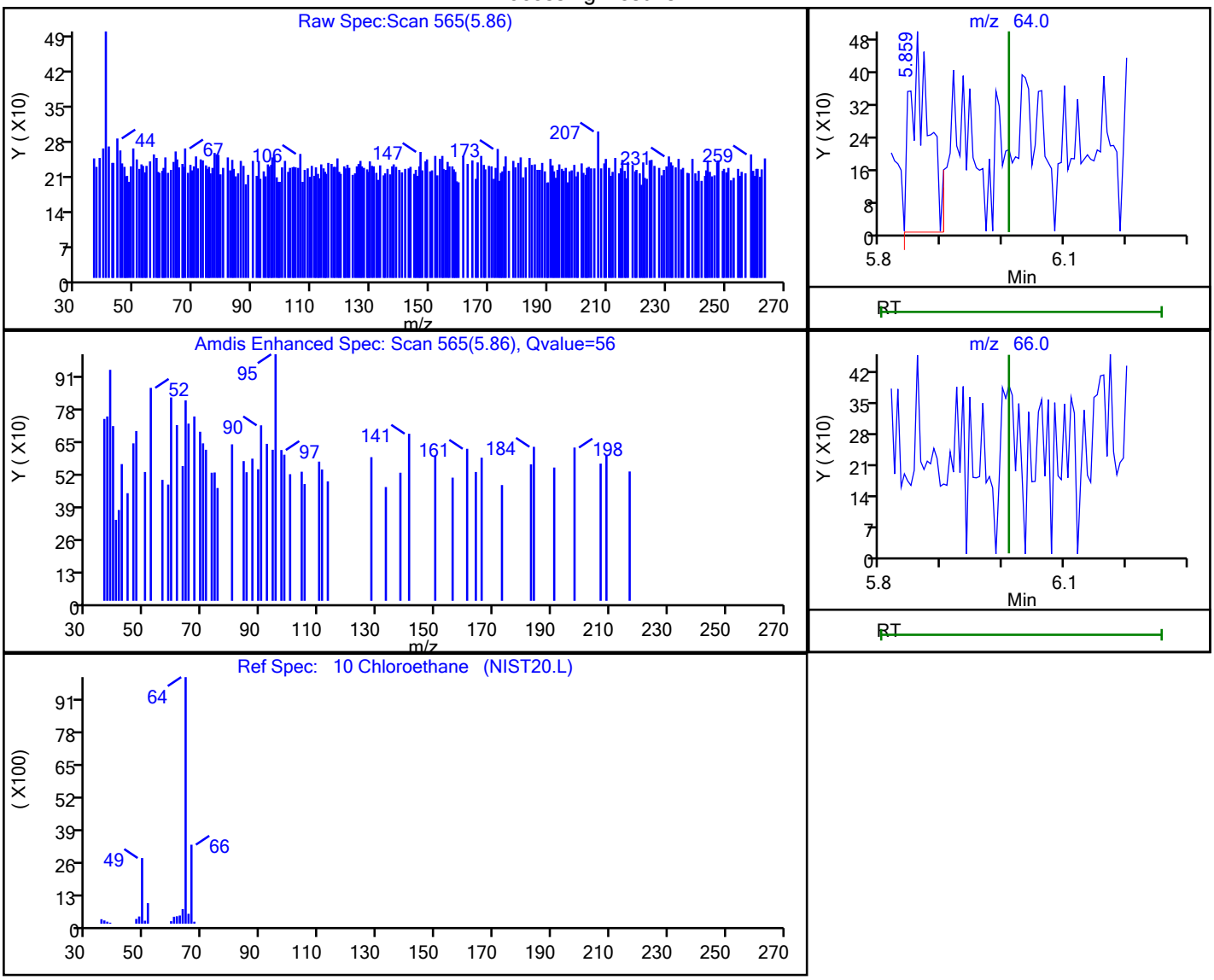
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

10 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
5.86	64.00	1013	0.152277
6.01	66.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:35:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

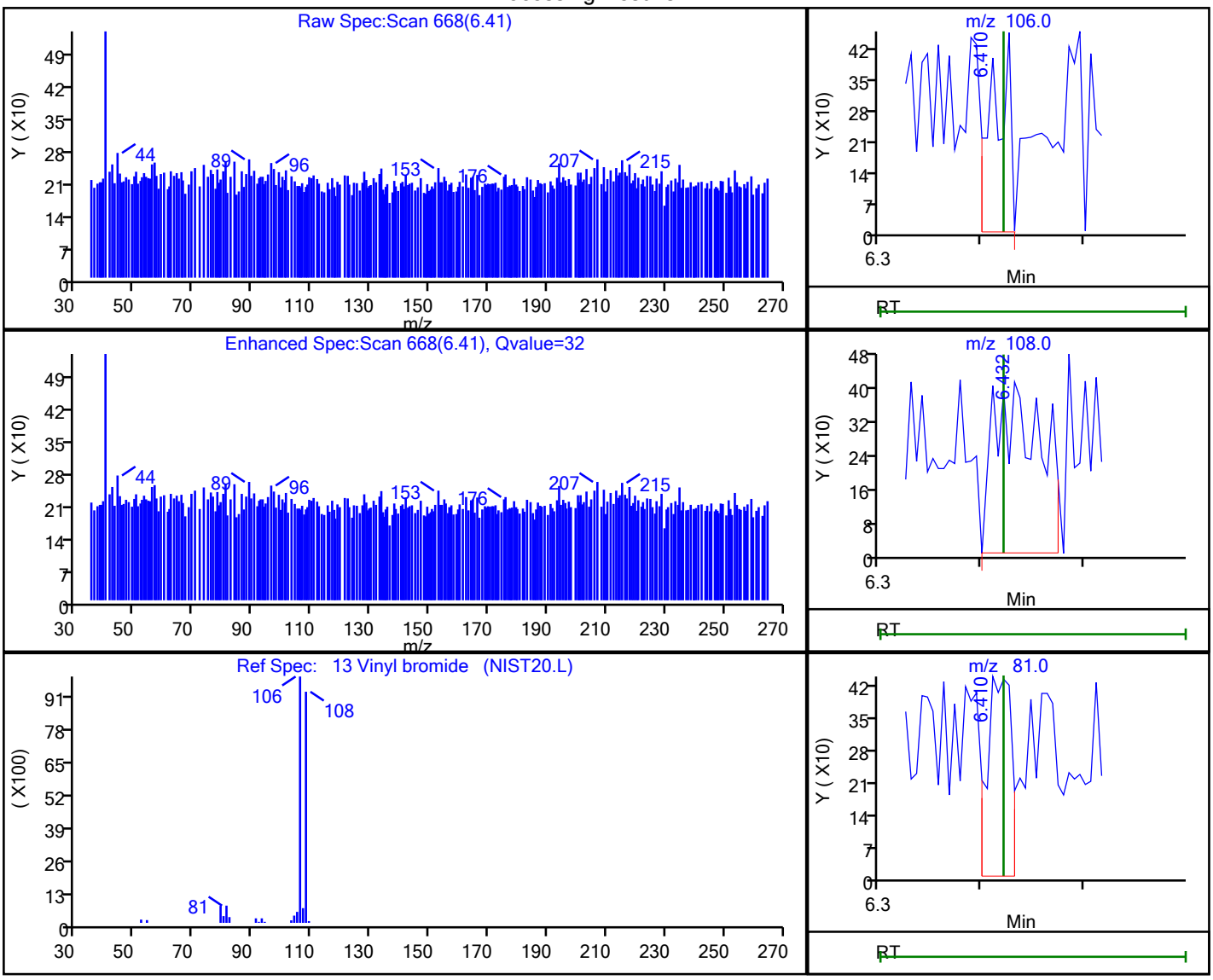
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

13 Vinyl bromide, CAS: 593-60-2

Processing Results



RT	Mass	Response	Amount
6.41	106.00	545	0.041749
6.43	108.00	1283	
6.41	81.00	732	

Reviewer: BKZ7, 20-Dec-2022 08:35:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

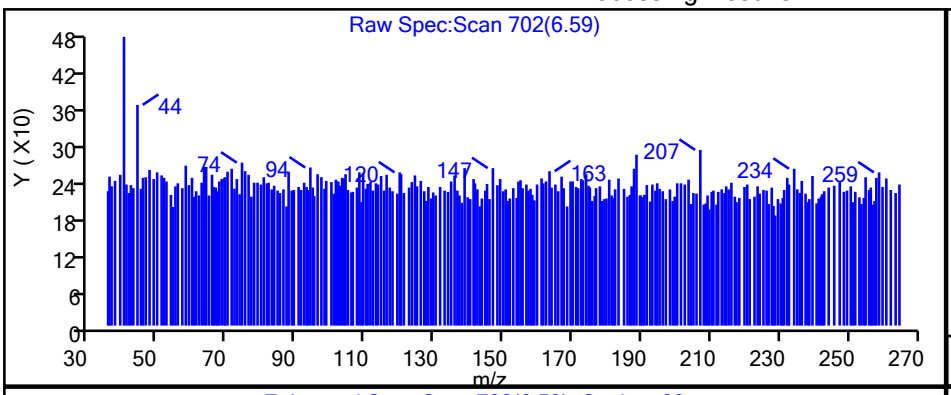
User Disabled Compound Report

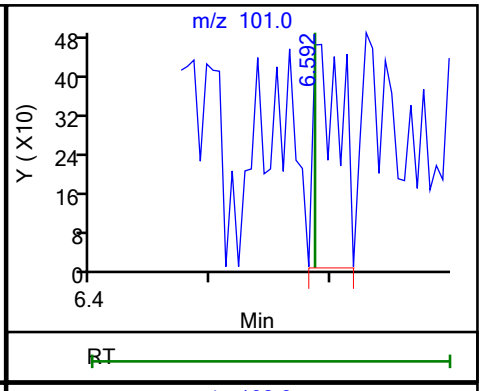
Eurofins Burlington

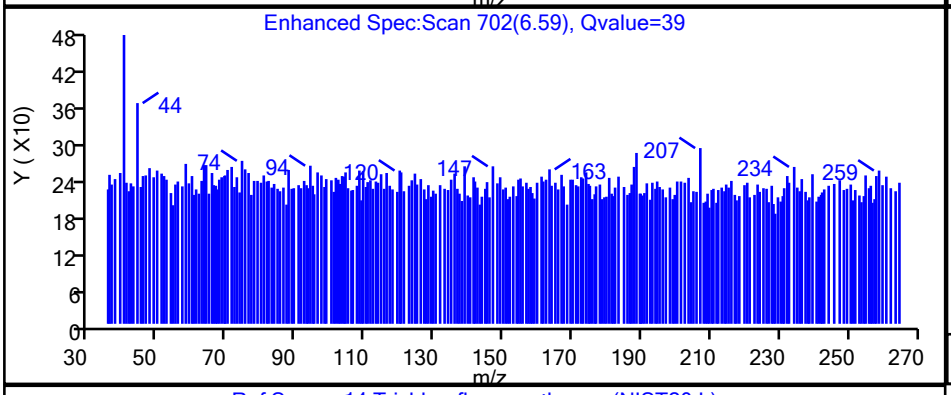
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

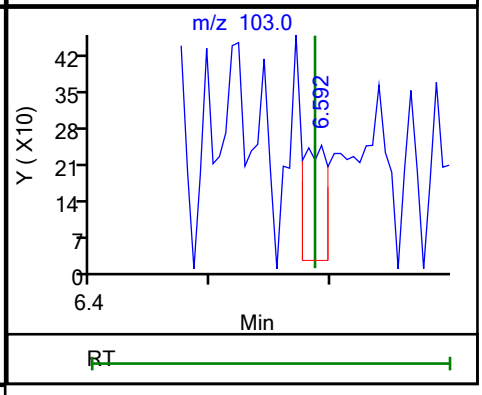
14 Trichlorofluoromethane, CAS: 75-69-4

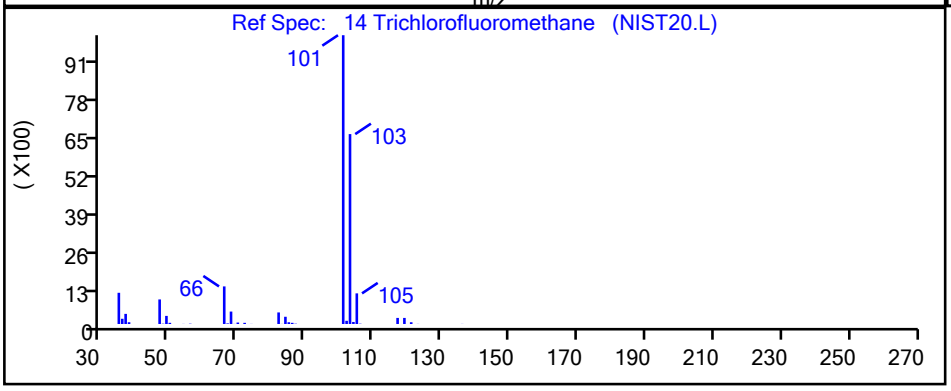
Processing Results











RT	Mass	Response	Amount
6.59	101.00	709	0.025799
6.59	103.00	330	

Reviewer: BKZ7, 20-Dec-2022 08:35:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

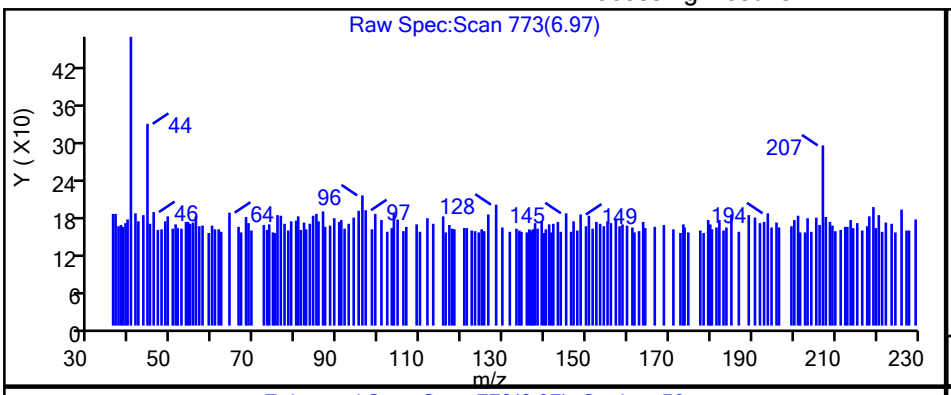
User Disabled Compound Report

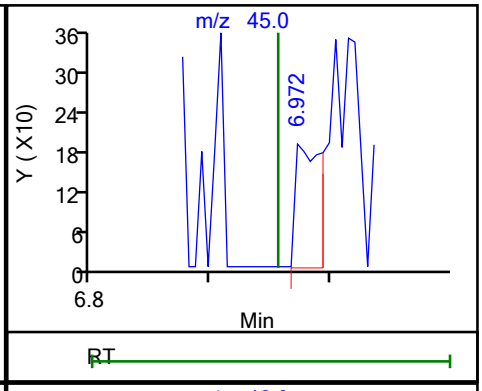
Eurofins Burlington

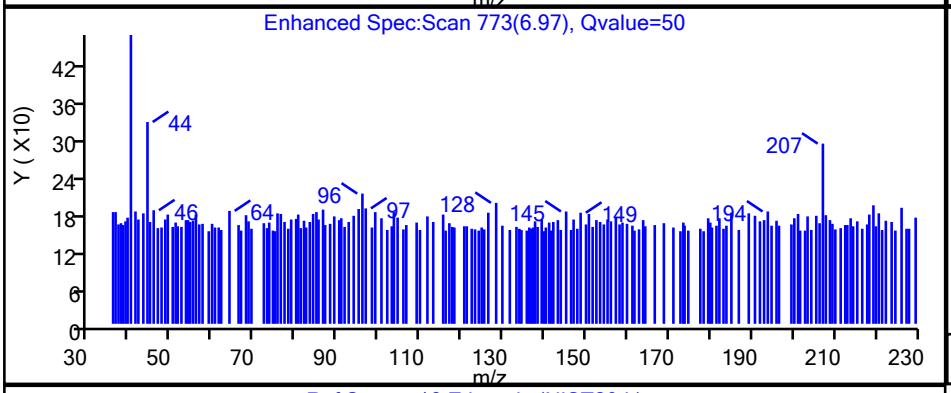
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

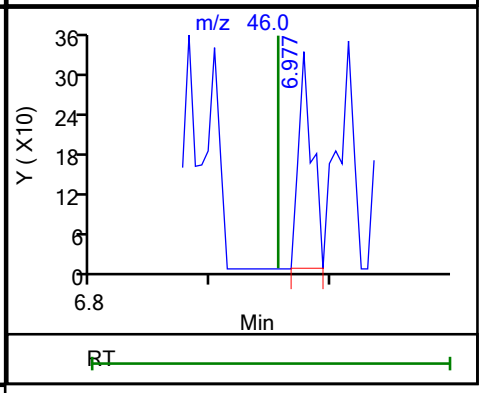
16 Ethanol, CAS: 64-17-5

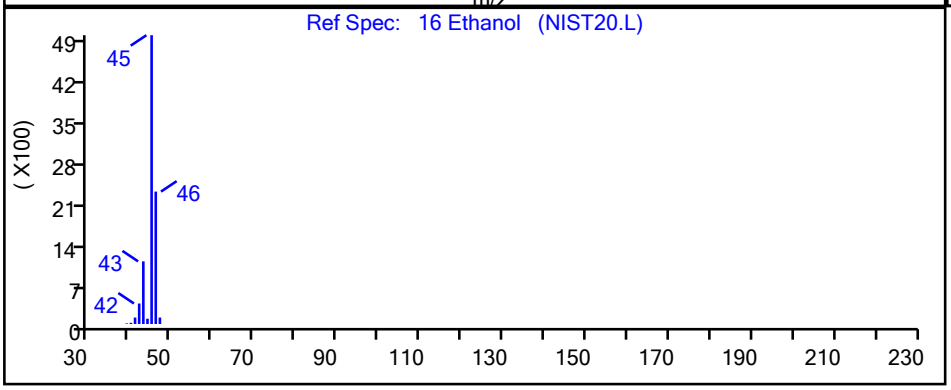
Processing Results











RT	Mass	Response	Amount
6.97	45.00	274	0.064658
6.98	46.00	261	

Reviewer: BKZ7, 20-Dec-2022 08:34:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

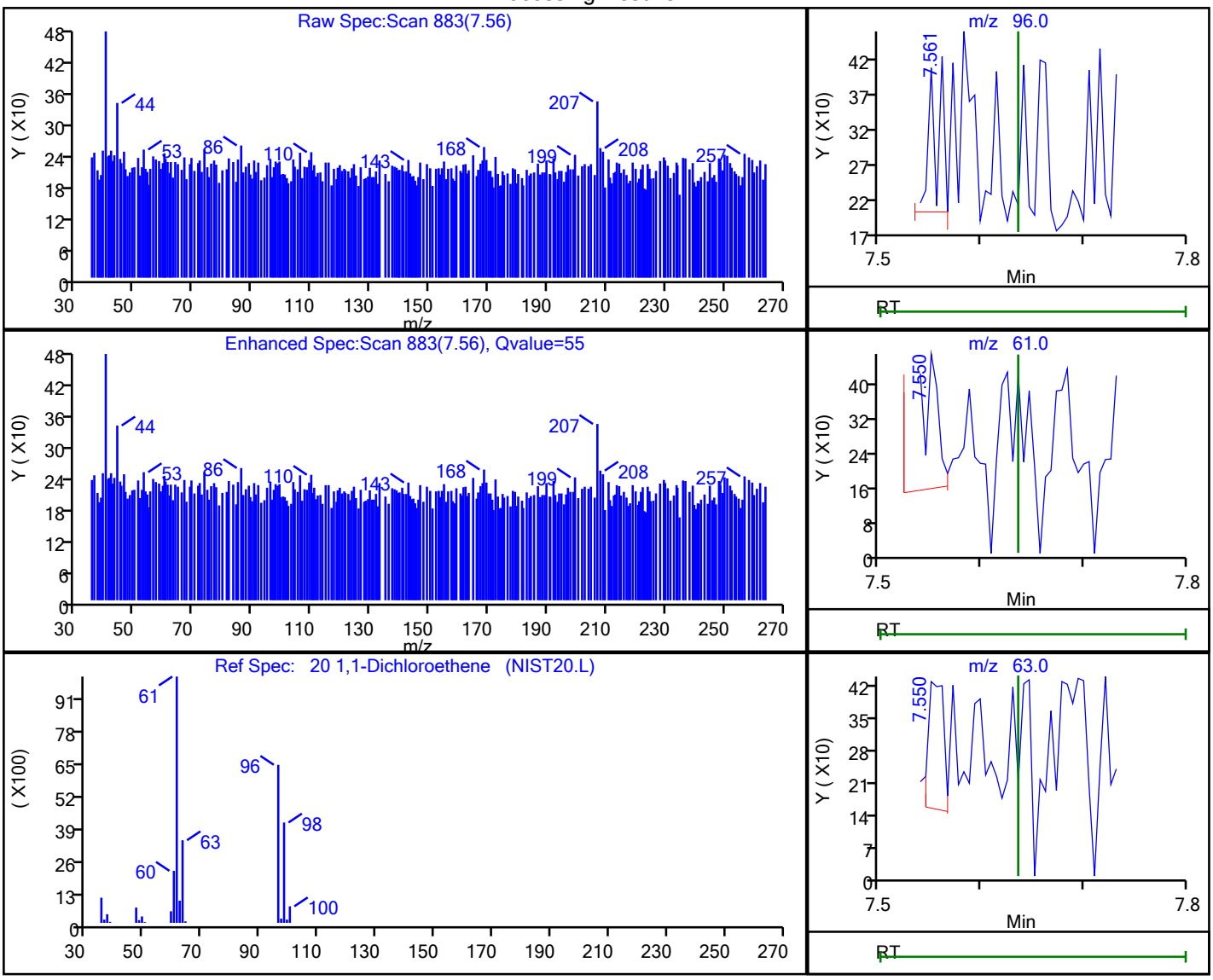
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
7.56	96.00	153	0.012539
7.55	61.00	374	
7.55	63.00	294	

Reviewer: BKZ7, 20-Dec-2022 08:34:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

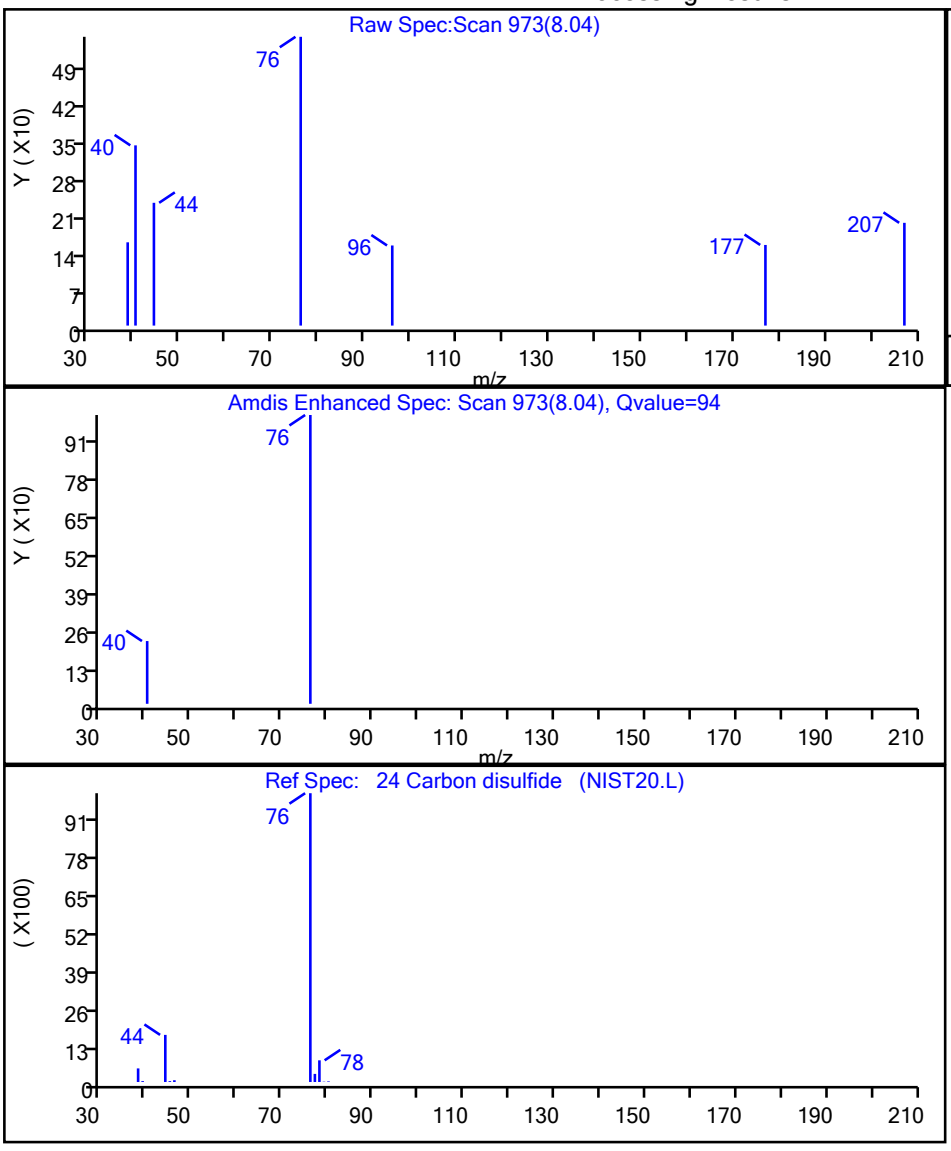
User Disabled Compound Report

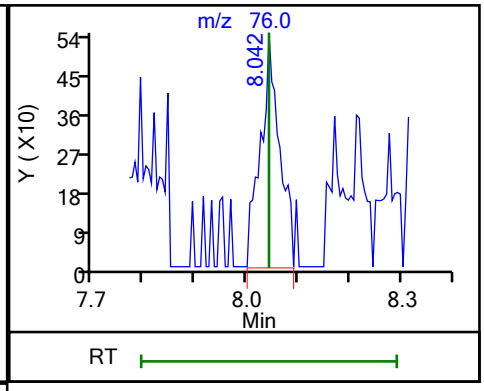
Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0

Processing Results





RT	Mass	Response	Amount
8.04	76.00	1413	0.049672

Reviewer: BKZ7, 20-Dec-2022 08:34:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

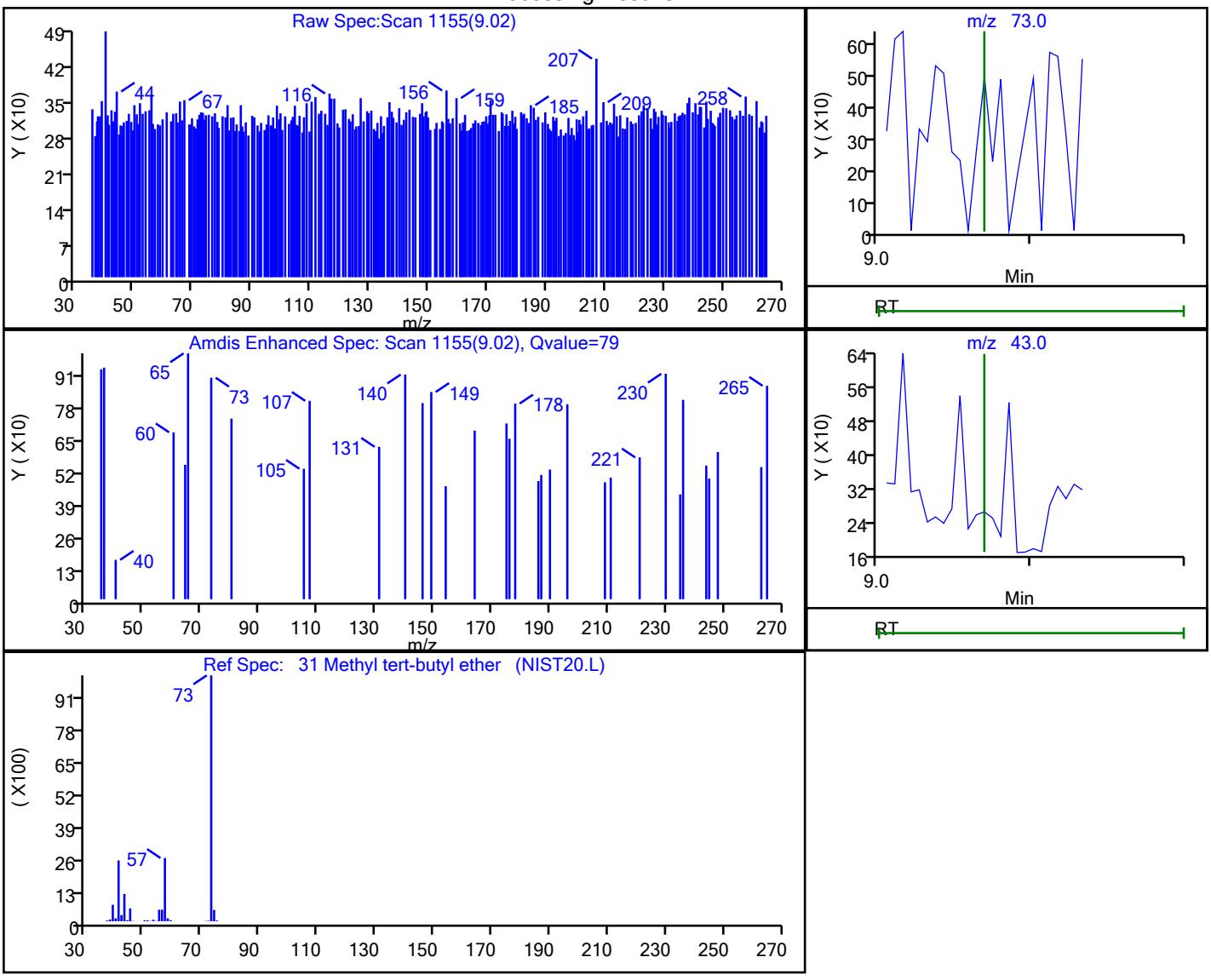
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

31 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
9.02	73.00	602	0.023185
9.07	43.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:34:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

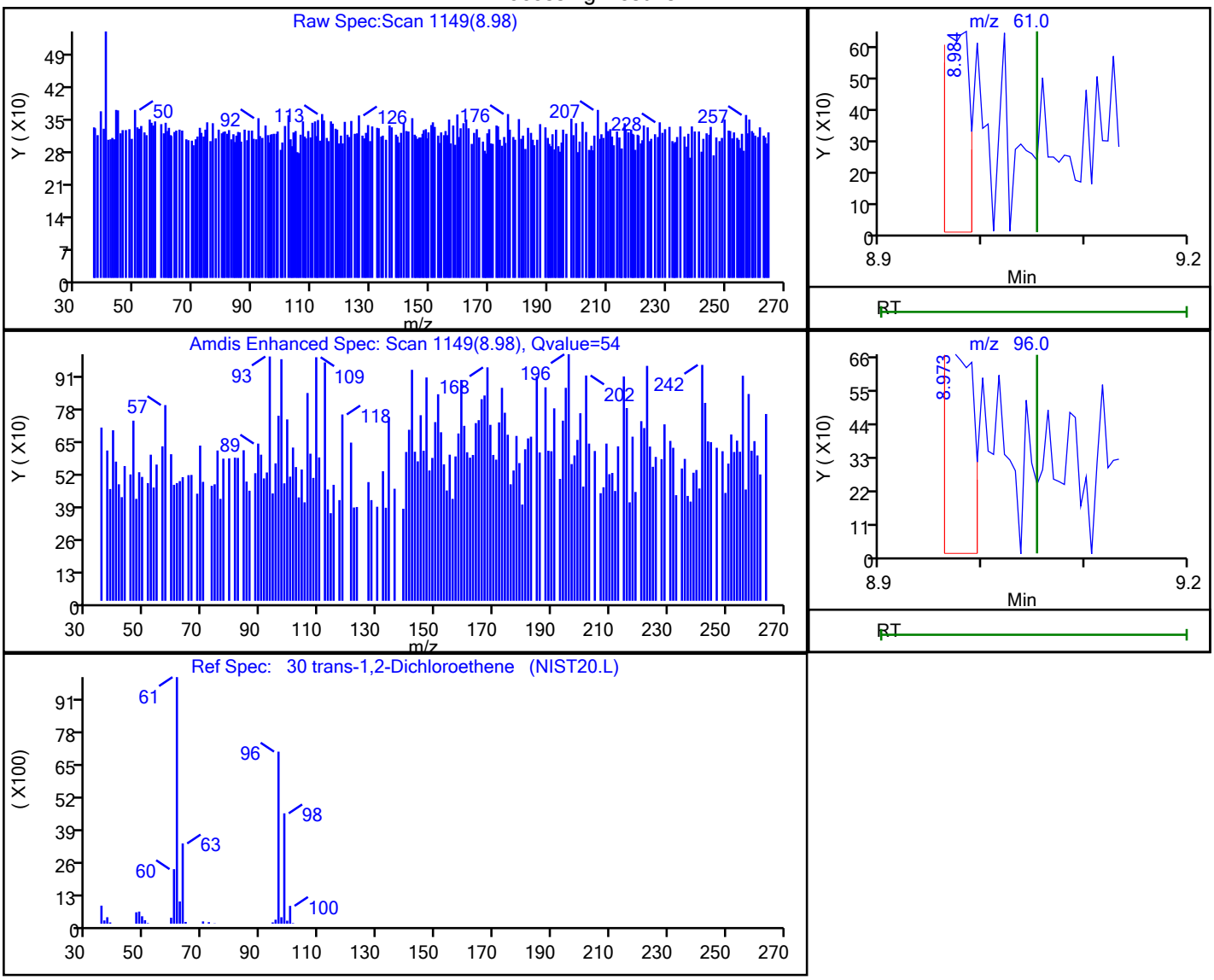
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

30 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
8.98	61.00	1003	0.082926
8.97	96.00	1235	

Reviewer: BKZ7, 20-Dec-2022 08:34:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

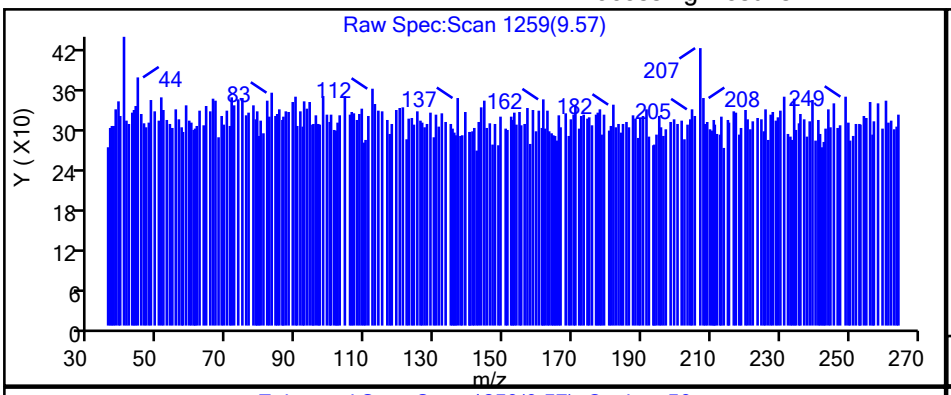
User Disabled Compound Report

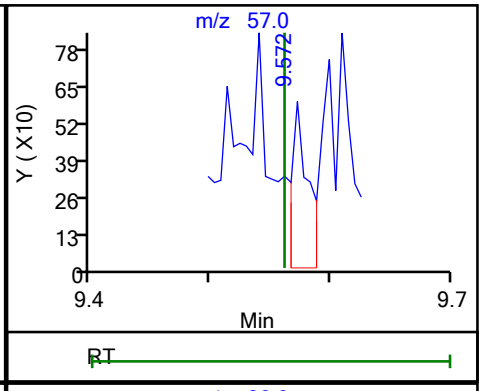
Eurofins Burlington

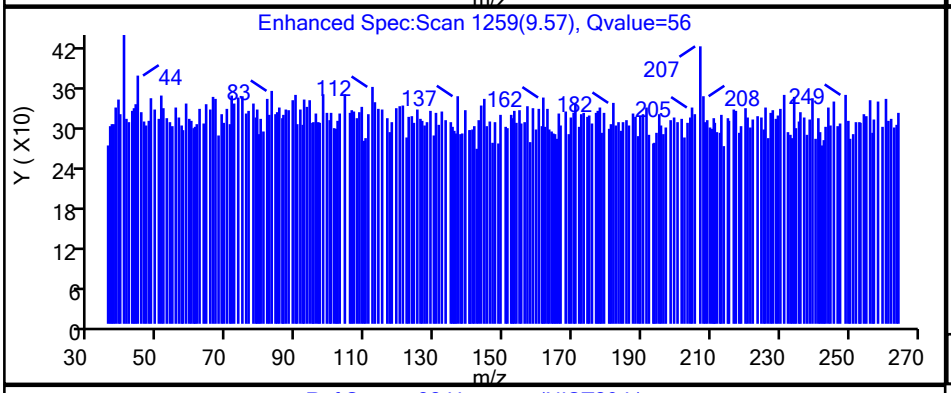
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

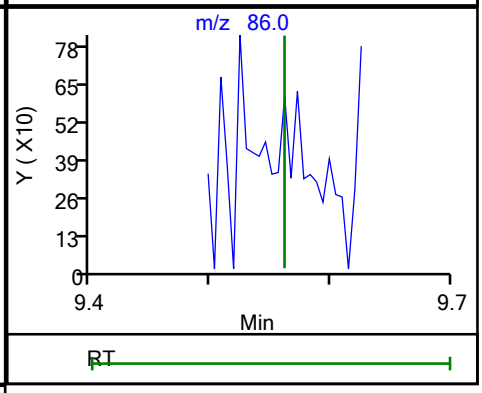
32 Hexane, CAS: 110-54-3

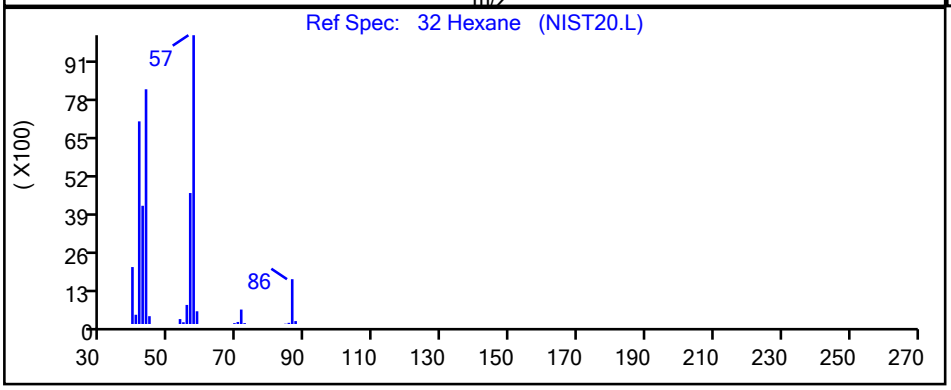
Processing Results











RT	Mass	Response	Amount
9.57	57.00	560	0.042112
9.56	86.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:34:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

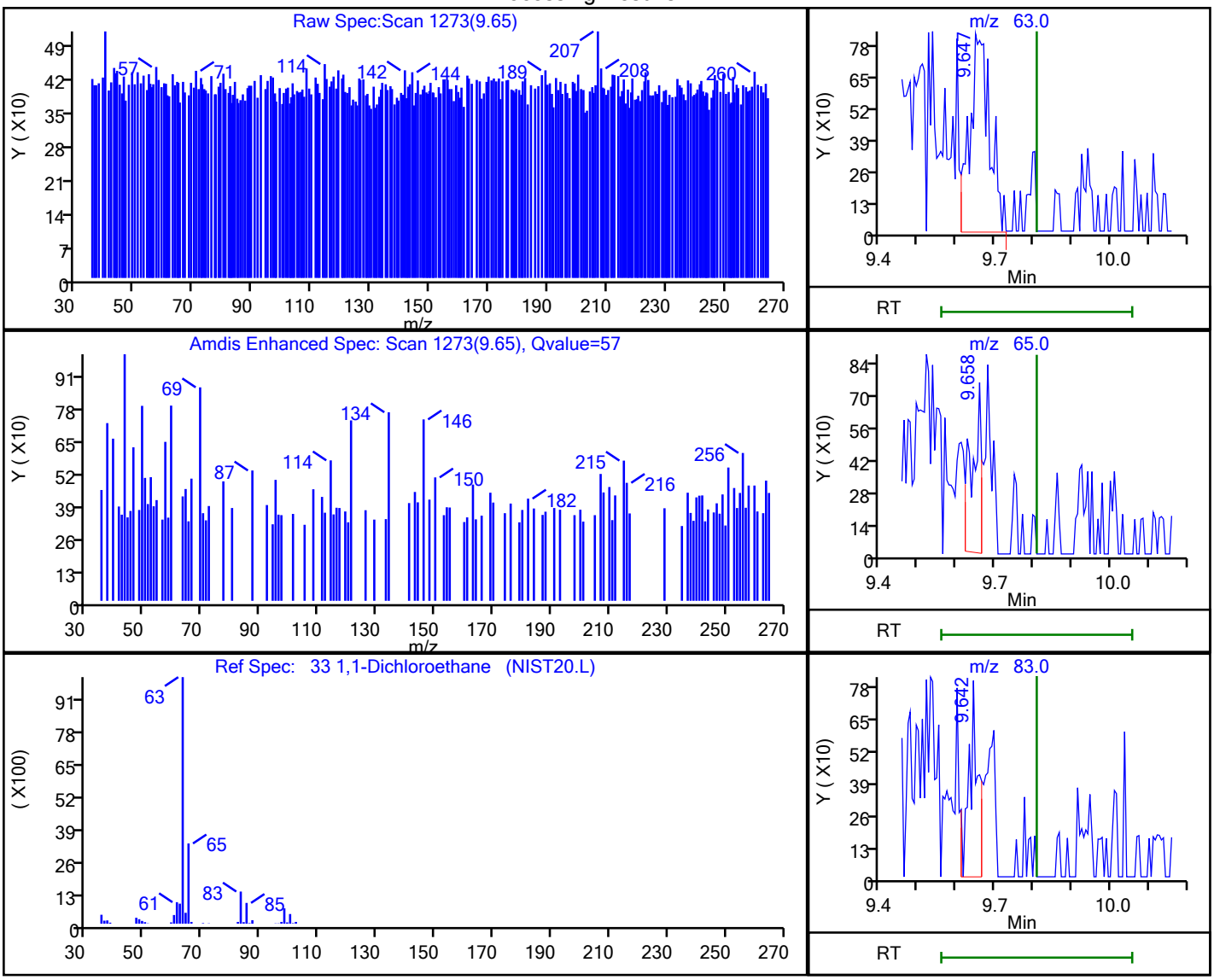
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 1,1-Dichloroethane, CAS: 75-34-3

Processing Results



RT	Mass	Response	Amount
9.65	63.00	2967	0.189903
9.66	65.00	1214	
9.64	83.00	1300	

Reviewer: BKZ7, 20-Dec-2022 08:34:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

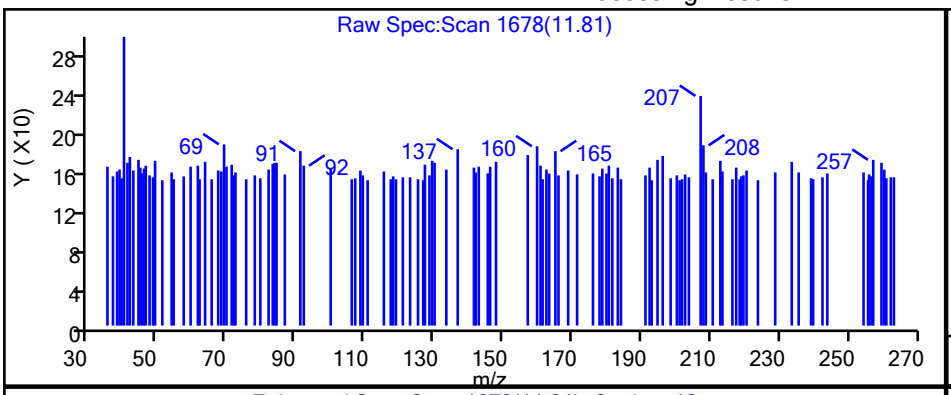
User Disabled Compound Report

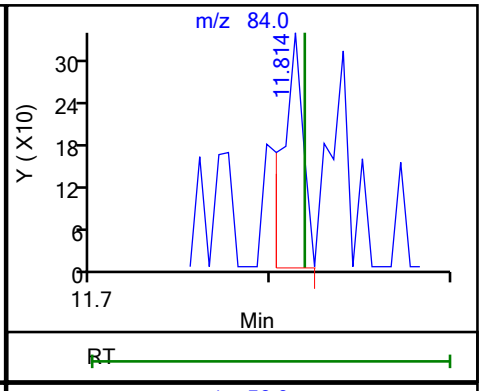
Eurofins Burlington

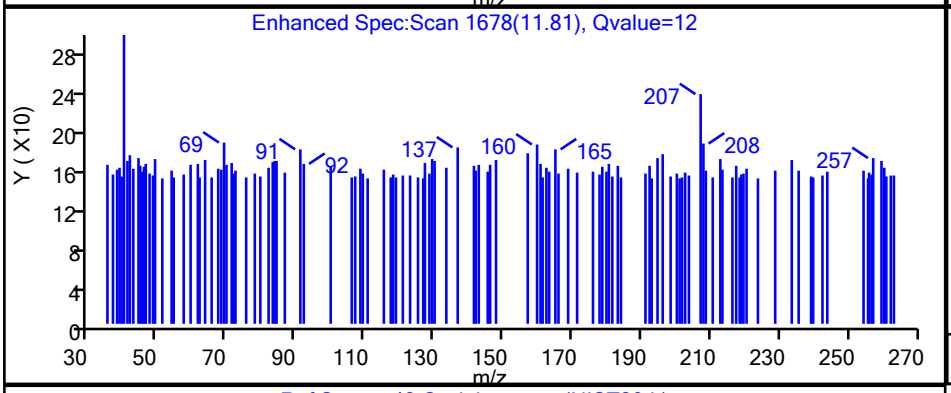
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

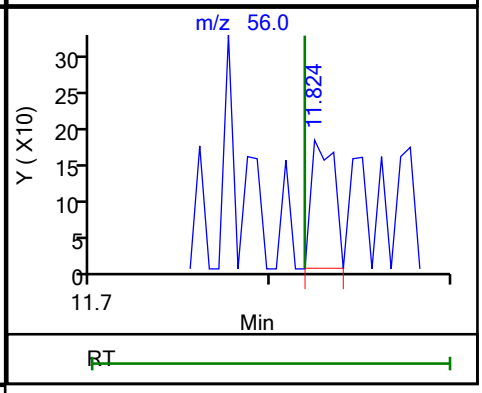
43 Cyclohexane, CAS: 110-82-7

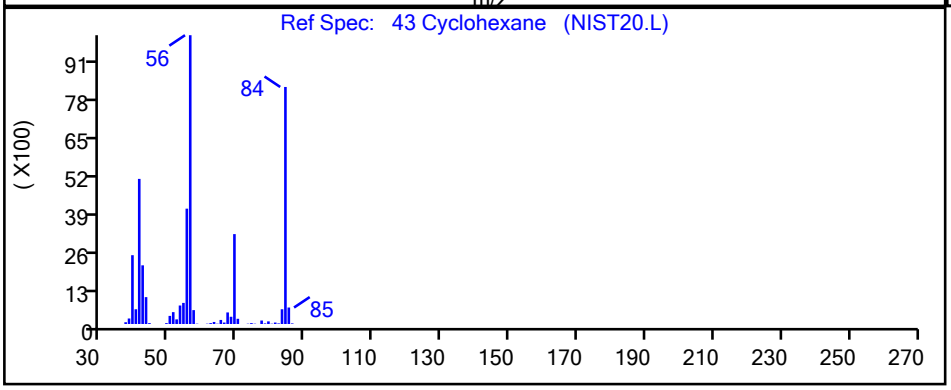
Processing Results











RT	Mass	Response	Amount
11.81	84.00	265	0.019522
11.82	56.00	159	

Reviewer: BKZ7, 20-Dec-2022 08:34:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

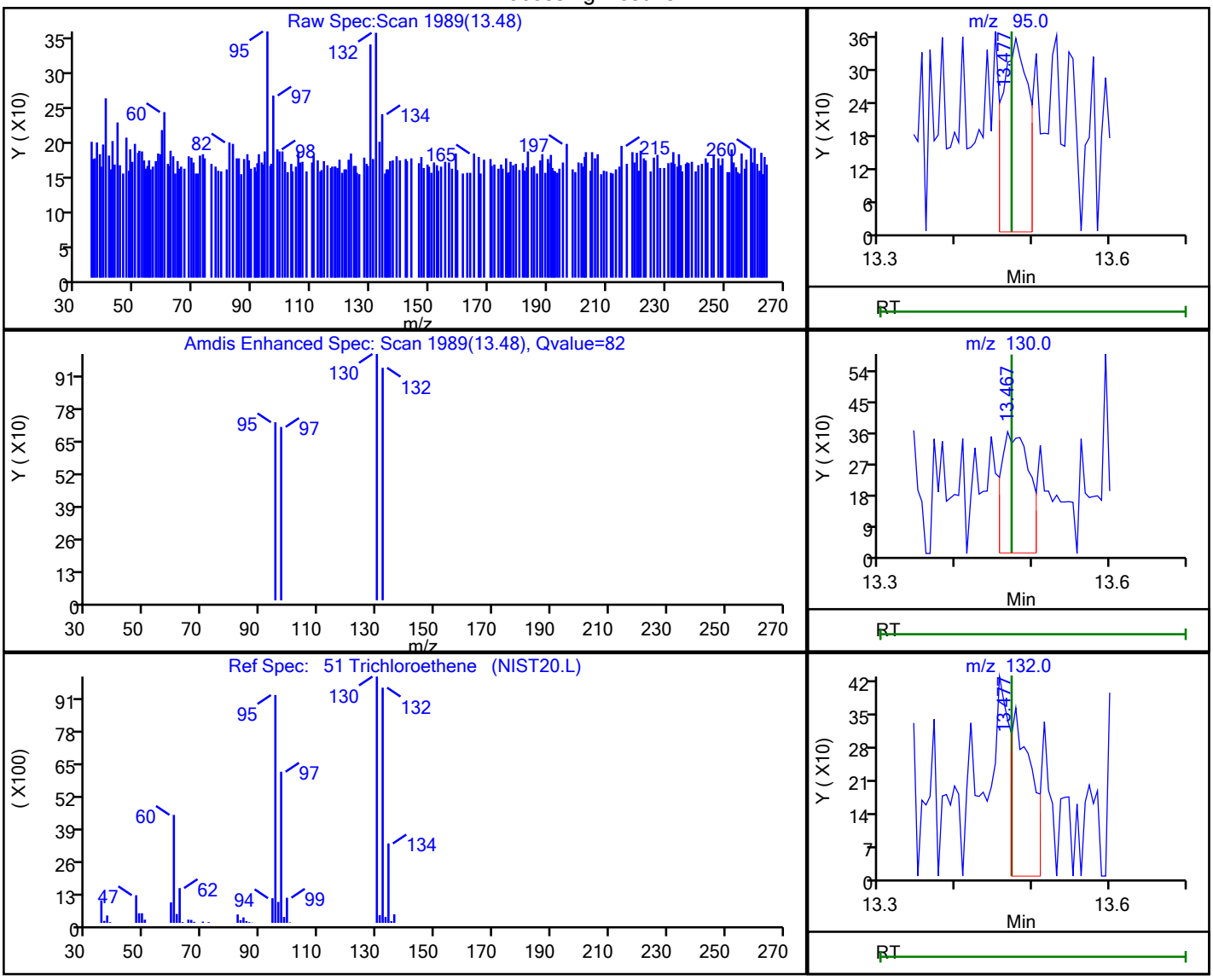
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
13.48	95.00	836	0.060001
13.47	130.00	909	
13.48	132.00	651	

Reviewer: BKZ7, 20-Dec-2022 08:34:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

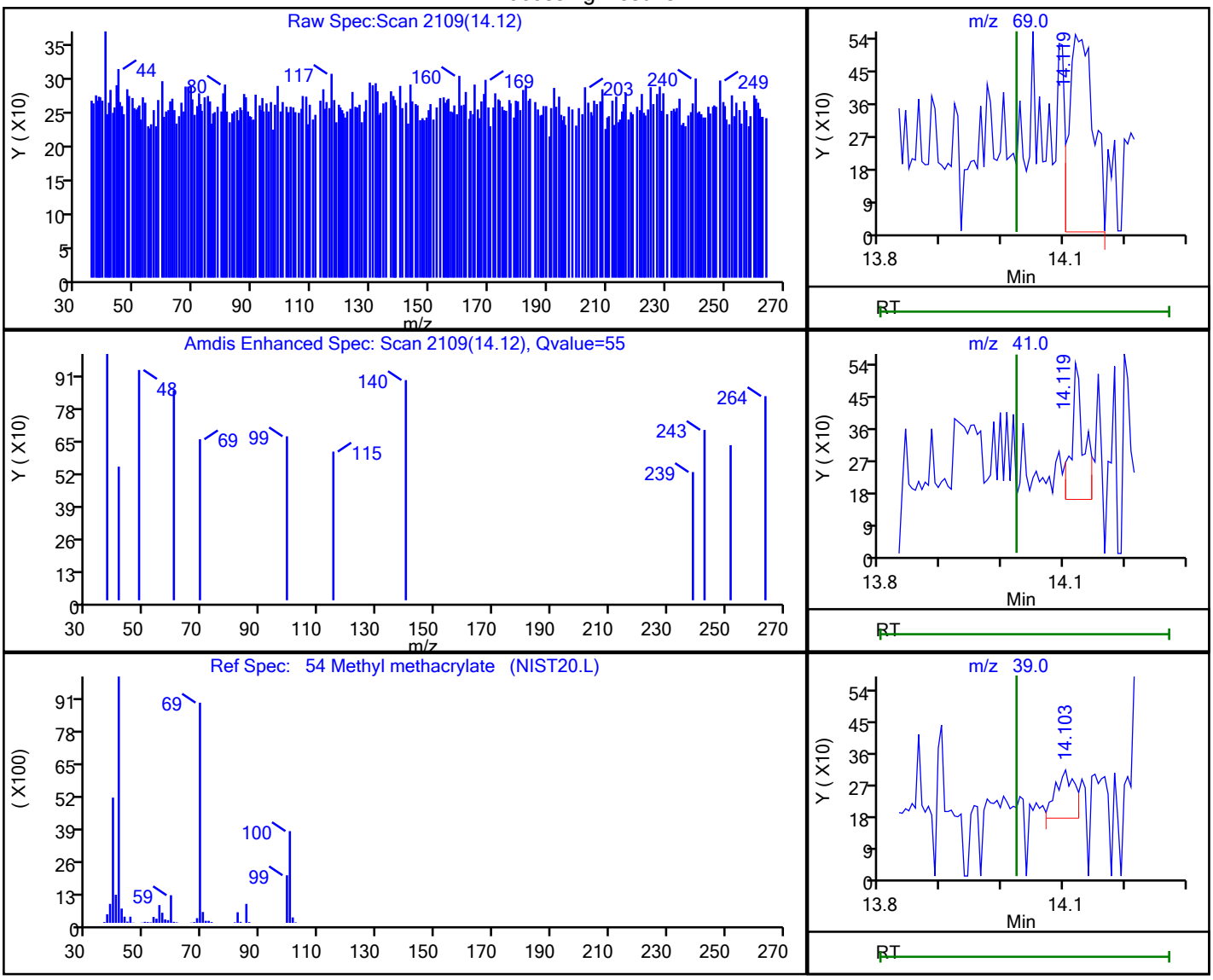
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

54 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
14.12	69.00	1501	0.163136
14.12	41.00	524	
14.10	39.00	299	

Reviewer: BKZ7, 20-Dec-2022 08:34:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

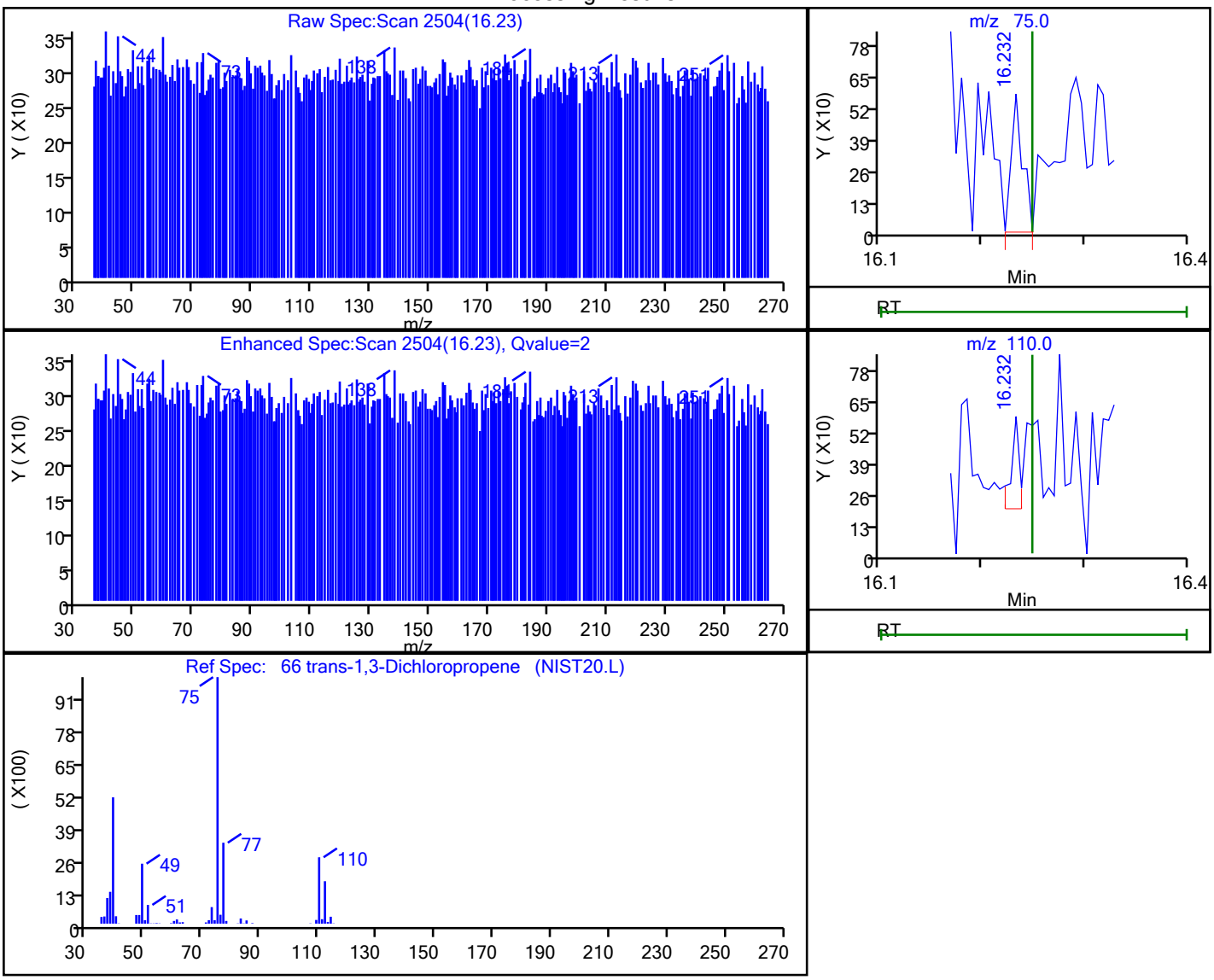
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
16.23	75.00	443	0.029893
16.23	110.00	220	

Reviewer: BKZ7, 20-Dec-2022 08:34:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

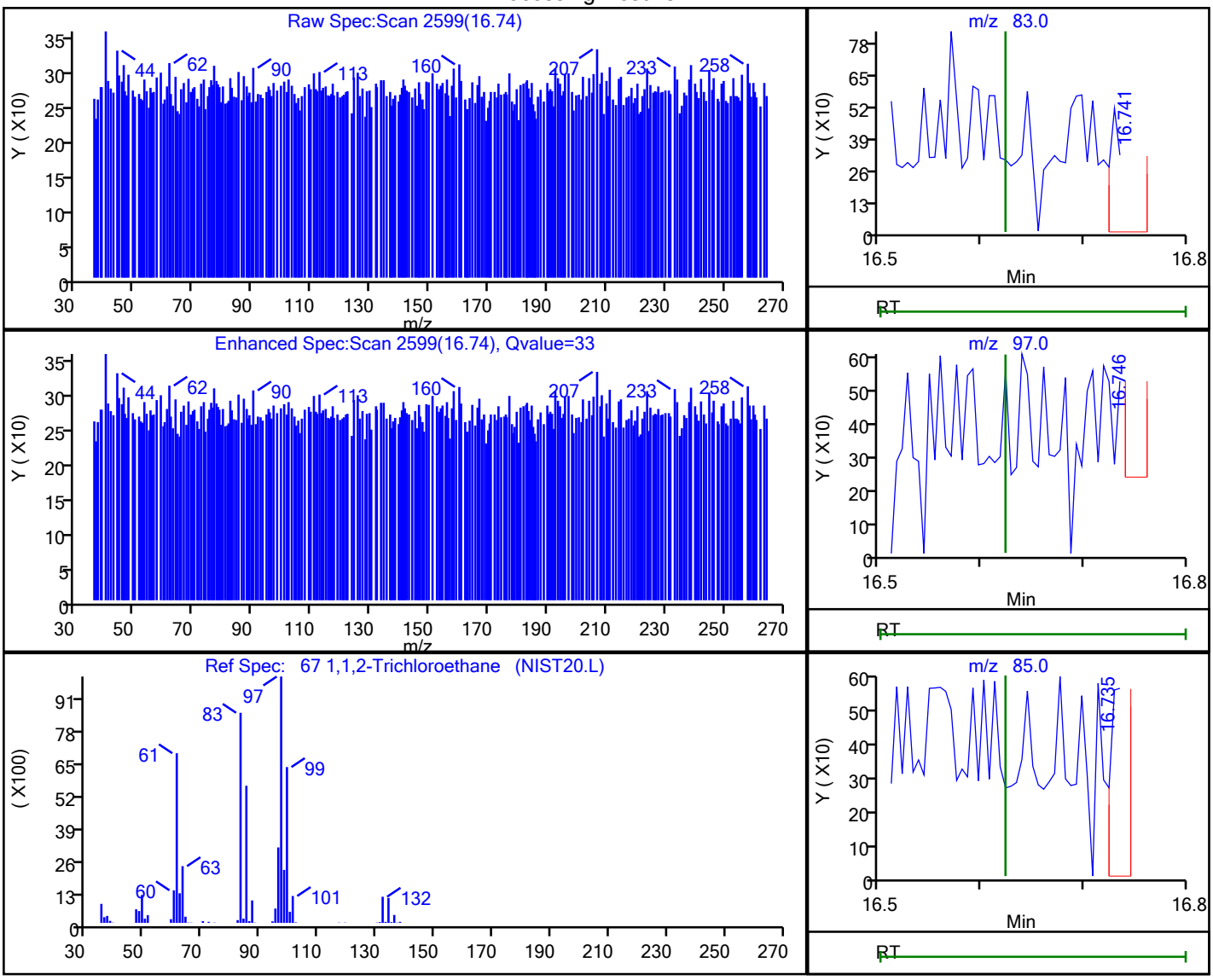
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

67 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
16.74	83.00	922	0.089676
16.75	97.00	238	
16.74	85.00	611	

Reviewer: BKZ7, 20-Dec-2022 08:34:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

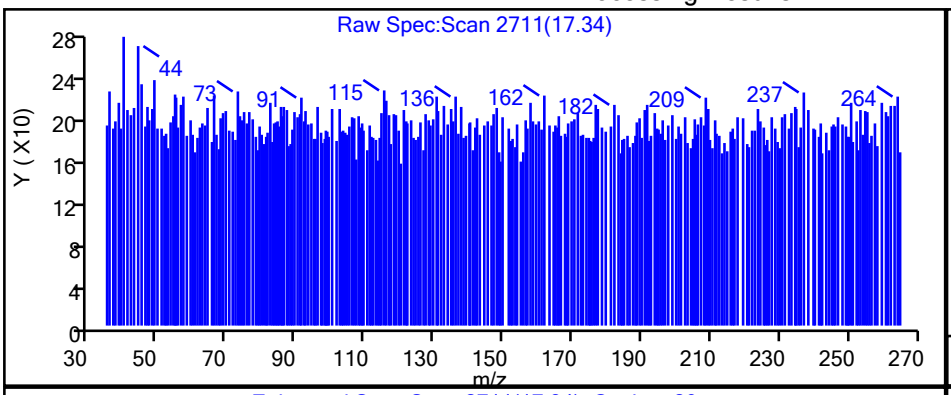
User Disabled Compound Report

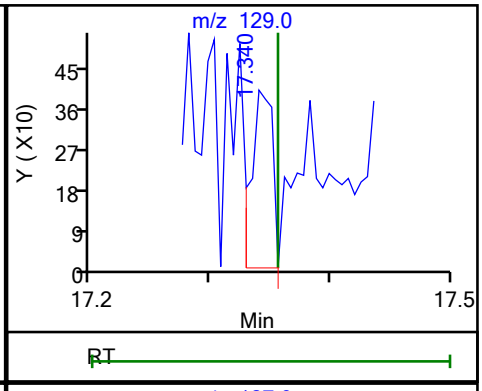
Eurofins Burlington

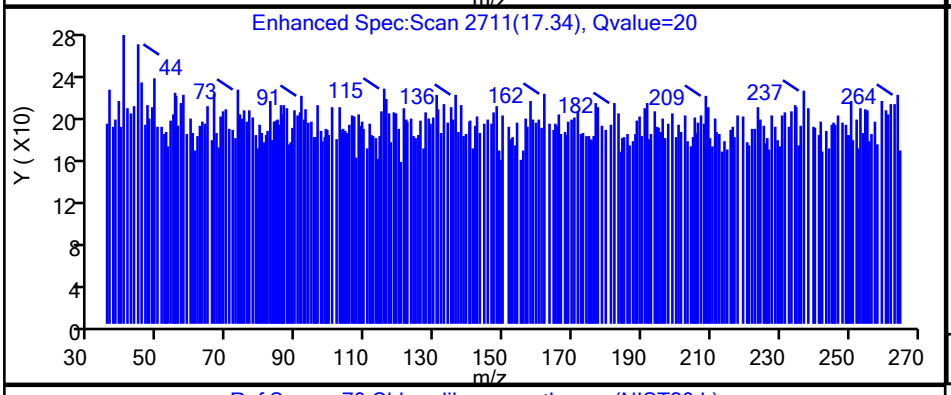
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

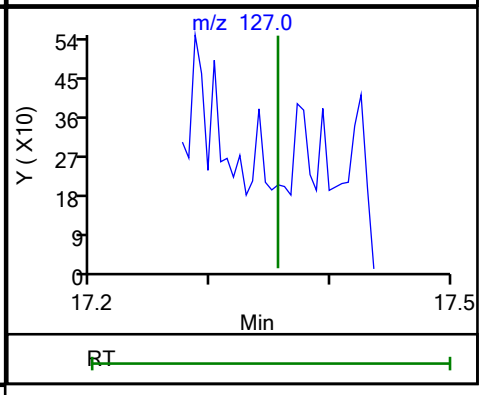
70 Chlorodibromomethane, CAS: 124-48-1

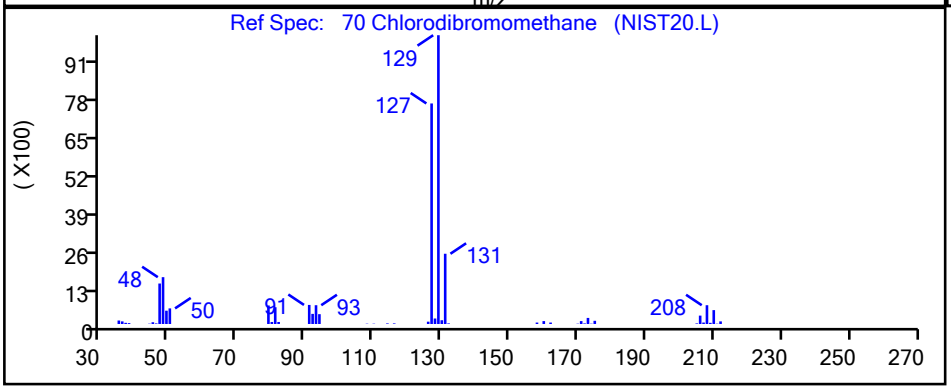
Processing Results











RT	Mass	Response	Amount
17.34	129.00	481	0.021322
17.36	127.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:34:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

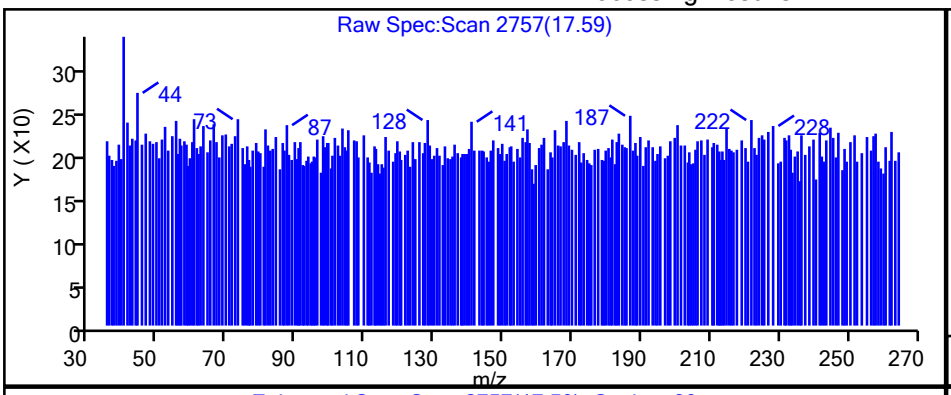
User Disabled Compound Report

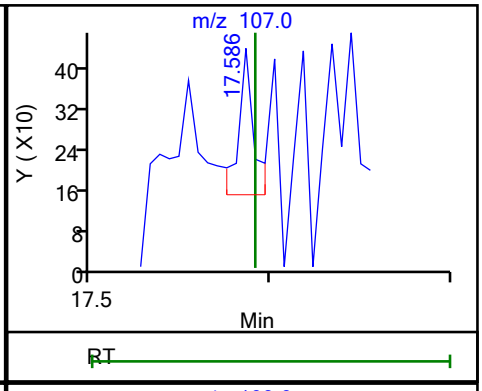
Eurofins Burlington

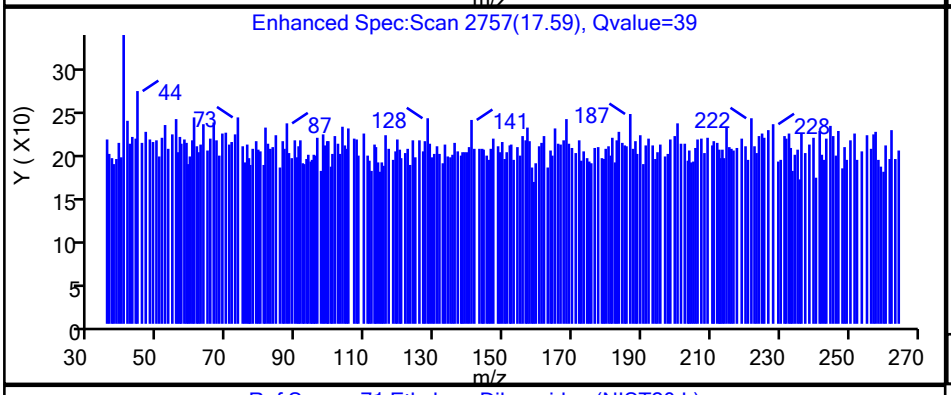
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

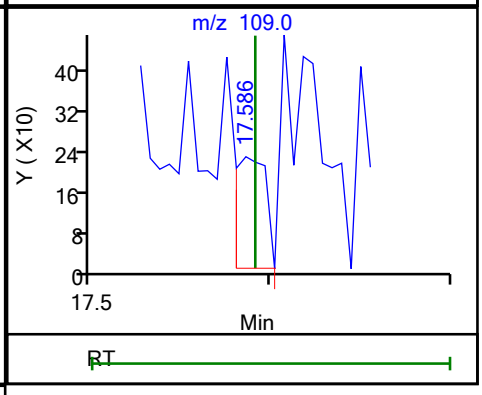
71 Ethylene Dibromide, CAS: 106-93-4

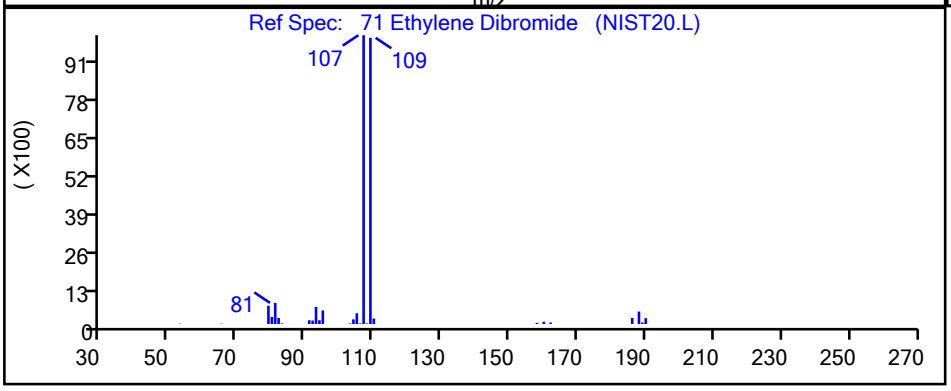
Processing Results











RT	Mass	Response	Amount
17.59	107.00	176	0.009166
17.59	109.00	271	

Reviewer: BKZ7, 20-Dec-2022 08:34:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

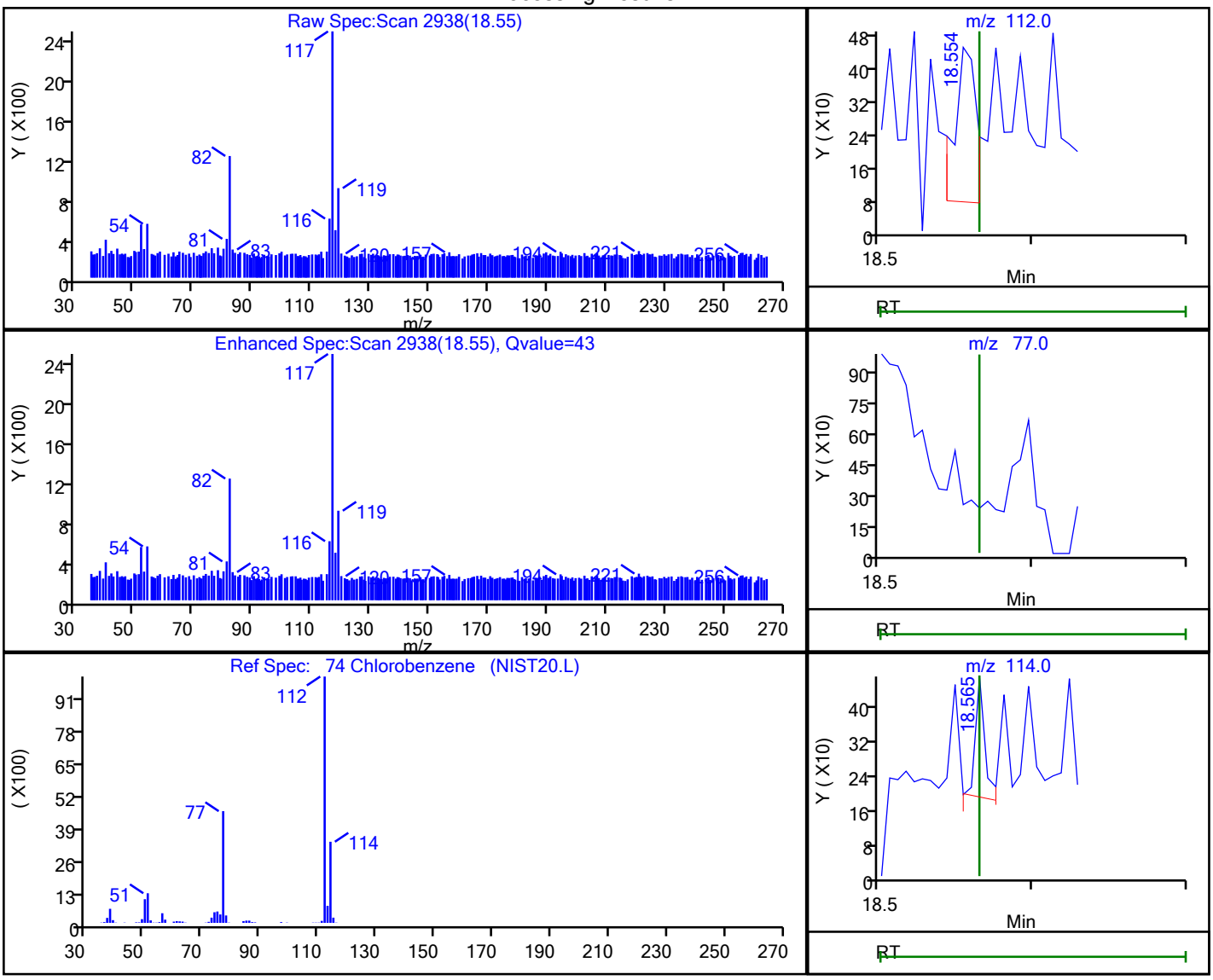
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
18.55	112.00	377	0.012029
18.56	77.00	0	
18.56	114.00	122	

Reviewer: BKZ7, 20-Dec-2022 08:34:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

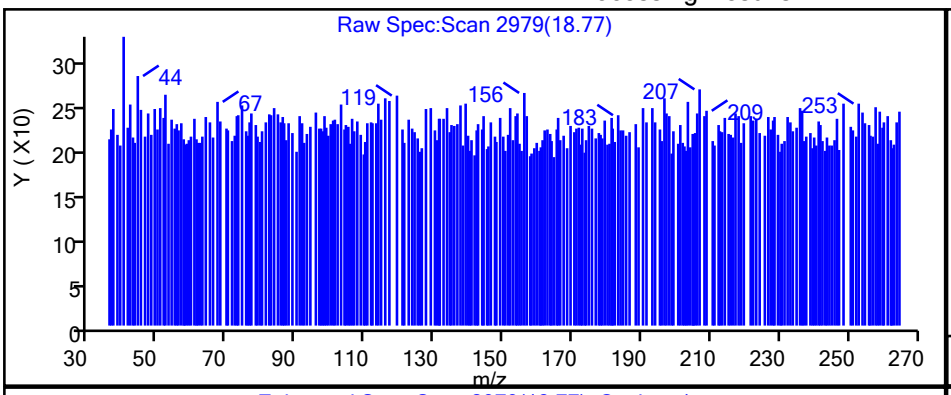
User Disabled Compound Report

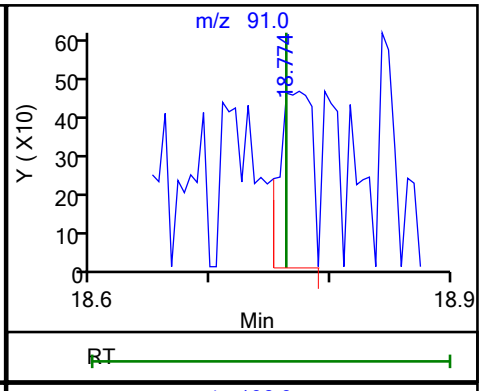
Eurofins Burlington

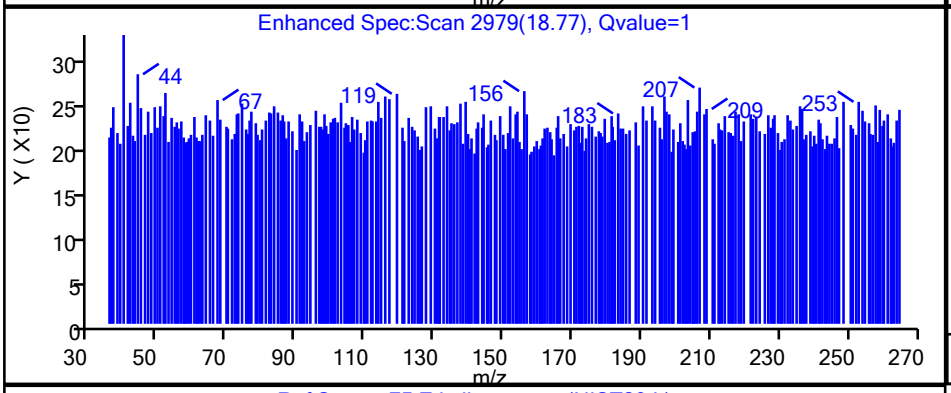
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

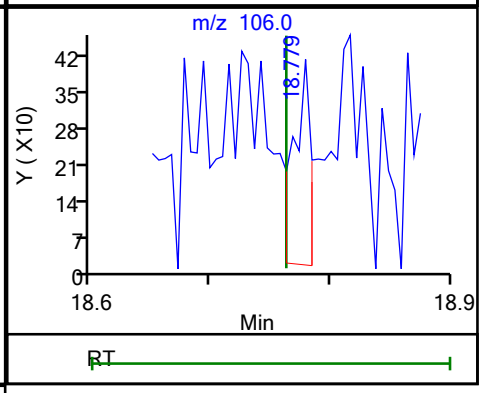
75 Ethylbenzene, CAS: 100-41-4

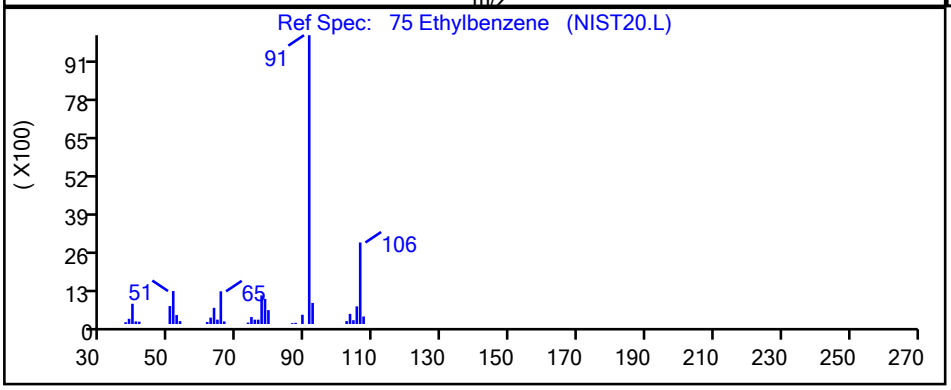
Processing Results











RT	Mass	Response	Amount
18.77	91.00	870	0.018289
18.78	106.00	404	

Reviewer: BKZ7, 20-Dec-2022 08:33:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

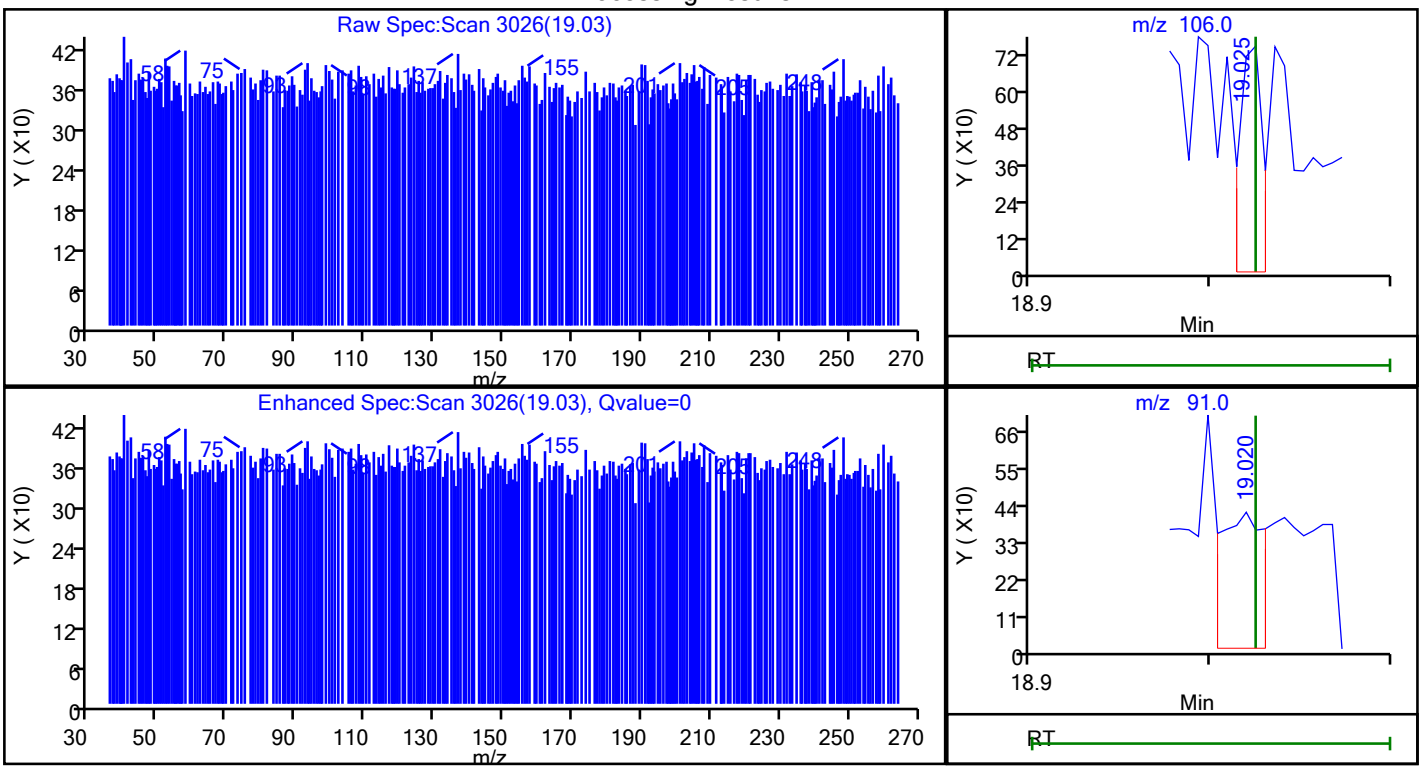
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
19.03	106.00	683	0.035128
19.02	91.00	710	

Reviewer: BKZ7, 20-Dec-2022 08:33:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

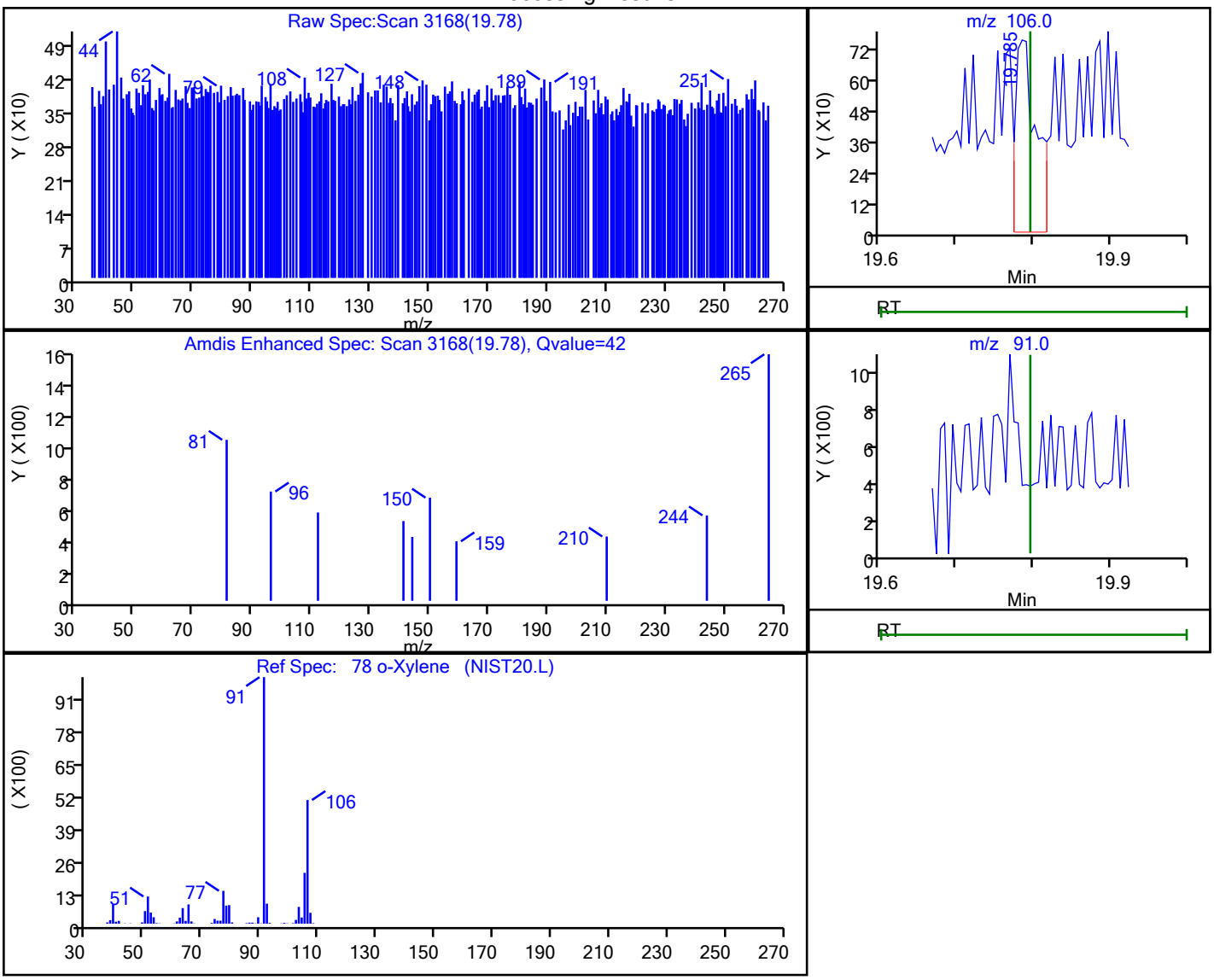
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
19.78	106.00	1435	0.075598
19.80	91.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:33:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

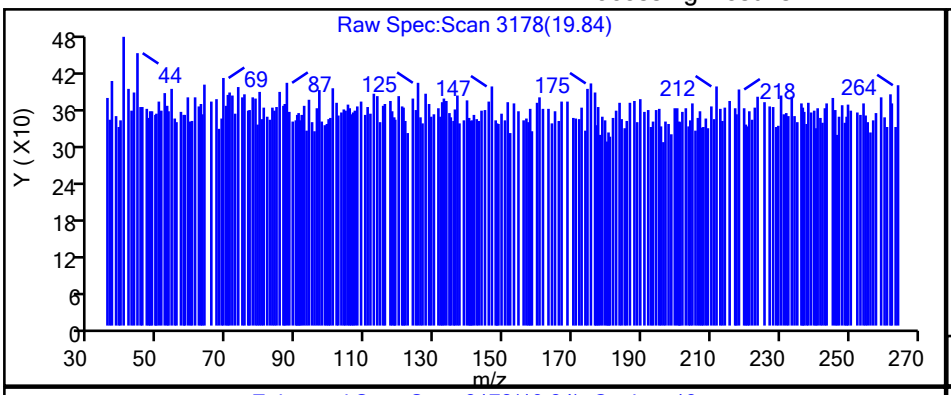
User Disabled Compound Report

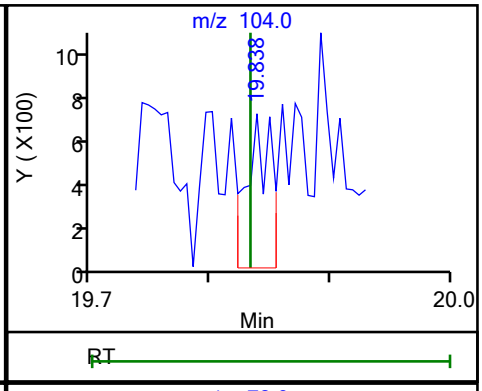
Eurofins Burlington

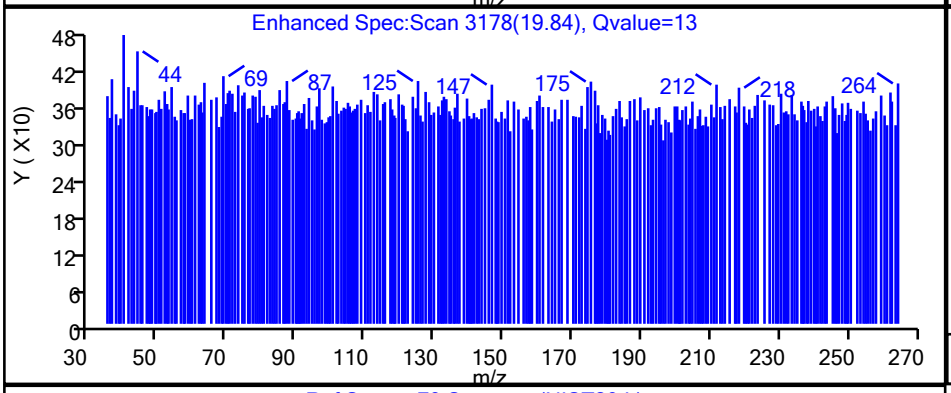
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

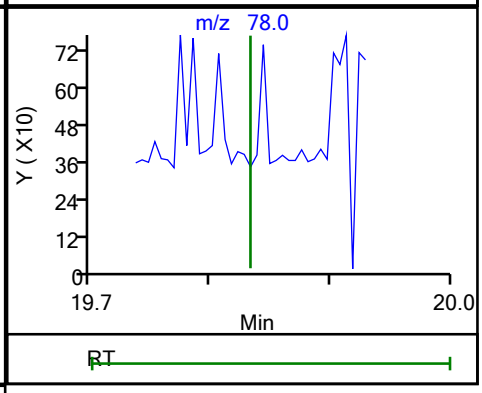
79 Styrene, CAS: 100-42-5

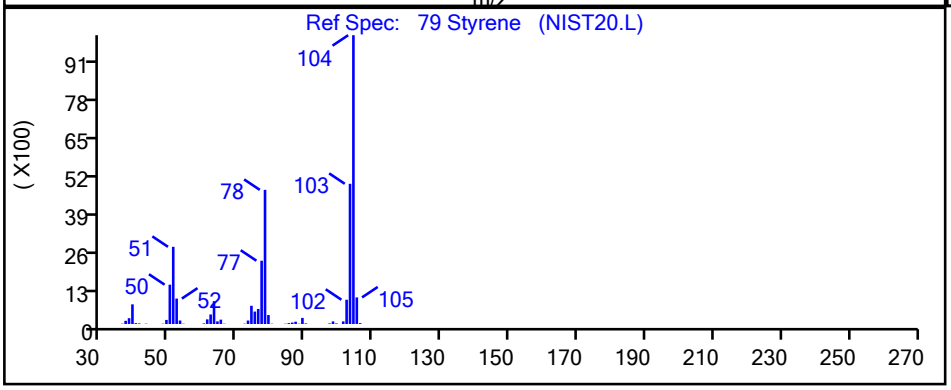
Processing Results











RT	Mass	Response	Amount
19.84	104.00	1023	0.035037
19.83	78.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:33:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

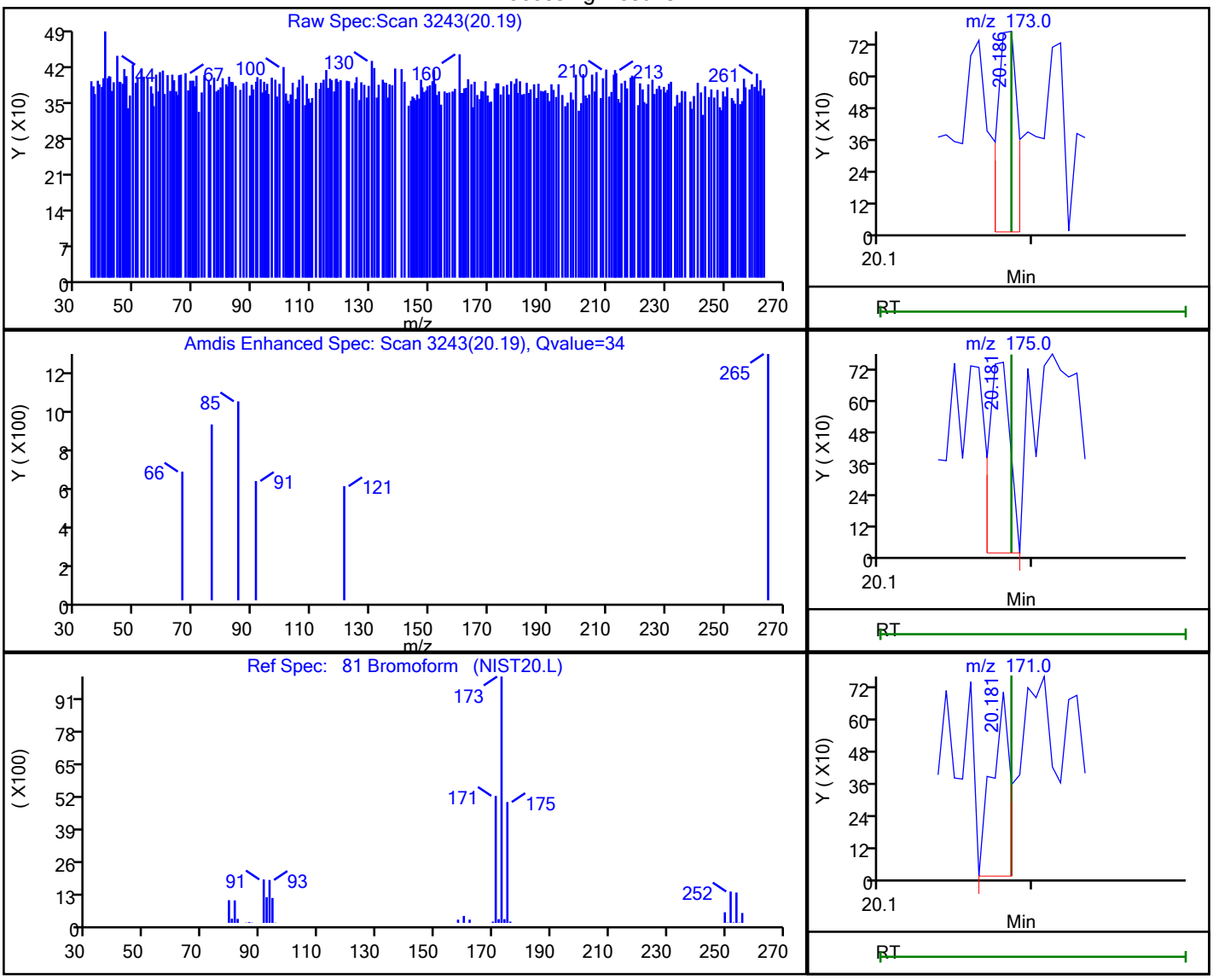
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

81 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
20.19	173.00	710	0.030411
20.18	175.00	712	
20.18	171.00	574	

Reviewer: BKZ7, 20-Dec-2022 08:33:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

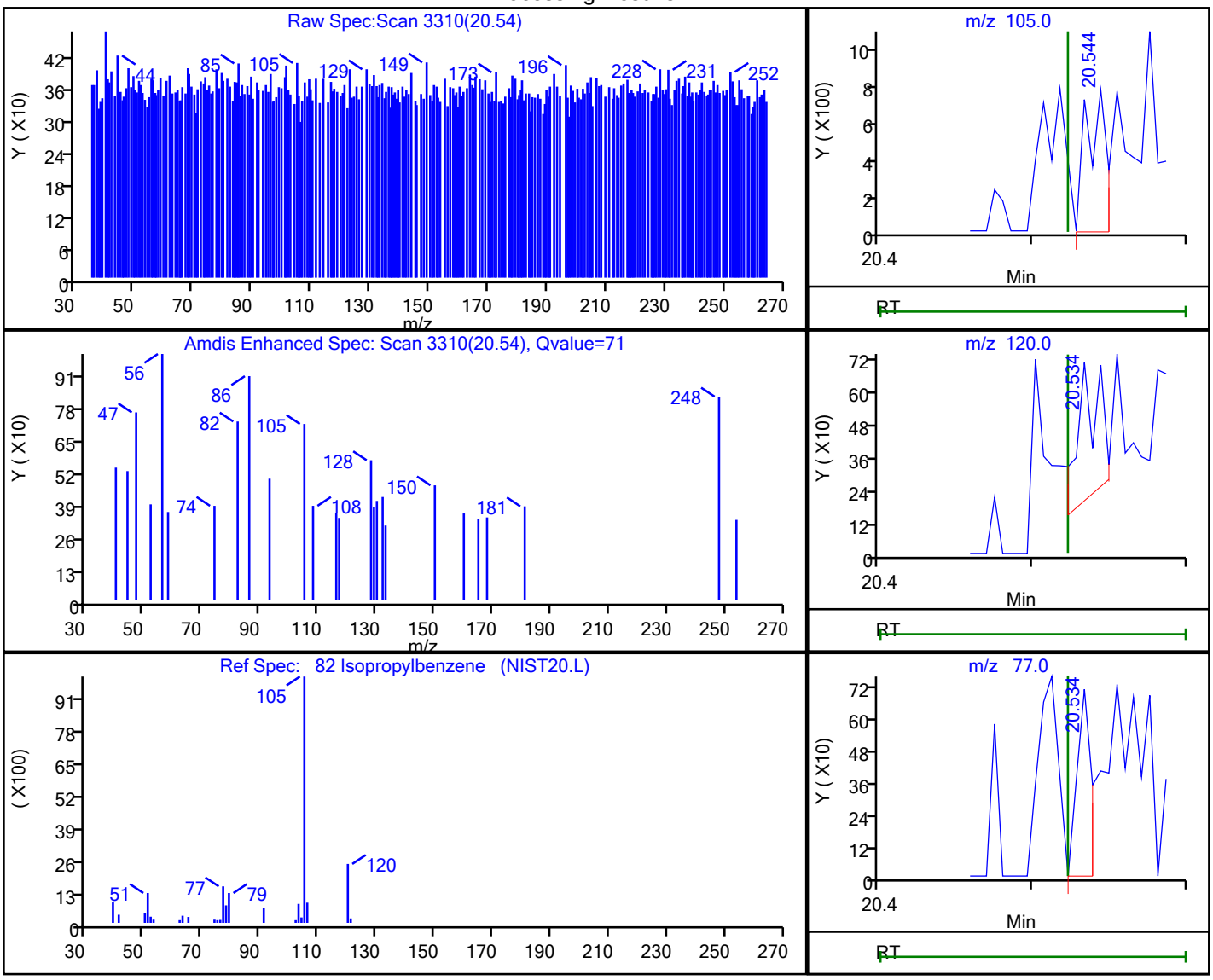
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

82 Isopropylbenzene, CAS: 98-82-8

Processing Results



RT	Mass	Response	Amount
20.54	105.00	683	0.012354
20.53	120.00	497	
20.53	77.00	452	

Reviewer: BKZ7, 20-Dec-2022 08:33:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

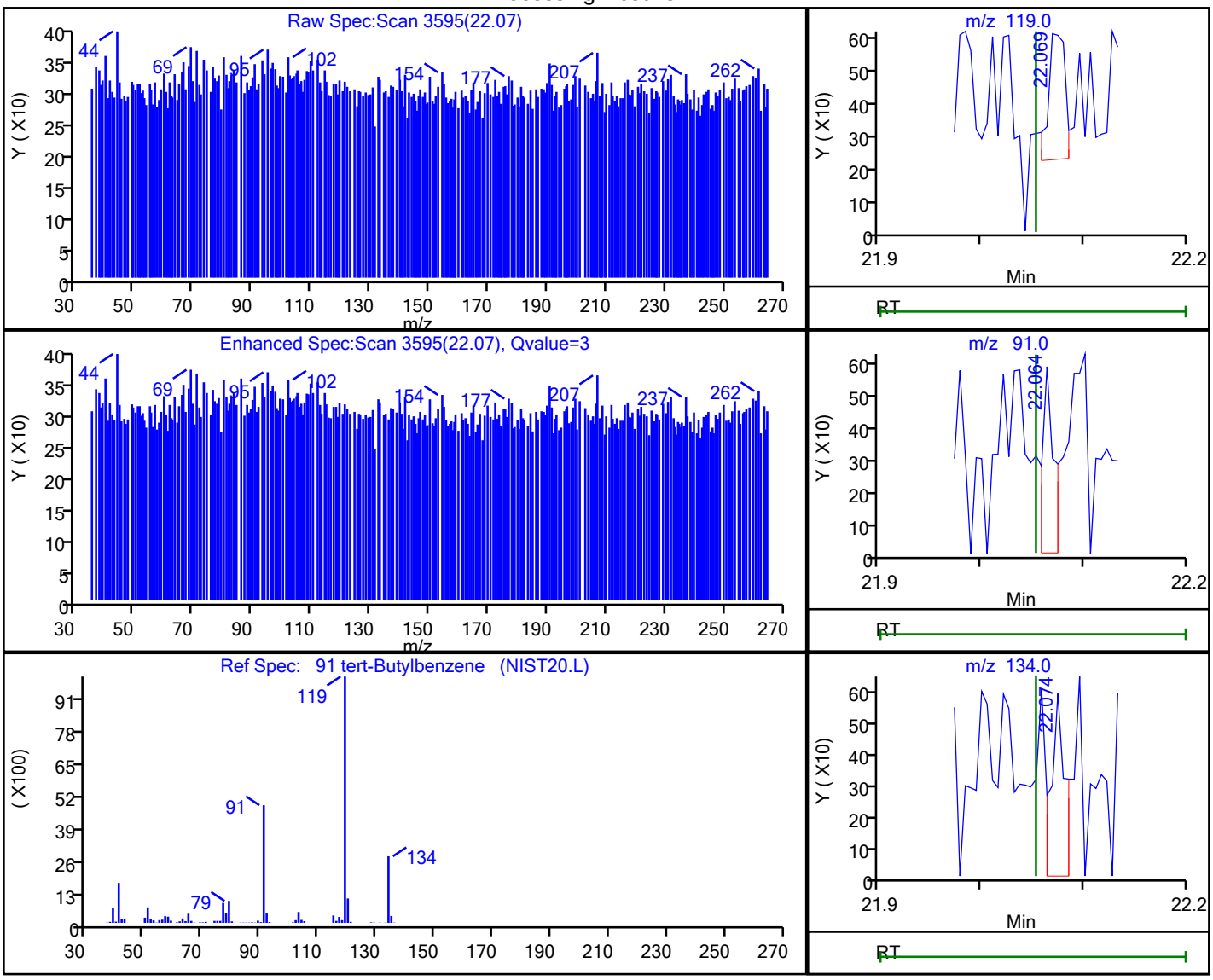
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

91 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
22.07	119.00	448	0.010016
22.06	91.00	463	
22.07	134.00	571	

Reviewer: BKZ7, 20-Dec-2022 08:33:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

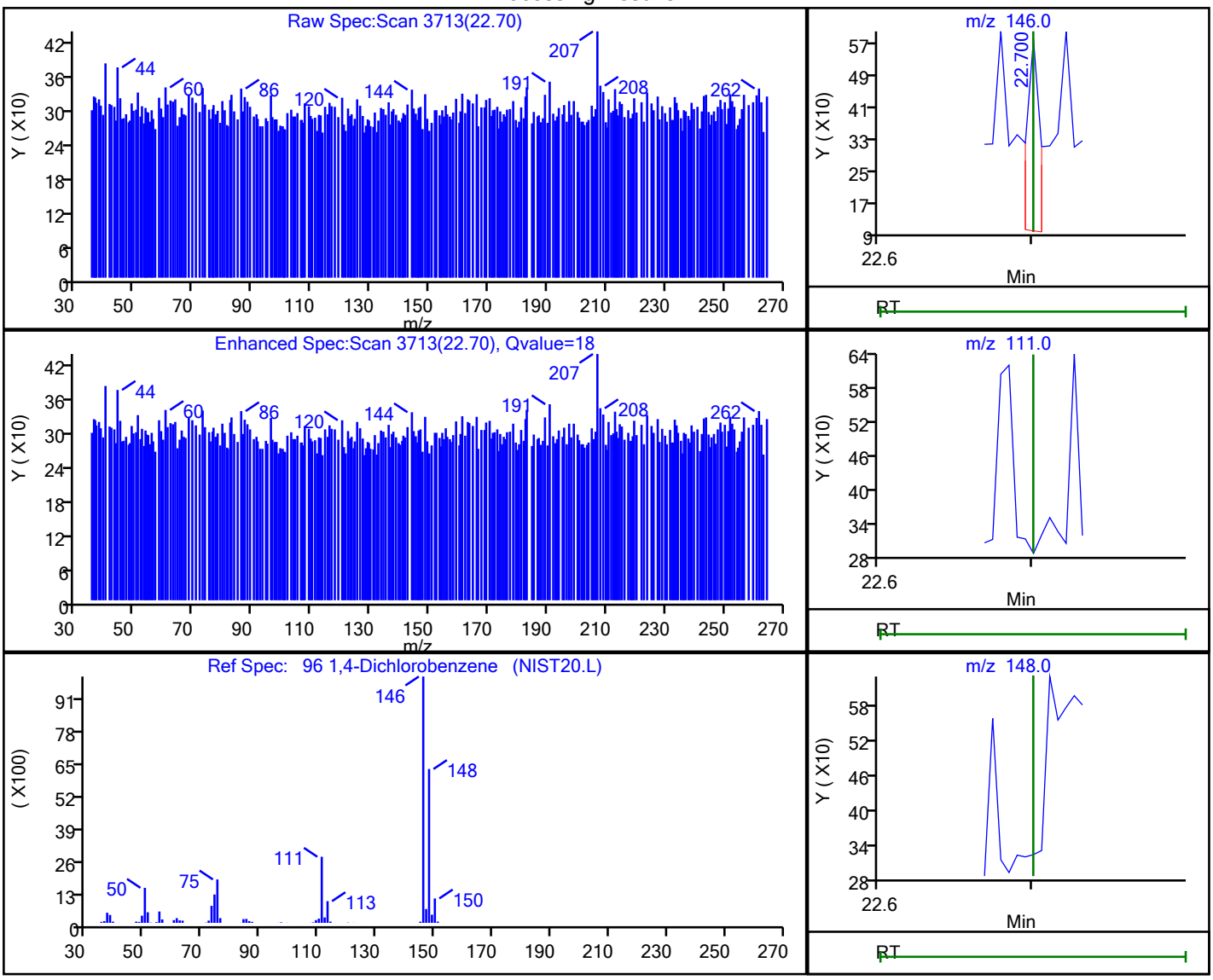
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
22.70	146.00	291	0.009530
22.70	111.00	0	
22.70	148.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:33:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

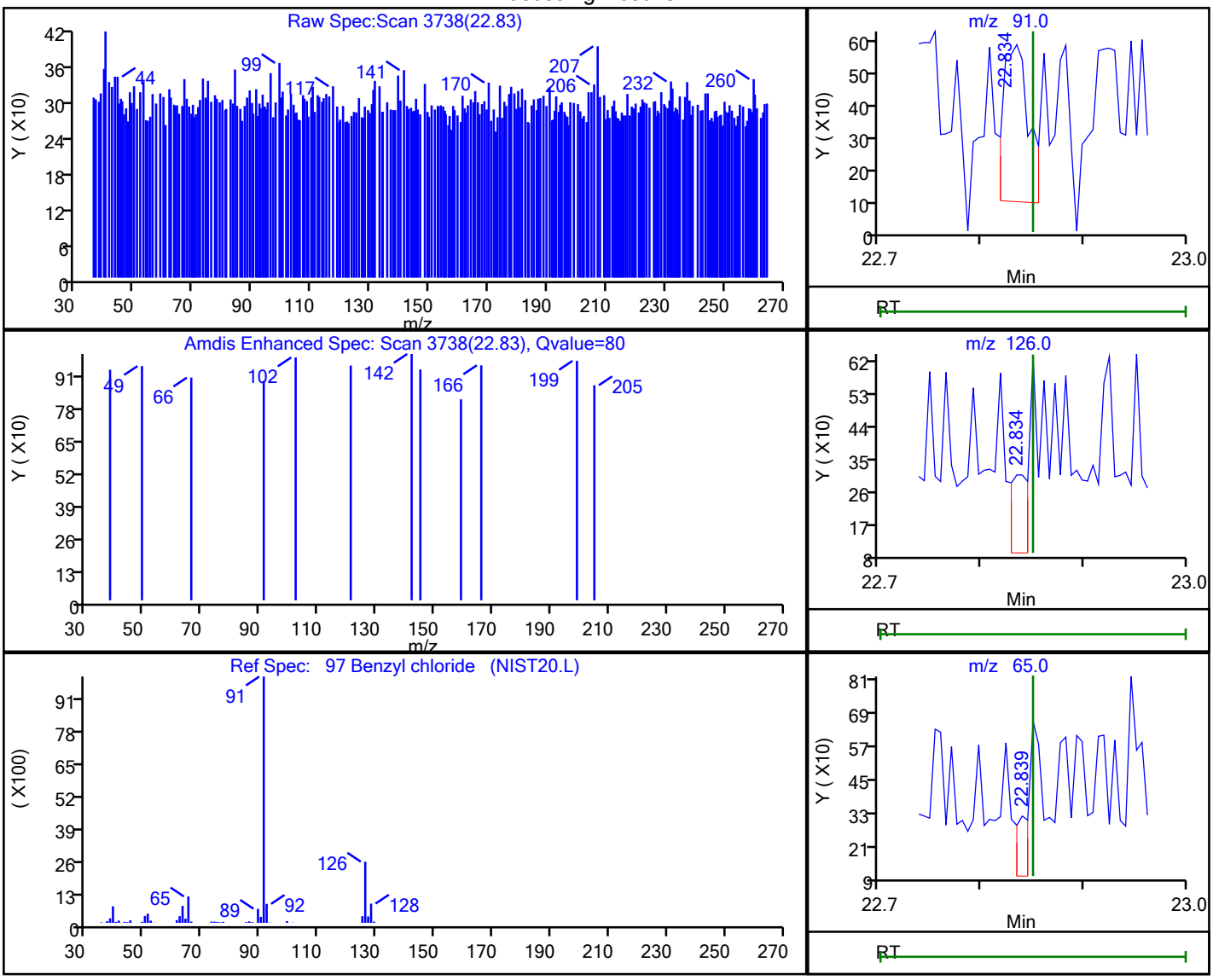
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

97 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
22.83	91.00	861	0.024871
22.83	126.00	266	
22.84	65.00	195	

Reviewer: BKZ7, 20-Dec-2022 08:33:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

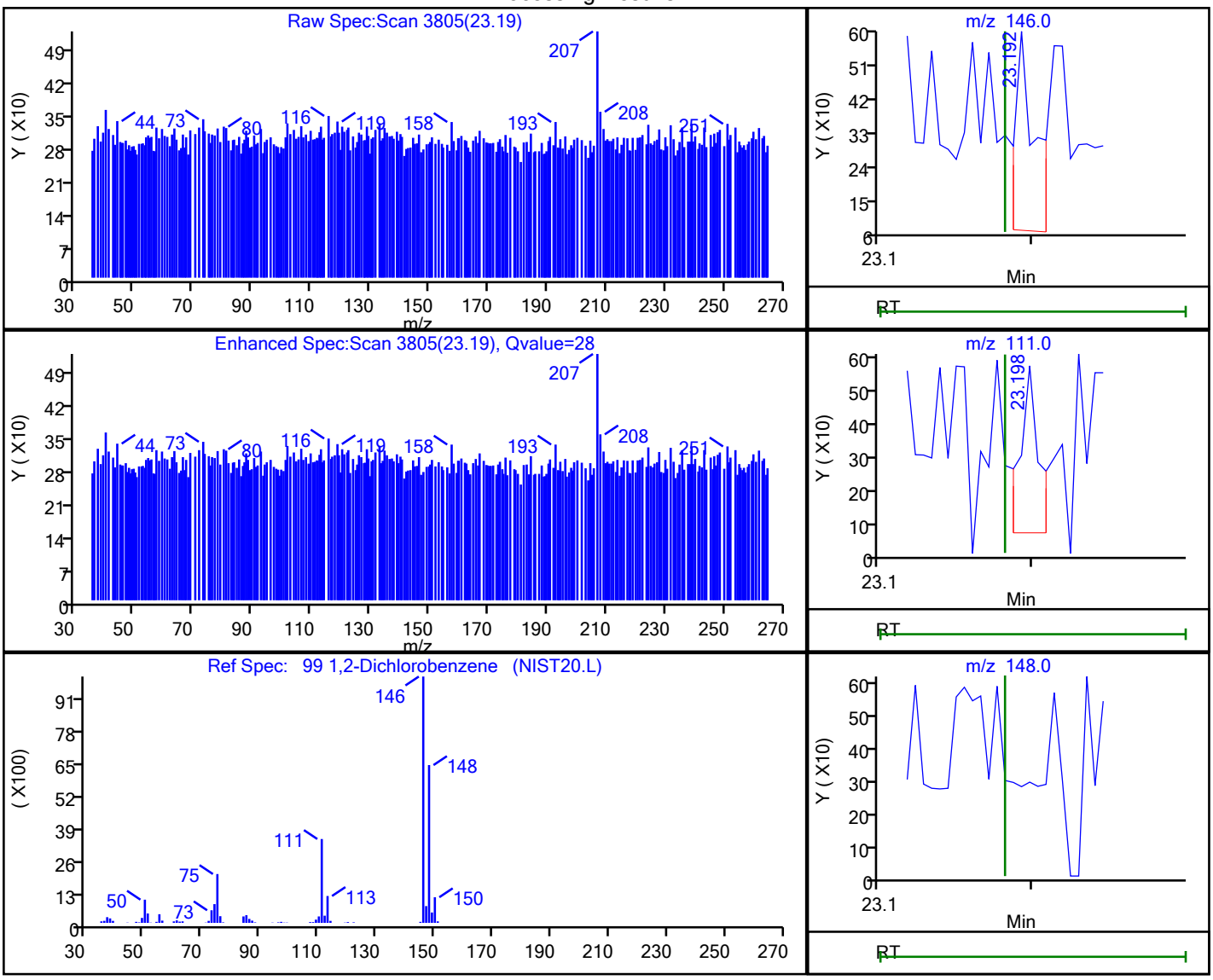
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-018.d				
Injection Date:	19-Dec-2022 21:56:30	Instrument ID:	CHW.i		
Lims ID:	200-66197-A-3	Lab Sample ID:	200-66197-3		
Client ID:	2637				
Operator ID:	vtp	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

99 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
23.19	146.00	471	0.015408
23.20	111.00	432	
23.18	148.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:33:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66202-1

SDG No.:

Client Sample ID: 4348 Lab Sample ID: 200-66202-4

Matrix: Air Lab File ID: 53728-019.d

Analysis Method: TO-15 Date Collected: 12/18/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/19/2022 23:02

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66202-1

SDG No.:

Client Sample ID: 4348 | Lab Sample ID: 200-66202-4

Matrix: Air | Lab File ID: 53728-019.d

Analysis Method: TO-15 | Date Collected: 12/18/2022 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 12/19/2022 23:02

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 186829 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66202-1

SDG No.:

Client Sample ID: 4348 Lab Sample ID: 200-66202-4

Matrix: Air Lab File ID: 53728-019.d

Analysis Method: TO-15 Date Collected: 12/18/2022 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 12/19/2022 23:02

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 186829 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d
Lims ID: 200-66202-A-4
Client ID: 4348
Sample Type: Client
Inject. Date: 19-Dec-2022 23:02:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0053728-019
Misc. Info.: 66202-4
Operator ID: vtp Instrument ID: CHW.i

Method: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\TO15_TO3_MasterMethod_W.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Dec-2022 08:37:25 Calib Date: 15-Dec-2022 23:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHW.i\20221215-53700.b\53700-013.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1649

First Level Reviewer: BKZ7 Date: 20-Dec-2022 08:37:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		4.083				ND	7
	2 Dichlorodifluoromethane	85		4.174				ND	7
	3 Chlorodifluoromethane	51		4.217				ND	7
	4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.517				ND	7
	5 Chloromethane	50		4.629				ND	7
	6 Vinyl chloride	62		4.928				ND	MU
	7 Butane	43		4.934				ND	7
	8 Butadiene	54		5.041				ND	MU
	9 Bromomethane	94		5.742				ND	7
	10 Chloroethane	64		6.009				ND	7
	13 Vinyl bromide	106		6.421				ND	MU
	14 Trichlorofluoromethane	101		6.587				ND	7
	16 Ethanol	45		6.956				ND	
	20 1,1-Dichloroethene	96		7.635				ND	
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		7.678				ND	
	22 Acetone	43		7.710				ND	
	23 Isopropyl alcohol	45		8.010				ND	
	24 Carbon disulfide	76	8.037	8.038	-0.005	94	1254	0.0444	
	26 3-Chloro-1-propene	41		8.325				ND	
	27 Methylene Chloride	49	8.566	8.551	0.010	88	519	0.0602	
	28 2-Methyl-2-propanol	59		8.775				ND	
	30 trans-1,2-Dichloroethene	61		9.053				ND	
	31 Methyl tert-butyl ether	73		9.069				ND	
	32 Hexane	57		9.561				ND	
	33 1,1-Dichloroethane	63		9.807				ND	
	34 Vinyl acetate	43		9.823				ND	
S	35 1,2-Dichloroethene, Total	61		10.200				ND	7
	36 2-Butanone (MEK)	72		10.765				ND	
	37 cis-1,2-Dichloroethene	96		10.792				ND	
	38 Ethyl acetate	88		10.856				ND	
*	39 Chlorobromomethane	128	11.199	11.204	-0.006	78	67482	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Tetrahydrofuran	42		11.252				ND	7
	41 Chloroform	83		11.380				ND	
	42 1,1,1-Trichloroethane	97		11.680				ND	7
	43 Cyclohexane	84		11.819				ND	7
	44 Carbon tetrachloride	117		11.958				ND	MU
	45 Benzene	78		12.300				ND	7
	46 1,2-Dichloroethane	62		12.375				ND	MU
	47 Isooctane	57		12.525				ND	
	48 n-Heptane	43		12.835				ND	MU
*	49 1,4-Difluorobenzene	114	13.039	13.044	-0.005	92	338296	10.0	
	51 Trichloroethene	95		13.472				ND	MU
	53 1,2-Dichloropropane	63		13.921				ND	
	54 Methyl methacrylate	69		14.023				ND	
	55 1,4-Dioxane	88		14.060				ND	7
	57 Dibromomethane	174	14.082	14.076	0.000	61	225	0.0150	
	58 Dichlorobromomethane	83		14.392				ND	
	59 cis-1,3-Dichloropropene	75		15.189				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		15.457				ND	
	62 Toluene	92		15.831				ND	
	66 trans-1,3-Dichloropropene	75		16.248				ND	
	67 1,1,2-Trichloroethane	83		16.623				ND	
	68 Tetrachloroethene	166		16.821				ND	
	69 2-Hexanone	43		17.040				ND	
	70 Chlorodibromomethane	129		17.356				ND	
	71 Ethylene Dibromide	107		17.591				ND	
*	73 Chlorobenzene-d5	117	18.506	18.506	0.000	83	283089	10.0	
	74 Chlorobenzene	112		18.565				ND	
	75 Ethylbenzene	91		18.763				ND	7
	76 m-Xylene & p-Xylene	106		19.025				ND	
	78 o-Xylene	106		19.795				ND	
	79 Styrene	104		19.833				ND	
S	80 Xylenes, Total	106		20.100				ND	7
	81 Bromoform	173		20.186				ND	
	82 Isopropylbenzene	105		20.523				ND	
	83 1,1,2,2-Tetrachloroethane	83		21.052				ND	
	85 N-Propylbenzene	91		21.261				ND	
	86 2-Chlorotoluene	91		21.411				ND	
	87 4-Ethyltoluene	105		21.464				ND	
	88 1,3,5-Trimethylbenzene	105		21.566				ND	
	91 tert-Butylbenzene	119		22.053				ND	
	92 1,2,4-Trimethylbenzene	105		22.144				ND	7
	93 sec-Butylbenzene	105		22.385				ND	7
	94 1,3-Dichlorobenzene	146		22.556				ND	7
	95 4-Isopropyltoluene	119		22.604				ND	7
	96 1,4-Dichlorobenzene	146		22.700				ND	7
	97 Benzyl chloride	91		22.850				ND	
	98 n-Butylbenzene	91		23.160				ND	7
	99 1,2-Dichlorobenzene	146	23.187	23.175	0.005	1	364	0.0119	
	102 1,2,4-Trichlorobenzene	180	25.573	25.555	0.011	53	745	0.0407	
	103 Hexachlorobutadiene	225	25.803	25.796	0.000	78	1108	0.0411	
	104 Naphthalene	128	26.033	26.015	0.011	93	1896	0.0554	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

ATTO15WISs_00010 Amount Added: 20.00 Units: mL Run Reagent

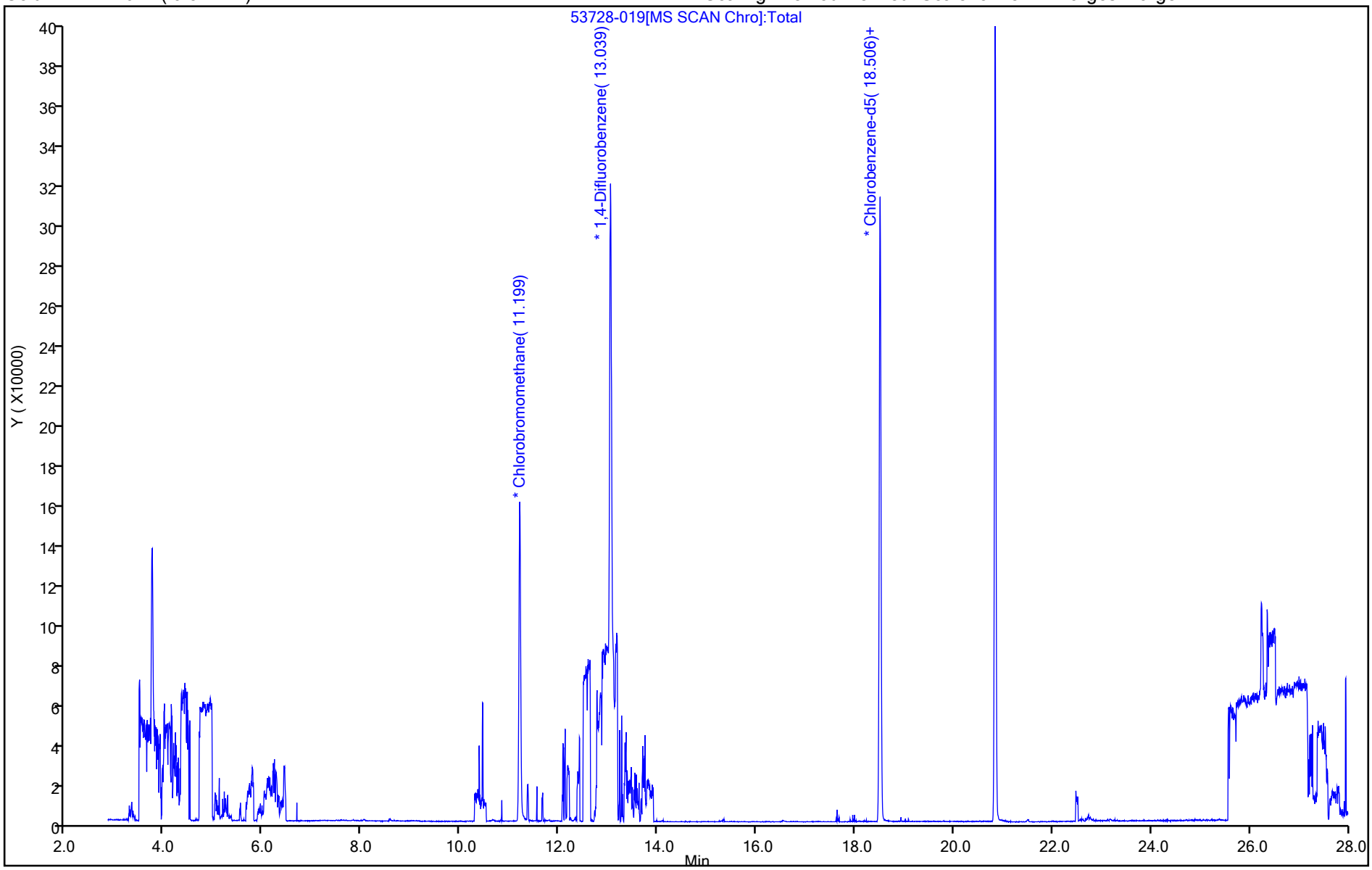
Report Date: 20-Dec-2022 08:37:25 Chrom Revision: 2.3 01-Dec-2022 08:01:02

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d

Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i	Operator ID:	vtp
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4	Worklist Smp#:	19
Client ID:	4348				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	18
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



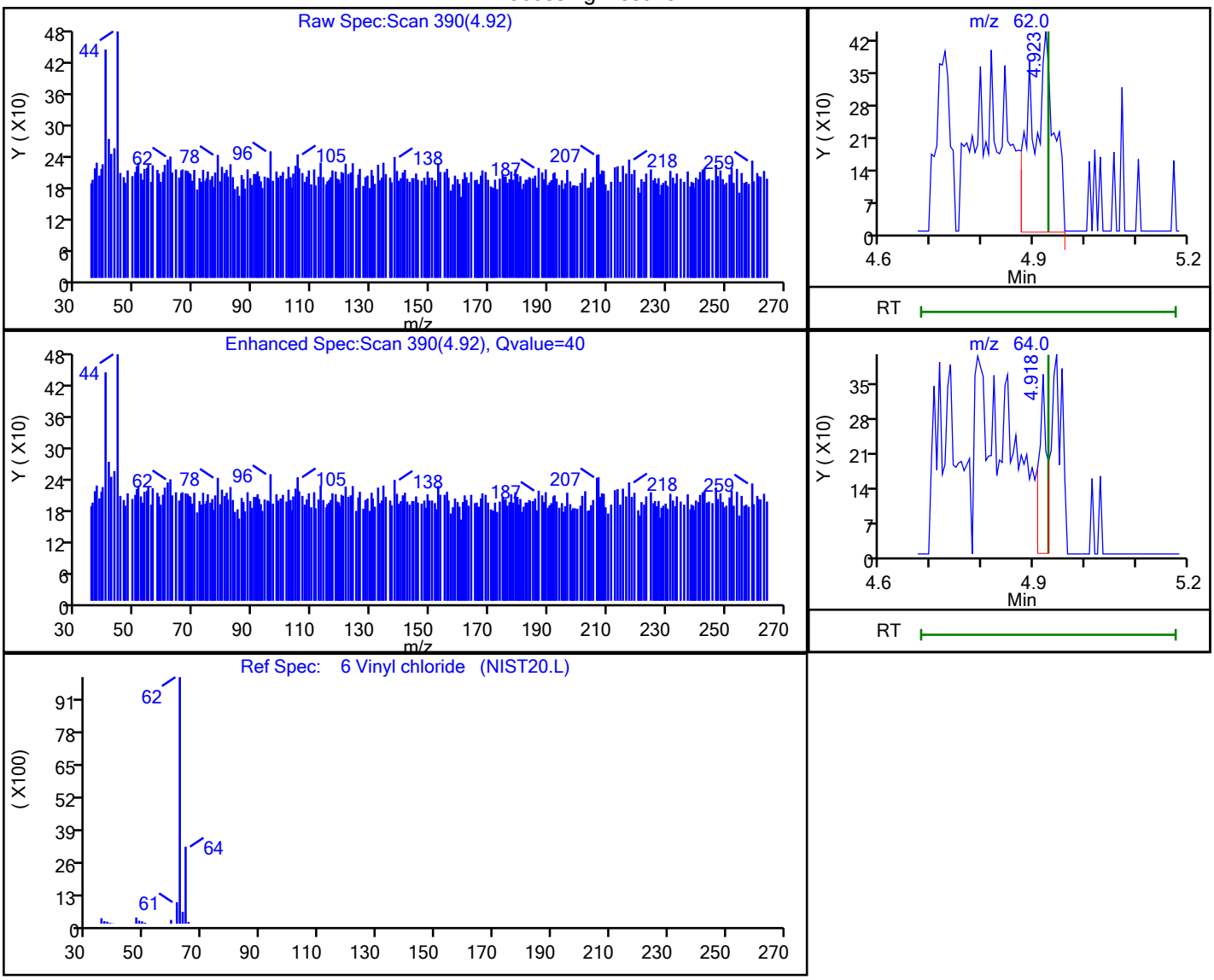
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
4.92	62.00	1253	0.096444
4.92	64.00	374	

Reviewer: BKZ7, 20-Dec-2022 08:36:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

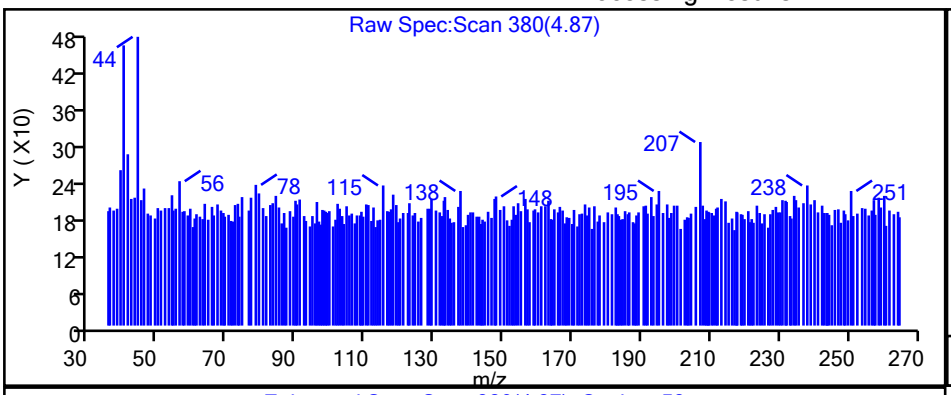
User Disabled Compound Report

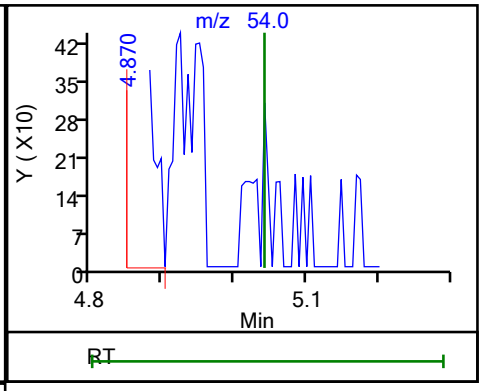
Eurofins Burlington

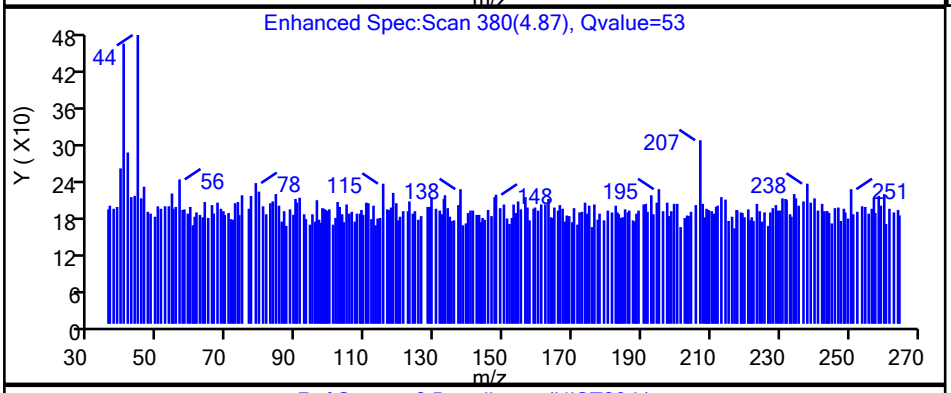
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

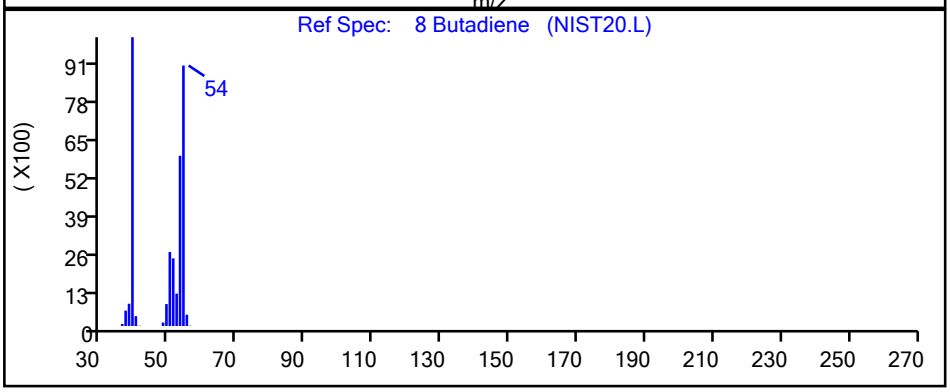
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
4.87	54.00	743	0.079525

Reviewer: BKZ7, 20-Dec-2022 08:36:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

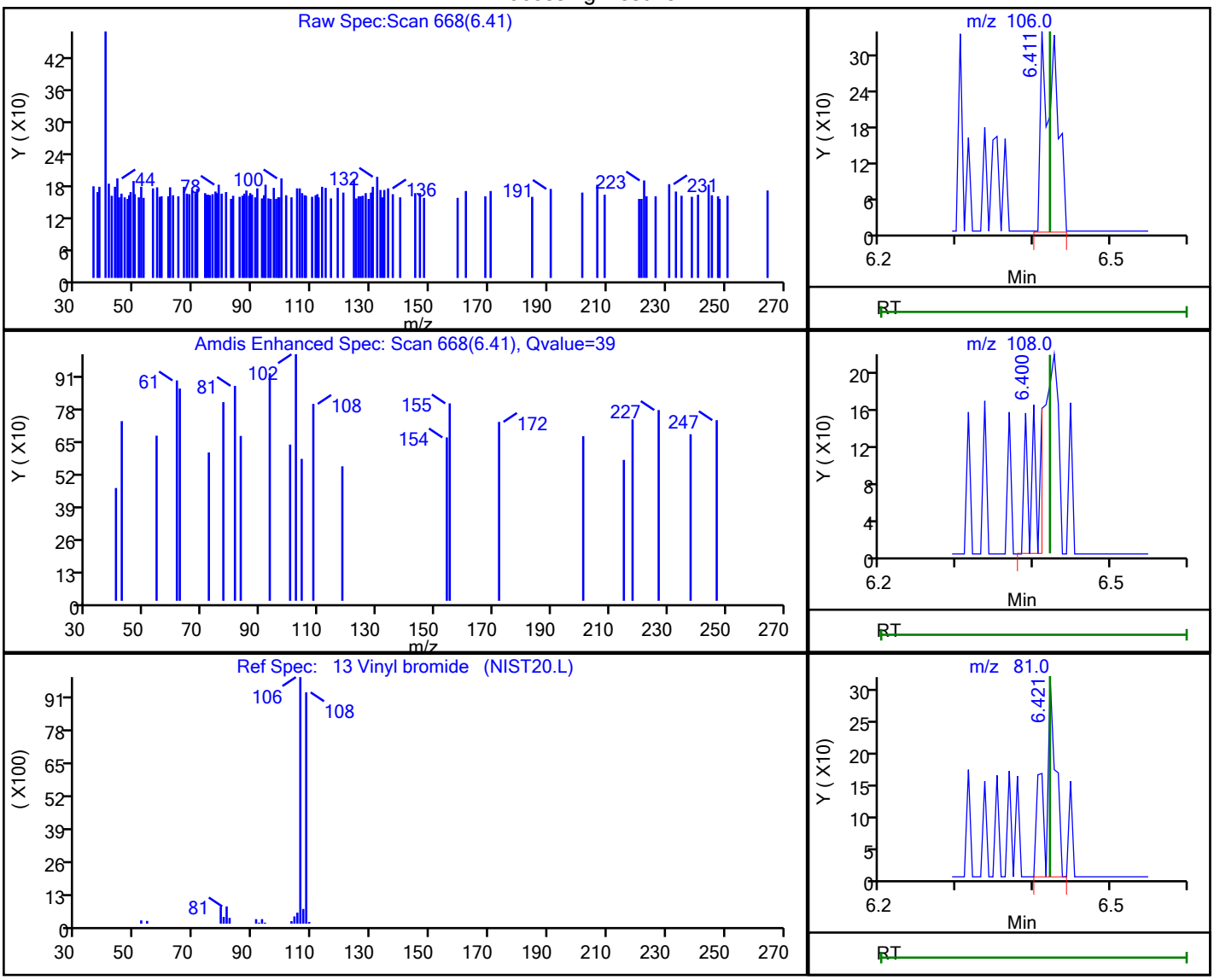
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

13 Vinyl bromide, CAS: 593-60-2

Processing Results



RT	Mass	Response	Amount
6.41	106.00	429	0.033120
6.40	108.00	150	
6.42	81.00	312	

Reviewer: BKZ7, 20-Dec-2022 08:36:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

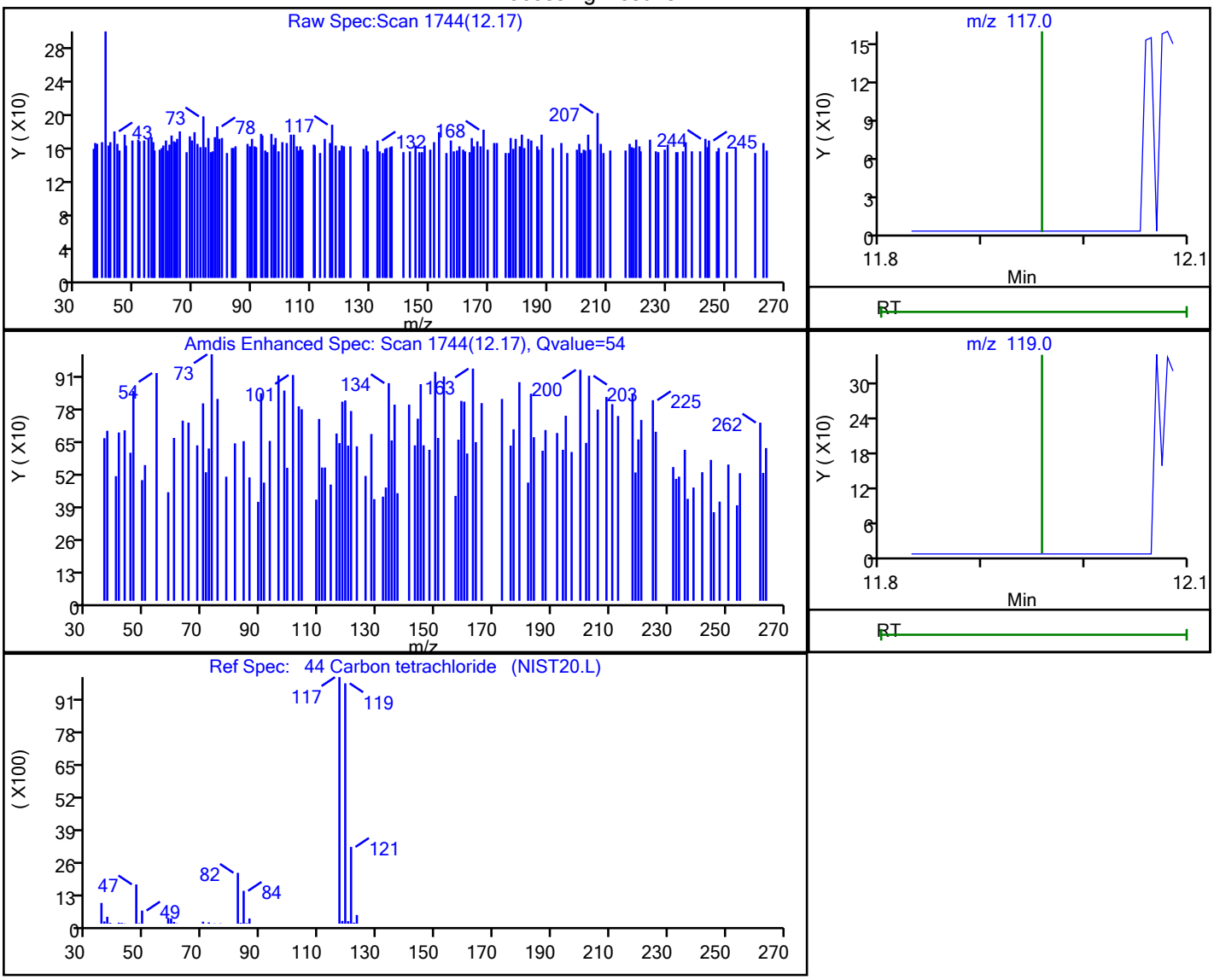
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
12.17	117.00	265	0.013118
12.16	119.00	307	

Reviewer: BKZ7, 20-Dec-2022 08:36:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

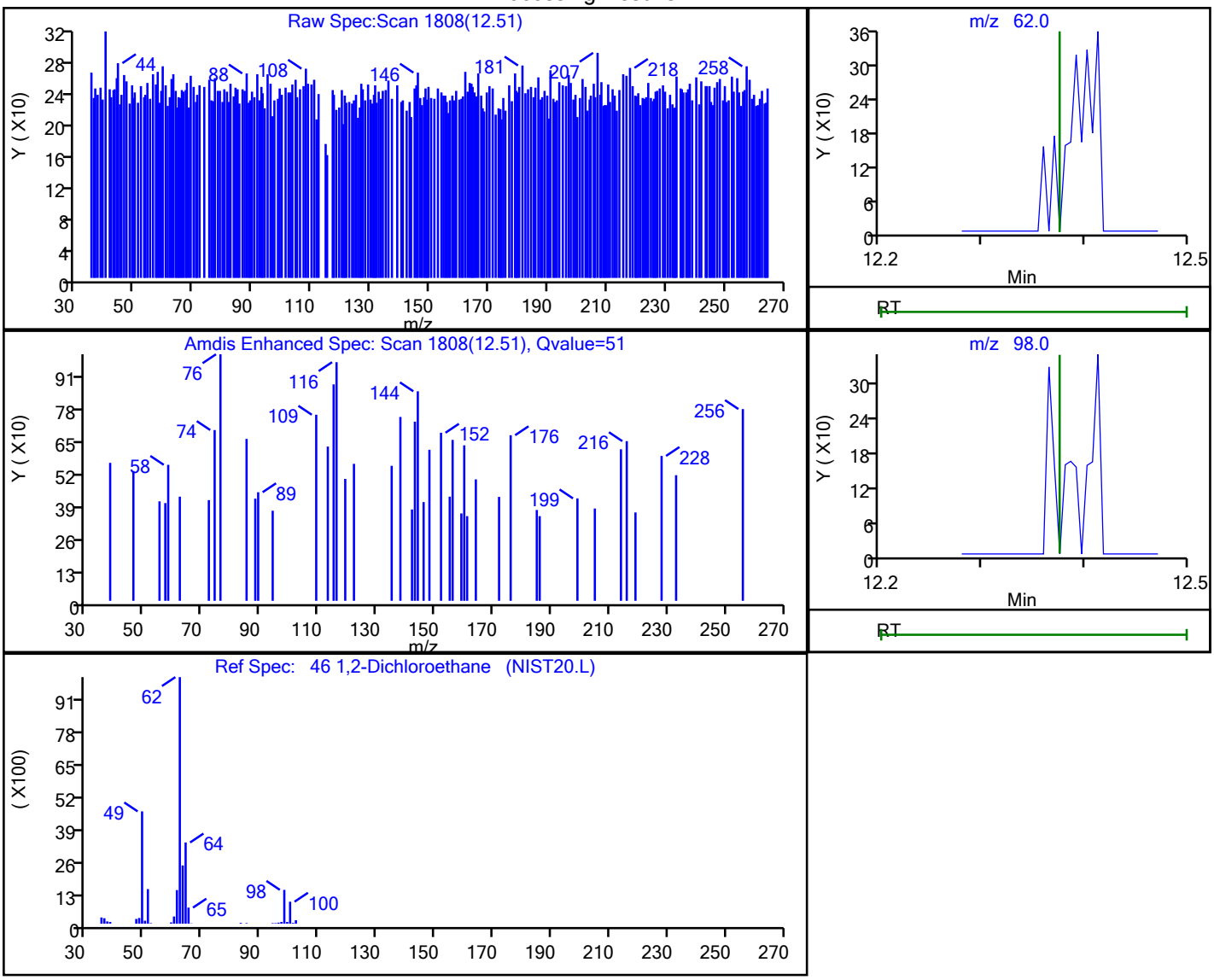
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
12.51	62.00	699	0.065743
12.38	98.00	0	

Reviewer: BKZ7, 20-Dec-2022 08:36:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

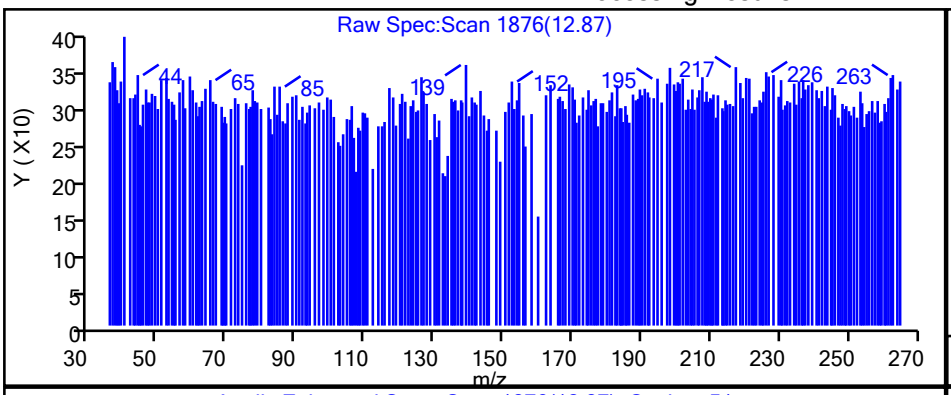
User Disabled Compound Report

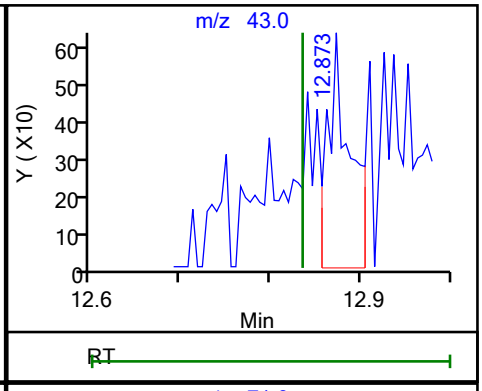
Eurofins Burlington

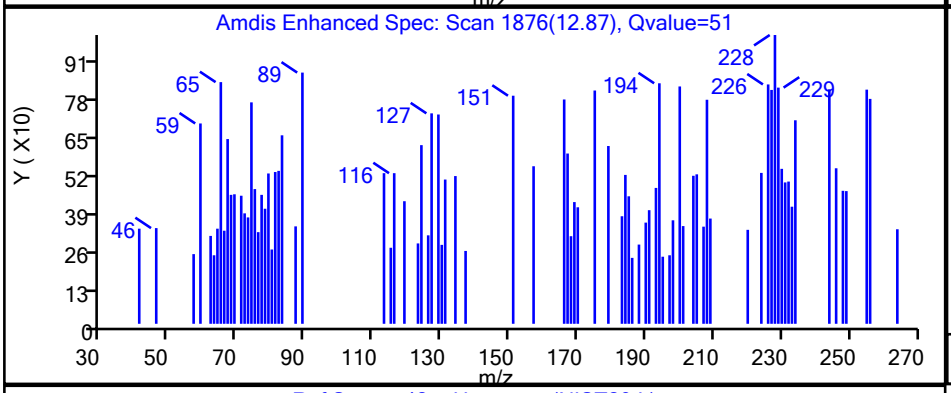
Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

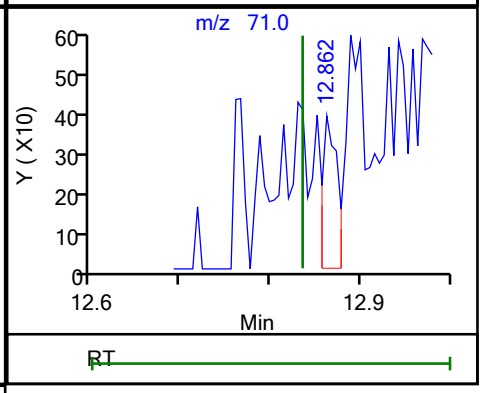
48 n-Heptane, CAS: 142-82-5

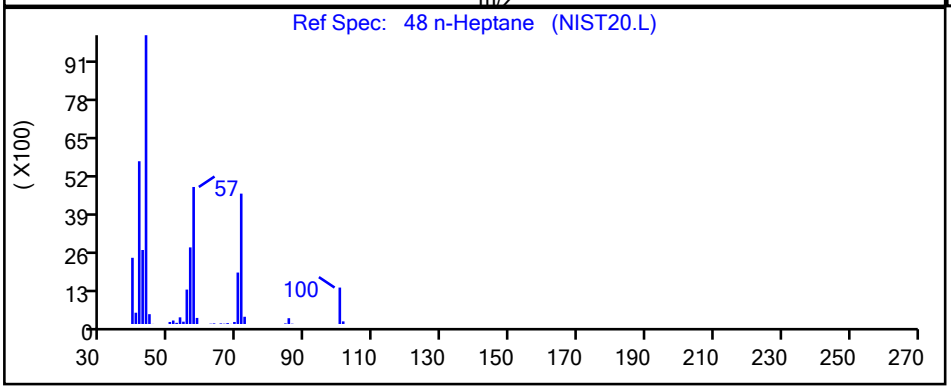
Processing Results











RT	Mass	Response	Amount
12.87	43.00	1083	0.079754
12.86	71.00	439	

Reviewer: BKZ7, 20-Dec-2022 08:36:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

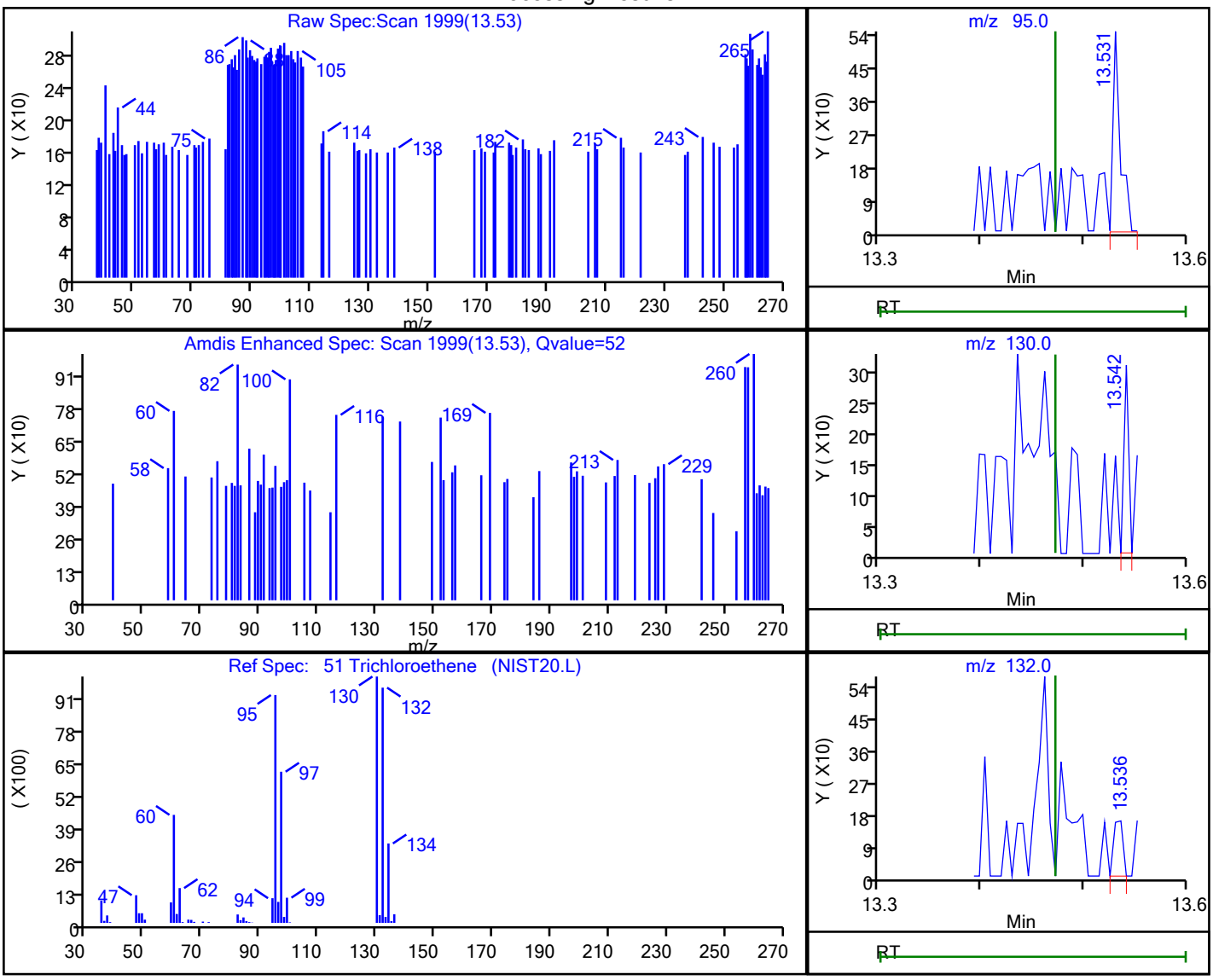
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHW.i\20221219-53728.b\53728-019.d				
Injection Date:	19-Dec-2022 23:02:30	Instrument ID:	CHW.i		
Lims ID:	200-66202-A-4	Lab Sample ID:	200-66202-4		
Client ID:	4348				
Operator ID:	vtp	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_TO3_MasterMethod_W	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

51 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
13.53	95.00	273	0.019695
13.54	130.00	97	
13.54	132.00	100	

Reviewer: BKZ7, 20-Dec-2022 08:36:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

January 25, 2023

David Zolp
Geosyntec
W67/N222 Evergreen Blvd.
Suite 113
Cedarburg, WI 53012

RE: Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Dear David Zolp:

Enclosed are the analytical results for sample(s) received by the laboratory on January 17, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

This report was revised on January 25, 2023, to update sample ID names.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Ray
matt.ray@pacelabs.com
(612)607-1700
Project Manager

Enclosures

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10640013001	**IA-01-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013002	**IA-01-012023 CERT#1759**	Air		01/17/23 11:09
10640013003	**IA-02-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013004	**IA-02-012023 CERT#2723**	Air		01/17/23 11:09
10640013005	**IA-03-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013006	**IA-03-012023 CERT#0975**	Air		01/17/23 11:09
10640013007	**IA-03DUP-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013008	**IA-03DUP-012023 CERT#3996**	Air		01/17/23 11:09
10640013009	**IA-04-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013010	**IA-04-012023 CERT#0576**	Air		01/17/23 11:09
10640013011	**IA-05-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013012	**IA-05-012023 CERT#2156**	Air		01/17/23 11:09
10640013013	**IA-06-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013014	**IA-06-012023 CERT#0702**	Air		01/17/23 11:09
10640013015	**OA-07-012023**	Air	01/13/23 22:50	01/17/23 11:09
10640013016	**OA-07-012023 CERT#2706**	Air		01/17/23 11:09

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10640013001	**IA-01-012023**	TO-15	MJL	5
10640013002	**IA-01-012023 CERT#1759**	TO-15	MJL	5
10640013003	**IA-02-012023**	TO-15	MJL	5
10640013004	**IA-02-012023 CERT#2723**	TO-15	SW	5
10640013005	**IA-03-012023**	TO-15	MJL	5
10640013006	**IA-03-012023 CERT#0975**	TO-15	MJL	5
10640013007	**IA-03DUP-012023**	TO-15	MJL	5
10640013008	**IA-03DUP-012023 CERT#3996**	TO-15	MJL	5
10640013009	**IA-04-012023**	TO-15	MJL	5
10640013010	**IA-04-012023 CERT#0576**	TO-15	GT	5
10640013011	**IA-05-012023**	TO-15	MJL	5
10640013012	**IA-05-012023 CERT#2156**	TO-15	MJL	5
10640013013	**IA-06-012023**	TO-15	MJL	5
10640013014	**IA-06-012023 CERT#0702**	TO-15	MJL	5
10640013015	**OA-07-012023**	TO-15	MJL	5
10640013016	**OA-07-012023 CERT#2706**	TO-15	MJL	5

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Sample: IA-01-012023 **Lab ID: 10640013001** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.29**	ug/m3	1.1	0.29	1.36		01/23/23 20:17	156-59-2	
trans-1,2-Dichloroethene	**1.2**	ug/m3	1.1	0.56	1.36		01/23/23 20:17	156-60-5	
Tetrachloroethene	**0.83J**	ug/m3	0.94	0.34	1.36		01/23/23 20:17	127-18-4	
Trichloroethene	**<0.33**	ug/m3	0.74	0.33	1.36		01/23/23 20:17	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.35	0.13	1.36		01/23/23 20:17	75-01-4	

Sample: IA-01-012023 CERT#1759 **Lab ID: 10640013002** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/04/23 00:41	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/04/23 00:41	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/04/23 00:41	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/04/23 00:41	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/04/23 00:41	75-01-4	

Sample: IA-02-012023 **Lab ID: 10640013003** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.29**	ug/m3	1.1	0.29	1.36		01/23/23 21:03	156-59-2	
trans-1,2-Dichloroethene	**1.0J**	ug/m3	1.1	0.56	1.36		01/23/23 21:03	156-60-5	
Tetrachloroethene	**0.80J**	ug/m3	0.94	0.34	1.36		01/23/23 21:03	127-18-4	
Trichloroethene	**<0.33**	ug/m3	0.74	0.33	1.36		01/23/23 21:03	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.35	0.13	1.36		01/23/23 21:03	75-01-4	

Sample: IA-02-012023 CERT#2723 **Lab ID: 10640013004** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/04/23 13:03	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/04/23 13:03	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/04/23 13:03	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/04/23 13:03	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Sample: IA-02-012023 CERT#2723 **Lab ID: 10640013004** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/04/23 13:03	75-01-4	

Sample: IA-03-012023 **Lab ID: 10640013005** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.39		01/23/23 21:48	156-59-2	
trans-1,2-Dichloroethene	**1.3**	ug/m3	1.1	0.58	1.39		01/23/23 21:48	156-60-5	
Tetrachloroethene	**2.3**	ug/m3	0.96	0.34	1.39		01/23/23 21:48	127-18-4	
Trichloroethene	**<0.33**	ug/m3	0.76	0.33	1.39		01/23/23 21:48	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.36	0.13	1.39		01/23/23 21:48	75-01-4	

Sample: IA-03-012023 CERT#0975 **Lab ID: 10640013006** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/04/23 02:08	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/04/23 02:08	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/04/23 02:08	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/04/23 02:08	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/04/23 02:08	75-01-4	

Sample: IA-03DUP-012023 **Lab ID: 10640013007** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.41		01/23/23 22:33	156-59-2	
trans-1,2-Dichloroethene	**1.2**	ug/m3	1.1	0.59	1.41		01/23/23 22:33	156-60-5	
Tetrachloroethene	**2.2**	ug/m3	0.97	0.35	1.41		01/23/23 22:33	127-18-4	
Trichloroethene	**<0.34**	ug/m3	0.77	0.34	1.41		01/23/23 22:33	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.41		01/23/23 22:33	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Sample: IA-03DUP-012023 CERT#3996 **Lab ID: 10640013008** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/04/23 01:25	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/04/23 01:25	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/04/23 01:25	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/04/23 01:25	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/04/23 01:25	75-01-4	

Sample: IA-04-012023 **Lab ID: 10640013009** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.41		01/23/23 23:18	156-59-2	
trans-1,2-Dichloroethene	**1.2**	ug/m3	1.1	0.59	1.41		01/23/23 23:18	156-60-5	
Tetrachloroethene	**4.4**	ug/m3	0.97	0.35	1.41		01/23/23 23:18	127-18-4	
Trichloroethene	**<0.34**	ug/m3	0.77	0.34	1.41		01/23/23 23:18	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.41		01/23/23 23:18	75-01-4	

Sample: IA-04-012023 CERT#0576 **Lab ID: 10640013010** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/03/23 23:11	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/03/23 23:11	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/03/23 23:11	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/03/23 23:11	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/03/23 23:11	75-01-4	

Sample: IA-05-012023 **Lab ID: 10640013011** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.41		01/24/23 00:43	156-59-2	
trans-1,2-Dichloroethene	**1.2**	ug/m3	1.1	0.59	1.41		01/24/23 00:43	156-60-5	
Tetrachloroethene	**2.1**	ug/m3	0.97	0.35	1.41		01/24/23 00:43	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Sample: IA-05-012023 **Lab ID: 10640013011** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Trichloroethene	**<0.34**	ug/m3	0.77	0.34	1.41		01/24/23 00:43	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.37	0.14	1.41		01/24/23 00:43	75-01-4	

Sample: IA-05-012023 CERT#2156 **Lab ID: 10640013012** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/03/23 21:46	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/03/23 21:46	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/03/23 21:46	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/03/23 21:46	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/03/23 21:46	75-01-4	

Sample: IA-06-012023 **Lab ID: 10640013013** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.39		01/24/23 02:14	156-59-2	
trans-1,2-Dichloroethene	**1.2**	ug/m3	1.1	0.58	1.39		01/24/23 02:14	156-60-5	
Tetrachloroethene	**2.4**	ug/m3	0.96	0.34	1.39		01/24/23 02:14	127-18-4	
Trichloroethene	**<0.33**	ug/m3	0.76	0.33	1.39		01/24/23 02:14	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.36	0.13	1.39		01/24/23 02:14	75-01-4	

Sample: IA-06-012023 CERT#0702 **Lab ID: 10640013014** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/03/23 22:30	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/03/23 22:30	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/03/23 22:30	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/03/23 22:30	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/03/23 22:30	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Sample: OA-07-012023 **Lab ID: 10640013015** Collected: 01/13/23 22:50 Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.0	0.28	1.3		01/24/23 03:44	156-59-2	
trans-1,2-Dichloroethene	**0.94J**	ug/m3	1.0	0.54	1.3		01/24/23 03:44	156-60-5	
Tetrachloroethene	**<0.32**	ug/m3	0.90	0.32	1.3		01/24/23 03:44	127-18-4	
Trichloroethene	**<0.31**	ug/m3	0.71	0.31	1.3		01/24/23 03:44	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.34	0.12	1.3		01/24/23 03:44	75-01-4	

Sample: OA-07-012023 CERT#2706 **Lab ID: 10640013016** Collected: Received: 01/17/23 11:09 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		01/04/23 05:03	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		01/04/23 05:03	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		01/04/23 05:03	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		01/04/23 05:03	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		01/04/23 05:03	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

QC Batch: 864089
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10640013001, 10640013003, 10640013005, 10640013007, 10640013009, 10640013011, 10640013013, 10640013015

METHOD BLANK: 4562787 Matrix: Air
Associated Lab Samples: 10640013001, 10640013003, 10640013005, 10640013007, 10640013009, 10640013011, 10640013013, 10640013015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.21	0.81	01/23/23 11:11	
Tetrachloroethene	ug/m3	<0.25	0.69	01/23/23 11:11	
trans-1,2-Dichloroethene	ug/m3	<0.42	0.81	01/23/23 11:11	
Trichloroethene	ug/m3	<0.24	0.55	01/23/23 11:11	
Vinyl chloride	ug/m3	<0.096	0.26	01/23/23 11:11	

LABORATORY CONTROL SAMPLE: 4562788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	42.1	48.8	116	70-133	
Tetrachloroethene	ug/m3	72	78.3	109	70-139	
trans-1,2-Dichloroethene	ug/m3	42.3	49.0	116	70-132	
Trichloroethene	ug/m3	57.2	66.7	117	70-132	
Vinyl chloride	ug/m3	27.2	30.7	113	64-136	

SAMPLE DUPLICATE: 4563344

Parameter	Units	10640013011 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.30	<0.30		25	
Tetrachloroethene	ug/m3	2.1	2.2	3	25	
trans-1,2-Dichloroethene	ug/m3	1.2	1.2	1	25	
Trichloroethene	ug/m3	<0.34	<0.34		25	
Vinyl chloride	ug/m3	<0.14	<0.14		25	

SAMPLE DUPLICATE: 4563345

Parameter	Units	10640013013 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.30	<0.30		25	
Tetrachloroethene	ug/m3	2.4	2.3	1	25	
trans-1,2-Dichloroethene	ug/m3	1.2	1.2	1	25	
Trichloroethene	ug/m3	<0.33	<0.33		25	
Vinyl chloride	ug/m3	<0.13	<0.13		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CHE80940Q Metro North Service-Revised Report
Pace Project No.: 10640013

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10640013001	**IA-01-012023**	TO-15	864089		
10640013003	**IA-02-012023**	TO-15	864089		
10640013005	**IA-03-012023**	TO-15	864089		
10640013007	**IA-03DUP-012023**	TO-15	864089		
10640013009	**IA-04-012023**	TO-15	864089		
10640013011	**IA-05-012023**	TO-15	864089		
10640013013	**IA-06-012023**	TO-15	864089		
10640013015	**OA-07-012023**	TO-15	864089		
10640013002	**IA-01-012023 CERT#1759**	TO-15	863722		
10640013004	**IA-02-012023 CERT#2723**	TO-15	863722		
10640013006	**IA-03-012023 CERT#0975**	TO-15	863722		
10640013008	**IA-03DUP-012023 CERT#3996**	TO-15	863722		
10640013010	**IA-04-012023 CERT#0576**	TO-15	863722		
10640013012	**IA-05-012023 CERT#2156**	TO-15	863722		
10640013014	**IA-06-012023 CERT#0702**	TO-15	863722		
10640013016	**OA-07-012023 CERT#2706**	TO-15	863722		

Pace Analytical®
www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

58478

Page: 1 of 1

Section A Required Client Information:

Company: Geosyntec
Address: 10600 N. Port Washington Rd Mequon, WI 53092
Email To: dzolp@geosyntec.com
Phone: 262-496-6103 Fax:
Requested Due Date/TAT: ~~12-01-23~~

Section B Required Project Information:

Report To: ~~Dave Zolp~~ Dave Zolp
Copy To: Jeremiah Johnson
Purchase Order No.:
Project Name: Metro North Service Center
Project Number: CHE809400

Section C Invoice Information:

Attention: Frank Dombrowski
Company Name: We Energies
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 37426

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: WI

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other ___

Section D Required Client Information

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE - END/GRAB DATE	COLLECTED COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	IA-01-012023	6LC		1/13/23	1450	1/13/23	2250	-26.6	-0.5	1759	0090									Y	001 002
2	IA-02-012023							-26.7	-0.6	2723	3387									Y	003 004
3	IA-03-012023							-26.7	-1.1	0975	1068									Y	005 006
4	IA-03DUP-012023							-26.7	-1.4	3996	1893									Y	007 008
5	IA-04-012023							-26.7	-1.3	0576	0318									Y	009 010
6	IA-05-012023							-26.7	-1.6	2156	1442									Y	011 012
7	IA-06-012023							-26.5	-1.4	0702	2742									Y	013 014
8	0A-07-012023							-26.5	+0.9	2706	1396									Y	015 016
9																					
10																					
11																					
12																					

Comments: Analyses:
Tetrachloroethylene
Trichloroethylene
cis+trans 1,2-Dichloroethylene
Vinyle Chloride

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Geosyntec	1/16/23	1230	Matt Pace	1-17-23	11:09

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
-	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dave Zolp
SIGNATURE of SAMPLER:
DATE Signed (MM / DD / YY): 1/16/23

WO#: 10640013

10640013

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air Effective Date: 02/25/2022

Air Sample Condition Upon Receipt Client Name: Geosyntec Project #: **WO#: 10640013**

PM: MR2 Due Date: 01/24/23

CLIENT: Geosyntec WI

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 610187408427 8438 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: 1-17-23 MI

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: Air Can Airbag				11. Individually Certified Cans? Y | N (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946III)**	☒ Yes	☐ No		13.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☐ 10AIR17 ☐ 10AIR47 ☒ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
IA-01	1759	90	-0.5	+5					
-02	2723	3387	-0.5						
-03	975	1068	-1						
-03 DUP	3996	1893	-1.5						
-04	576	318	-1.5						
-05	2156	1442	-1.5						
-06	702	2742	-1						
OA	2706	1396	+0.5						

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Matt Ray **Date:** 1/17/23

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

March 07, 2023

David Zolp
Geosyntec
10600 N. Port Washington Rd.
Suite 100
Mequon, WI 53092

RE: Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Dear David Zolp:

Enclosed are the analytical results for sample(s) received by the laboratory on February 24, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott Unze
scott.unze@pacelabs.com
1(612)607-6383
Project Manager

Enclosures

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10643963001	**IA-01-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963002	**IA-01-022023 Cert# 2811**	Air		02/24/23 10:00
10643963003	**IA-02-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963004	**IA-02-022023 Cert# 0783**	Air		02/24/23 10:00
10643963005	**IA-03-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963006	**IA-03-022023 Cert# 1486**	Air		02/24/23 10:00
10643963007	**IA-03DUP-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963008	**IA-03DUP-022023 Cert# 0809**	Air		02/24/23 10:00
10643963009	**IA-04-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963010	**IA-04-022023 Cert# 3566**	Air		02/24/23 10:00
10643963011	**IA-05-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963012	**IA-05-022023 Cert# 0839**	Air		02/24/23 10:00
10643963013	**IA-06-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963014	**IA-06-022023 Cert# 3494**	Air		02/24/23 10:00
10643963015	**OA-07-022023**	Air	02/17/23 22:10	02/24/23 10:00
10643963016	**OA-07-022023 Cert# 3445**	Air		02/24/23 10:00

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SAMPLE ANALYTE COUNT

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10643963001	**IA-01-022023**	TO-15	GAS1	5
10643963002	**IA-01-022023 Cert# 2811**	TO-15	GAS1	5
10643963003	**IA-02-022023**	TO-15	GAS1	5
10643963004	**IA-02-022023 Cert# 0783**	TO-15	GAS1	5
10643963005	**IA-03-022023**	TO-15	GAS1	5
10643963006	**IA-03-022023 Cert# 1486**	TO-15	GT	5
10643963007	**IA-03DUP-022023**	TO-15	GAS1	5
10643963008	**IA-03DUP-022023 Cert# 0809**	TO-15	GT	5
10643963009	**IA-04-022023**	TO-15	GAS1	5
10643963010	**IA-04-022023 Cert# 3566**	TO-15	AJA	5
10643963011	**IA-05-022023**	TO-15	GAS1	5
10643963012	**IA-05-022023 Cert# 0839**	TO-15	GAS1	5
10643963013	**IA-06-022023**	TO-15	GAS1	5
10643963014	**IA-06-022023 Cert# 3494**	TO-15	GAS1	5
10643963015	**OA-07-022023**	TO-15	GAS1	5
10643963016	**OA-07-022023 Cert# 3445**	TO-15	GAS1	5

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
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(612)607-1700

ANALYTICAL RESULTS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Sample: IA-01-022023 **Lab ID: 10643963001** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.32**	ug/m3	1.2	0.32	1.49		02/27/23 14:48	156-59-2	
trans-1,2-Dichloroethene	**<0.62**	ug/m3	1.2	0.62	1.49		02/27/23 14:48	156-60-5	
Tetrachloroethene	**5.0**	ug/m3	1.0	0.37	1.49		02/27/23 14:48	127-18-4	
Trichloroethene	**<0.36**	ug/m3	0.81	0.36	1.49		02/27/23 14:48	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.39	0.14	1.49		02/27/23 14:48	75-01-4	

Sample: IA-01-022023 Cert# 2811 **Lab ID: 10643963002** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		02/10/23 01:19	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/10/23 01:19	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/10/23 01:19	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/10/23 01:19	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/10/23 01:19	75-01-4	

Sample: IA-02-022023 **Lab ID: 10643963003** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.31**	ug/m3	1.2	0.31	1.46		02/27/23 15:33	156-59-2	
trans-1,2-Dichloroethene	**<0.61**	ug/m3	1.2	0.61	1.46		02/27/23 15:33	156-60-5	
Tetrachloroethene	**5.2**	ug/m3	1.0	0.36	1.46		02/27/23 15:33	127-18-4	
Trichloroethene	**<0.35**	ug/m3	0.80	0.35	1.46		02/27/23 15:33	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.38	0.14	1.46		02/27/23 15:33	75-01-4	

Sample: IA-02-022023 Cert# 0783 **Lab ID: 10643963004** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		02/10/23 00:19	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/10/23 00:19	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/10/23 00:19	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/10/23 00:19	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Sample: IA-02-022023 Cert# 0783 **Lab ID: 10643963004** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/10/23 00:19	75-01-4	

Sample: IA-03-022023 **Lab ID: 10643963005** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.32**	ug/m3	1.2	0.32	1.49		02/27/23 16:18	156-59-2	
trans-1,2-Dichloroethene	**<0.62**	ug/m3	1.2	0.62	1.49		02/27/23 16:18	156-60-5	
Tetrachloroethene	**12.1**	ug/m3	1.0	0.37	1.49		02/27/23 16:18	127-18-4	
Trichloroethene	**<0.36**	ug/m3	0.81	0.36	1.49		02/27/23 16:18	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.39	0.14	1.49		02/27/23 16:18	75-01-4	

Sample: IA-03-022023 Cert# 1486 **Lab ID: 10643963006** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.21**	ug/m3	2.0	0.21	1		02/08/23 16:53	156-59-2	
trans-1,2-Dichloroethene	**<0.42**	ug/m3	0.81	0.42	1		02/08/23 16:53	156-60-5	
Tetrachloroethene	**<0.25**	ug/m3	0.69	0.25	1		02/08/23 16:53	127-18-4	
Trichloroethene	**<0.24**	ug/m3	0.55	0.24	1		02/08/23 16:53	79-01-6	
Vinyl chloride	**<0.096**	ug/m3	0.26	0.096	1		02/08/23 16:53	75-01-4	

Sample: IA-03DUP-022023 **Lab ID: 10643963007** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.32**	ug/m3	1.2	0.32	1.49		02/27/23 17:03	156-59-2	
trans-1,2-Dichloroethene	**<0.62**	ug/m3	1.2	0.62	1.49		02/27/23 17:03	156-60-5	
Tetrachloroethene	**11.5**	ug/m3	1.0	0.37	1.49		02/27/23 17:03	127-18-4	
Trichloroethene	**0.78J**	ug/m3	0.81	0.36	1.49		02/27/23 17:03	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.39	0.14	1.49		02/27/23 17:03	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
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ANALYTICAL RESULTS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Sample: IA-03DUP-022023 Cert# 0809 **Lab ID: 10643963008** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	1.0	0.11	0.5		02/09/23 11:19	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/09/23 11:19	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/09/23 11:19	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/09/23 11:19	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/09/23 11:19	75-01-4	

Sample: IA-04-022023 **Lab ID: 10643963009** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.32**	ug/m3	1.2	0.32	1.49		02/27/23 17:49	156-59-2	
trans-1,2-Dichloroethene	**<0.62**	ug/m3	1.2	0.62	1.49		02/27/23 17:49	156-60-5	
Tetrachloroethene	**14.0**	ug/m3	1.0	0.37	1.49		02/27/23 17:49	127-18-4	
Trichloroethene	**<0.36**	ug/m3	0.81	0.36	1.49		02/27/23 17:49	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.39	0.14	1.49		02/27/23 17:49	75-01-4	

Sample: IA-04-022023 Cert# 3566 **Lab ID: 10643963010** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		02/09/23 10:02	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/09/23 10:02	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/09/23 10:02	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/09/23 10:02	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/09/23 10:02	75-01-4	

Sample: IA-05-022023 **Lab ID: 10643963011** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
	Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.1	0.30	1.39		02/27/23 18:34	156-59-2	
trans-1,2-Dichloroethene	**<0.58**	ug/m3	1.1	0.58	1.39		02/27/23 18:34	156-60-5	
Tetrachloroethene	**11.3**	ug/m3	0.96	0.34	1.39		02/27/23 18:34	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Sample: IA-05-022023 **Lab ID: 10643963011** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Trichloroethene	**<0.33**	ug/m3	0.76	0.33	1.39		02/27/23 18:34	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.36	0.13	1.39		02/27/23 18:34	75-01-4	

Sample: IA-05-022023 Cert# 0839 **Lab ID: 10643963012** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		02/10/23 00:49	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/10/23 00:49	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/10/23 00:49	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/10/23 00:49	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/10/23 00:49	75-01-4	

Sample: IA-06-022023 **Lab ID: 10643963013** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.29**	ug/m3	1.1	0.29	1.34		02/27/23 19:19	156-59-2	
trans-1,2-Dichloroethene	**<0.56**	ug/m3	1.1	0.56	1.34		02/27/23 19:19	156-60-5	
Tetrachloroethene	**10.7**	ug/m3	0.92	0.33	1.34		02/27/23 19:19	127-18-4	
Trichloroethene	**<0.32**	ug/m3	0.73	0.32	1.34		02/27/23 19:19	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.35	0.13	1.34		02/27/23 19:19	75-01-4	

Sample: IA-06-022023 Cert# 3494 **Lab ID: 10643963014** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		02/10/23 02:19	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/10/23 02:19	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/10/23 02:19	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/10/23 02:19	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/10/23 02:19	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Sample: OA-07-022023 **Lab ID: 10643963015** Collected: 02/17/23 22:10 Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.29**	ug/m3	1.1	0.29	1.34		02/27/23 20:05	156-59-2	
trans-1,2-Dichloroethene	**<0.56**	ug/m3	1.1	0.56	1.34		02/27/23 20:05	156-60-5	
Tetrachloroethene	**<0.33**	ug/m3	0.92	0.33	1.34		02/27/23 20:05	127-18-4	
Trichloroethene	**<0.32**	ug/m3	0.73	0.32	1.34		02/27/23 20:05	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.35	0.13	1.34		02/27/23 20:05	75-01-4	

Sample: OA-07-022023 Cert# 3445 **Lab ID: 10643963016** Collected: Received: 02/24/23 10:00 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.11**	ug/m3	0.40	0.11	0.5		02/10/23 02:49	156-59-2	
trans-1,2-Dichloroethene	**<0.21**	ug/m3	0.40	0.21	0.5		02/10/23 02:49	156-60-5	
Tetrachloroethene	**<0.12**	ug/m3	0.34	0.12	0.5		02/10/23 02:49	127-18-4	
Trichloroethene	**<0.12**	ug/m3	0.27	0.12	0.5		02/10/23 02:49	79-01-6	
Vinyl chloride	**<0.048**	ug/m3	0.13	0.048	0.5		02/10/23 02:49	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

QC Batch: 869099
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10643963001, 10643963003, 10643963005, 10643963007, 10643963009, 10643963011, 10643963013, 10643963015

METHOD BLANK: 4584593 Matrix: Air
Associated Lab Samples: 10643963001, 10643963003, 10643963005, 10643963007, 10643963009, 10643963011, 10643963013, 10643963015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.21	0.81	02/27/23 08:27	
Tetrachloroethene	ug/m3	<0.25	0.69	02/27/23 08:27	
trans-1,2-Dichloroethene	ug/m3	<0.42	0.81	02/27/23 08:27	
Trichloroethene	ug/m3	<0.24	0.55	02/27/23 08:27	
Vinyl chloride	ug/m3	<0.096	0.26	02/27/23 08:27	

LABORATORY CONTROL SAMPLE: 4584594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	42.1	47.6	113	70-133	
Tetrachloroethene	ug/m3	72	70.2	97	70-139	
trans-1,2-Dichloroethene	ug/m3	42.3	48.0	114	70-132	
Trichloroethene	ug/m3	57.2	66.1	115	70-132	
Vinyl chloride	ug/m3	27.2	29.9	110	64-136	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CHE8094OQ Metro North Service
Pace Project No.: 10643963

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10643963001	**IA-01-022023**	TO-15	869099		
10643963003	**IA-02-022023**	TO-15	869099		
10643963005	**IA-03-022023**	TO-15	869099		
10643963007	**IA-03DUP-022023**	TO-15	869099		
10643963009	**IA-04-022023**	TO-15	869099		
10643963011	**IA-05-022023**	TO-15	869099		
10643963013	**IA-06-022023**	TO-15	869099		
10643963015	**OA-07-022023**	TO-15	869099		
10643963002	**IA-01-022023 Cert# 2811**	TO-15	869602		
10643963004	**IA-02-022023 Cert# 0783**	TO-15	869602		
10643963006	**IA-03-022023 Cert# 1486**	TO-15	869602		
10643963008	**IA-03DUP-022023 Cert# 0809**	TO-15	869602		
10643963010	**IA-04-022023 Cert# 3566**	TO-15	869602		
10643963012	**IA-05-022023 Cert# 0839**	TO-15	869602		
10643963014	**IA-06-022023 Cert# 3494**	TO-15	869602		
10643963016	**OA-07-022023 Cert# 3445**	TO-15	869602		

WO# : 10643963

10643963

Pace Analytical

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: Geosyntec

Address: 10600 N. Port Washington Rd. Ste 100

Mequon, WI 53092

Email To: jpjohnson@geosyntec.com
dzolp@geosyntec.com

Phone: 262-496-6103 Fax:

Requested Due Date/TAT:

Section B Required Project Information:

Report To: Jeremiah Johnson; Dave Zolp

Copy To:

Purchase Order No.:

Project Name: Metro North Service Center (MNSC)

Project Number: CHE8094OQ

Section C Invoice Information:

Attention: Frank Dombrowski

Company Name: WEC Energy Group (We Energies)

Address:

Pace Quote Reference:

Pace Project Manager/Sales Rep.

Pace Profile #: 37426

Program: UST Superfund Emissions Clean Air Act Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: WI

Reporting Units: ug/m ___ mg/m PPBV ___ PPMV ___ Other

Report Level II. ___ III. ___ IV. ___ Other ___

Section D Required Client Information

AIR SAMPLE ID

Sample IDs MUST BE UNIQUE

Valid Media Codes MEDIA CODE: Tedlar Bag TB 1; Liter Summa Can 1LC 6; Liter Summa Can 6LC Low; Volume Puff LVP High; Volume Puff HVP; Other PM10

	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START / END/GRAB DATE	COLLECTED TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Method: PM10	3C-HED C/S (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)			Pace Lab ID
1	IA-01-022023	6LC		2/17/23	1410	2/17/23	2210	-27.1	-2.4	2811	1788									X			
2	IA-02-022023			2/17/23	1410	2/17/23	2210	-27	-2.1	783	2634									X			
3	IA-03-022023			2/17/23	1410	2/17/23	2210	-27	-1.9	1486	0514									X			
4	IA-03DUP-022023			2/17/23	1410	2/17/23	2210	-26.8	-1.8	0809	0243									X			
5	IA-04-022023			2/17/23	1410	2/17/23	2210	-27	-2.1	3566	0096									X			
6	IA-05-022023			2/17/23	1410	2/17/23	2210	-26.8	-1.2	0839	2026									X			
7	IA-06-022023			2/17/23	1410	2/17/23	2210	-28	-2.3	3494	2497									X			
8	OA-07-022023			2/17/23	1410	2/17/23	2210	-27	0.5	3445	1781									X			
9																							
10																							
11																							
12																							

Comments :

TO-15 Short List as follows: Tetrachloroethylene, Trichloroethylene, cis&trans-1,2-Dichloroethylene, Vinyl Chloride

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
1 by / Geosyntec	2/20/23	1600	Fed Ex	2/21/23	10:00	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: D. Zolp

SIGNATURE of SAMPLER: D. Zolp

DATE Signed (MM / DD / YY): 02/20/23

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air

Effective Date: 02/25/2022

WO# : 10643963
PM: MR2 Due Date: 03/03/23
CLIENT: Geosyntec WI

Air Sample Condition Upon Receipt | **Client Name:** Geosyntec | **Project #:**

Courier: ☒ FedEx ☐ UPS ☑ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 7713 5533 5710, 5915 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: RG 2/24/23

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: (Air Can) Airbag				11. Individually Certified Cans? (Y) / N (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☒ Yes	☐ No		13.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☐ 10AIR17 ☐ 10AIR47 ☒ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
01	2811	1788	-3	+5					
02	783	2634	-2.5	|					
03	1486	514	-3	|					
Dup	809	243	-3	|					
04	3566	96	-3	|					
05	839	2026	-1	|					
06	3494	2497	0	|					
07	3445	1781	0	+5					

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time: **Field Data Required?** ☐ Yes ☐ No

Comments/Resolution:

Project Manager Review: Sara C. Mays **Date:** 02/27/23

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave Zolp
Geosyntec Consultants Inc
10600 N. Port Washington Road, Suite 100
Mequon, Wisconsin 53092

Generated 3/15/2023 8:39:07 PM

JOB DESCRIPTION

Metro North Service Center (MNSC)

JOB NUMBER

200-67055-1

Eurofins Burlington
530 Community Drive
Suite 11
South Burlington VT 05403

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

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Authorized for release by
Kathryn Kelly, Project Manager II
Kathryn.Kelly@et.eurofinsus.com
(802)923-1021

Table of Contents

Definitions/Glossary

Client: Geosyntec Consultants Inc
Job ID: 200-67055-1
Project/Site: Metro North Service Center (MNSC)

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 200-67055-1

Laboratory: Eurofins Burlington

Narrative

CASE NARRATIVE

Client: Geosyntec Consultants Inc

Project: Metro North Service Center (MNSC)

Report Number: 200-67055-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 02/28/2023; the samples arrived in good condition.

VOLATILE ORGANIC COMPOUNDS
Samples IA-01-2023 (200-67055-1), IA-02-2023 (200-67055-2), IA-03-2023 (200-67055-3), IA-03DUP-2023 (200-67055-4), IA-04-2023 (200-67055-5), IA-05-2023 (200-67055-6), IA-06-2023 (200-67055-7) and OA-07-2023 (200-67055-8) were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 03/11/2023 and 03/12/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants Inc
Project/Site: Metro North Service Center (MNSC)

Job ID: 200-67055-1

Client Sample ID: IA-01-2023 — Lab Sample ID: 200-67055-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.040	J	0.20	0.025	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.42		0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.22	J	1.1	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	2.8		1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-02-2023 — Lab Sample ID: 200-67055-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.15	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.0	J	1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-03-2023 — Lab Sample ID: 200-67055-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.047	J	0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.32	J	1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-03DUP-2023 — Lab Sample ID: 200-67055-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.48		0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3.2		1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-04-2023 — Lab Sample ID: 200-67055-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.3		0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.0		1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-05-2023 — Lab Sample ID: 200-67055-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	0.027	J	0.20	0.023	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.94		0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	0.11	J	0.79	0.091	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	6.4		1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: IA-06-2023 — Lab Sample ID: 200-67055-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2		0.20	0.021	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	8.0		1.4	0.14	ug/m3	1		TO-15	Total/NA

Client Sample ID: OA-07-2023 — Lab Sample ID: 200-67055-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Burlington

Client Sample ID: IA-01-2023
Lab Sample ID: 200-67055-1

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 04:42	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/11/23 04:42	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 04:42	1
Trichloroethene	**0.040**	**J**	0.20	0.025	ppb v/v			03/11/23 04:42	1
Tetrachloroethene	**0.42**		0.20	0.021	ppb v/v			03/11/23 04:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 04:42	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/11/23 04:42	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 04:42	1
Trichloroethene	**0.22**	**J**	1.1	0.13	ug/m3			03/11/23 04:42	1
Tetrachloroethene	**2.8**		1.4	0.14	ug/m3			03/11/23 04:42	1

Client Sample ID: IA-02-2023
Lab Sample ID: 200-67055-2

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 06:37	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/11/23 06:37	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 06:37	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/11/23 06:37	1
Tetrachloroethene	**0.15**	**J**	0.20	0.021	ppb v/v			03/11/23 06:37	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 06:37	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/11/23 06:37	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 06:37	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/11/23 06:37	1
Tetrachloroethene	**1.0**	**J**	1.4	0.14	ug/m3			03/11/23 06:37	1

Client Sample ID: IA-03-2023
Lab Sample ID: 200-67055-3

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 07:35	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/11/23 07:35	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 07:35	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/11/23 07:35	1
Tetrachloroethene	**0.047**	**J**	0.20	0.021	ppb v/v			03/11/23 07:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 07:35	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/11/23 07:35	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 07:35	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/11/23 07:35	1
Tetrachloroethene	**0.32**	**J**	1.4	0.14	ug/m3			03/11/23 07:35	1

Client Sample ID: IA-03DUP-2023
Lab Sample ID: 200-67055-4

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 08:32	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/11/23 08:32	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 08:32	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/11/23 08:32	1
Tetrachloroethene	**0.48**		0.20	0.021	ppb v/v			03/11/23 08:32	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 08:32	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/11/23 08:32	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 08:32	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/11/23 08:32	1
Tetrachloroethene	**3.2**		1.4	0.14	ug/m3			03/11/23 08:32	1

Client Sample ID: IA-04-2023
Lab Sample ID: 200-67055-5

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 09:30	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/11/23 09:30	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 09:30	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/11/23 09:30	1
Tetrachloroethene	**1.3**		0.20	0.021	ppb v/v			03/11/23 09:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 09:30	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/11/23 09:30	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 09:30	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/11/23 09:30	1
Tetrachloroethene	**9.0**		1.4	0.14	ug/m3			03/11/23 09:30	1

Client Sample ID: IA-05-2023
Lab Sample ID: 200-67055-6

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 23:04	1
trans-1,2-Dichloroethene	**0.027**	**J**	0.20	0.023	ppb v/v			03/11/23 23:04	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 23:04	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/11/23 23:04	1
Tetrachloroethene	**0.94**		0.20	0.021	ppb v/v			03/11/23 23:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 23:04	1
trans-1,2-Dichloroethene	**0.11**	**J**	0.79	0.091	ug/m3			03/11/23 23:04	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 23:04	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/11/23 23:04	1
Tetrachloroethene	**6.4**		1.4	0.14	ug/m3			03/11/23 23:04	1

Client Sample ID: IA-06-2023
Lab Sample ID: 200-67055-7

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/12/23 16:56	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/12/23 16:56	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/12/23 16:56	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/12/23 16:56	1
Tetrachloroethene	**1.2**		0.20	0.021	ppb v/v			03/12/23 16:56	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/12/23 16:56	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/12/23 16:56	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/12/23 16:56	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/12/23 16:56	1
Tetrachloroethene	**8.0**		1.4	0.14	ug/m3			03/12/23 16:56	1

Client Sample ID: OA-07-2023
Lab Sample ID: 200-67055-8

Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/12/23 17:48	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/12/23 17:48	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/12/23 17:48	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/12/23 17:48	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			03/12/23 17:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/12/23 17:48	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/12/23 17:48	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/12/23 17:48	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/12/23 17:48	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			03/12/23 17:48	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-189243/4
Matrix: Air
Analysis Batch: 189243

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/10/23 14:04	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/10/23 14:04	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/10/23 14:04	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/10/23 14:04	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			03/10/23 14:04	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/10/23 14:04	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/10/23 14:04	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/10/23 14:04	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/10/23 14:04	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			03/10/23 14:04	1

Lab Sample ID: LCS 200-189243/3
Matrix: Air
Analysis Batch: 189243

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	10.0	8.67		ppb v/v		87	61 - 135
trans-1,2-Dichloroethene	10.0	8.61		ppb v/v		86	69 - 137
cis-1,2-Dichloroethene	10.0	9.01		ppb v/v		90	72 - 121
Trichloroethene	10.0	8.39		ppb v/v		84	73 - 122
Tetrachloroethene	10.0	9.55		ppb v/v		96	70 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	26	22.2		ug/m3		87	61 - 135
trans-1,2-Dichloroethene	40	34.1		ug/m3		86	69 - 137
cis-1,2-Dichloroethene	40	35.7		ug/m3		90	72 - 121
Trichloroethene	54	45.1		ug/m3		84	73 - 122
Tetrachloroethene	68	64.8		ug/m3		96	70 - 125

Lab Sample ID: 200-67055-1 DU
Matrix: Air
Analysis Batch: 189243

Client Sample ID: IA-01-2023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Vinyl chloride	<0.021		<0.021		ppb v/v		NC	25
trans-1,2-Dichloroethene	<0.023		<0.023		ppb v/v		NC	25
cis-1,2-Dichloroethene	<0.021		<0.021		ppb v/v		NC	25
Trichloroethene	0.040	J	0.0350	J	ppb v/v		14	25
Tetrachloroethene	0.42		0.399		ppb v/v		5	25

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Vinyl chloride	<0.054		<0.054		ug/m3		NC	25
trans-1,2-Dichloroethene	<0.091		<0.091		ug/m3		NC	25
cis-1,2-Dichloroethene	<0.083		<0.083		ug/m3		NC	25
Trichloroethene	0.22	J	0.188	J	ug/m3		14	25
Tetrachloroethene	2.8		2.70		ug/m3		5	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-189268/4
Matrix: Air
Analysis Batch: 189268

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/11/23 14:21	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/11/23 14:21	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 14:21	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/11/23 14:21	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			03/11/23 14:21	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/11/23 14:21	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/11/23 14:21	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/11/23 14:21	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/11/23 14:21	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			03/11/23 14:21	1

Lab Sample ID: LCS 200-189268/3
Matrix: Air
Analysis Batch: 189268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	10.0	8.55		ppb v/v		86	61 - 135
trans-1,2-Dichloroethene	10.0	8.47		ppb v/v		85	69 - 137
cis-1,2-Dichloroethene	10.0	8.86		ppb v/v		89	72 - 121
Trichloroethene	10.0	8.27		ppb v/v		83	73 - 122
Tetrachloroethene	10.0	9.49		ppb v/v		95	70 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	26	21.9		ug/m3		86	61 - 135
trans-1,2-Dichloroethene	40	33.6		ug/m3		85	69 - 137
cis-1,2-Dichloroethene	40	35.1		ug/m3		89	72 - 121
Trichloroethene	54	44.4		ug/m3		83	73 - 122
Tetrachloroethene	68	64.3		ug/m3		95	70 - 125

Lab Sample ID: MB 200-189279/4
Matrix: Air
Analysis Batch: 189279

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.021		0.20	0.021	ppb v/v			03/12/23 15:01	1
trans-1,2-Dichloroethene	<0.023		0.20	0.023	ppb v/v			03/12/23 15:01	1
cis-1,2-Dichloroethene	<0.021		0.20	0.021	ppb v/v			03/12/23 15:01	1
Trichloroethene	<0.025		0.20	0.025	ppb v/v			03/12/23 15:01	1
Tetrachloroethene	<0.021		0.20	0.021	ppb v/v			03/12/23 15:01	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.054		0.51	0.054	ug/m3			03/12/23 15:01	1
trans-1,2-Dichloroethene	<0.091		0.79	0.091	ug/m3			03/12/23 15:01	1
cis-1,2-Dichloroethene	<0.083		0.79	0.083	ug/m3			03/12/23 15:01	1
Trichloroethene	<0.13		1.1	0.13	ug/m3			03/12/23 15:01	1
Tetrachloroethene	<0.14		1.4	0.14	ug/m3			03/12/23 15:01	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-189279/3
Matrix: Air
Analysis Batch: 189279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	10.0	8.40		ppb v/v		84	61 - 135
trans-1,2-Dichloroethene	10.0	11.8		ppb v/v		118	69 - 137
cis-1,2-Dichloroethene	10.0	10.5		ppb v/v		105	72 - 121
Trichloroethene	10.0	9.92		ppb v/v		99	73 - 122
Tetrachloroethene	10.0	8.96		ppb v/v		90	70 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	26	21.5		ug/m3		84	61 - 135
trans-1,2-Dichloroethene	40	46.7		ug/m3		118	69 - 137
cis-1,2-Dichloroethene	40	41.8		ug/m3		105	72 - 121
Trichloroethene	54	53.3		ug/m3		99	73 - 122
Tetrachloroethene	68	60.8		ug/m3		90	70 - 125

Air - GC/MS VOA

Analysis Batch: 189243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-67055-1	IA-01-2023	Total/NA	Air	TO-15	
200-67055-2	IA-02-2023	Total/NA	Air	TO-15	
200-67055-3	IA-03-2023	Total/NA	Air	TO-15	
200-67055-4	IA-03DUP-2023	Total/NA	Air	TO-15	
200-67055-5	IA-04-2023	Total/NA	Air	TO-15	
MB 200-189243/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-189243/3	Lab Control Sample	Total/NA	Air	TO-15	
200-67055-1 DU	IA-01-2023	Total/NA	Air	TO-15	

Analysis Batch: 189268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-67055-6	IA-05-2023	Total/NA	Air	TO-15	
MB 200-189268/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-189268/3	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 189279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-67055-7	IA-06-2023	Total/NA	Air	TO-15	
200-67055-8	OA-07-2023	Total/NA	Air	TO-15	
MB 200-189279/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-189279/3	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Metro North Service Center (MNSC)

Job ID: 200-67055-1

Client Sample ID: IA-01-2023
Lab Sample ID: 200-67055-1
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189243	WRD	EET BUR	03/11/23 04:42

Client Sample ID: IA-02-2023
Lab Sample ID: 200-67055-2
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189243	WRD	EET BUR	03/11/23 06:37

Client Sample ID: IA-03-2023
Lab Sample ID: 200-67055-3
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189243	WRD	EET BUR	03/11/23 07:35

Client Sample ID: IA-03DUP-2023
Lab Sample ID: 200-67055-4
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189243	WRD	EET BUR	03/11/23 08:32

Client Sample ID: IA-04-2023
Lab Sample ID: 200-67055-5
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189243	WRD	EET BUR	03/11/23 09:30

Client Sample ID: IA-05-2023
Lab Sample ID: 200-67055-6
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189268	A1B	EET BUR	03/11/23 23:04

Client Sample ID: IA-06-2023
Lab Sample ID: 200-67055-7
Date Collected: 02/17/23 22:10
Matrix: Air
Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189279	TPB	EET BUR	03/12/23 16:56

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 200-67055-1
Project/Site: Metro North Service Center (MNSC)

Client Sample ID: OA-07-2023
Lab Sample ID: 200-67055-8

Date Collected: 02/17/23 22:10
Matrix: Air

Date Received: 02/28/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	TO-15		1	189279	TPB	EET BUR	03/12/23 17:48

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 200-67055-1
Project/Site: Metro North Service Center (MNSC)

Laboratory: Eurofins Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	399133350	08-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	cis-1,2-Dichloroethene
TO-15		Air	Tetrachloroethene
TO-15		Air	trans-1,2-Dichloroethene
TO-15		Air	Trichloroethene
TO-15		Air	Vinyl chloride

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 200-67055-1
Project/Site: Metro North Service Center (MNSC)

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 200-67055-1
Project/Site: Metro North Service Center (MNSC)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
200-67055-1	IA-01-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #3725
200-67055-2	IA-02-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #6007
200-67055-3	IA-03-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #4784
200-67055-4	IA-03DUP-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #5709
200-67055-5	IA-04-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #3525
200-67055-6	IA-05-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #3200
200-67055-7	IA-06-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #4123
200-67055-8	OA-07-2023	Air	02/17/23 22:10	02/28/23 10:30	Air Canister (6-Liter) #4098

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
200-67055	03/02/23	9:59	29.3	23	G20	JR

Sampling Information and Return Equipment Check	Yes	N o	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	Yes		
(2) Is the flow controller ID used for each canister recorded?	Yes		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		N o	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		N o	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-67055-A-1	3725	-5.3	N	2768	95/7	Y	3725-54031	
200-67055-A-2	6007	0.0	Y	6012	95/7	Y	6007-54033	
200-67055-A-3	4784	-5.4	N	3943	95/7	Y	4784-54031	
200-67055-A-4	5709	-3.8	N	5186	N/A	Y	5709-54045	
200-67055-A-5	3525	-8.2	N	5244	N/A	Y	3525-54033	
200-67055-A-6	3200	0.0	Y	3637	95/6	Y	3200-54045	
200-67055-A-7	4123	-2.0	N	3575	95/7	Y	4123-54043	
200-67055-A-8	4098	0.0	Y	3121	95/7	Y	4098-54033	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10"Hg, but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded

Eurofins TestAmerica, Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802.660.1990 fax 802.660.1919

Canister Samples Chain of Custody Record

200-67055 Chain of Custody

eurofins | Environment Testing America

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager: Frank Dombrowski**	**Samples Collected By: Dave Zolp**
Company Name. Geosyntec Consultants	**Phone: 414-221-2156**	
Address. 10600 N. Port Washington Rd.; STE 100	**Email:frank.dombrowski@wecenergygroup.com**	
City/State/Zip: Mequon, WI 53092	frank.dombrowski@wecenergygroup.com	
Phone: 262-834-0225	**Site Contact: Dave Zolp**	
FAX:	**Tel/Fax: 262-496-6103**	
Project Name: Metro North Service Center (MNSC)	**Analysis Turnaround Time**	
Site/Location. Milwaukee, WI	Standard (Specific):	
P O #	Rush (Specifiy):	

COC No: __1__ of __1__ COCs

TALS Project #:

For Lab Use Only:
Walk-in Client:
Lab Sampling:

Job / SDG No.:

(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-01-2023	2/17/2023	1410	2/17/2023	2210	27.7	5.3	2768	3725	X								X						TO-15 Short List See Below
IA-02-2023	2/17/2023	1410	2/17/2023	2210	28	0	6012	6007	X								X						TO-15 Short List See Below
IA-03-2023	2/17/2023	1410	2/17/2023	2210	27.7	5.4	3943	4784	X								X						TO-15 Short List See Below
IA-03DUP-2023	2/17/2023	1410	2/17/2023	2210	27.8	4.5	5186	5709	X								X						TO-15 Short List See Below
IA-04-2023	2/17/2023	1410	2/17/2023	2210	27.7	7.8	5244	3525	X								X						TO-15 Short List See Below
IA-05-2023	2/17/2023	1410	2/17/2023	2210	27.7	3.6	3637	3200	X								X						TO-15 Short List See Below
IA-06-2023	2/17/2023	1410	2/17/2023	2210	27.7	3.4	3575	4123	X								X						TO-15 Short List See Below
OA-07-2023	2/17/2023	1410	2/17/2023	2210	27.7	0	3121	4098	X								X						TO-15 Short List See Below

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: TO-15 Short List as follows. Tetrachloroethylene, Trichloroethylene, cis&trans-1,2-Dichloroethylene, Vinyl Chloride

Samples Shipped by:	**Date / Time:**	**Samples Received by:** ETA-Burl 2/28/23 1030
Samples Relinquished by:	**Date / Time:**	**Received by:**
Relinquished by:	**Date / Time:**	**Received by:**

Lab Use Only: **Shipper Name:** **Opened by:** **Condition:**

Form No. CA-C-WI-003, Rev. 2.25, dated 10/6/2020

3/15/2023

FROM: (262) 834-0227
Distribution
Geosyntec Consultants
10600 N PORT WASHINGTON RD
STE 100
MEQUON WI 53092
US

SHIP DATE: 20FEB23
ACTWGT 35 00 LB
CAD 102598228/INET4580

BILL SENDER

TO Sample Receiving
Test America
530 Community Drive
Suite 11
SOUTH BURLINGTON VT 05403 (US)
(802) 660-1990 REF CHE8094OQ
INV **
PO 02 DEPT 1811

581J1/BB02/FE2D

FedEx Ground

J23102301101uv

1 of 2
TRK# 7713 5536 1956

MASTER

05403

9622 0019 0 (000 000 0000) 0 00 7713 5536 1956

FedEx Ship Manager - Print Your Label(s)

2/20/23, 4:08 PM

FROM: (262) 834-0227
Distribution
Geosyntec Consultants
10600 N PORT WASHINGTON RD
STE 100
MEQUON WI 53092
US

SHIP DATE: 20FEB23
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581J1/BB02/FE2D

FedEx Ground

J23102301101uv

2 of 2
MPS# 7713 5536 2963

Mstr# 7713 5536 1956

05403

9622 0019 0 (000 000 0000) 0 00 7713 5536 2963

FedEx Ship Manager - Print Your Label(s)

2/20/23, 4:08 PM

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 200-67055-1

Login Number: 67055
List Number: 1
Creator: Reynolds, Jamie K

List Source: Eurofins Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Oven 3/4	10	32	1/16/2023	1438	22	22	SML	6 liter	Individual

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4312	.04	.04	0	29.8	G26	1/20/23	1418	[illegible]	22.0	G26	2/1/23	1051	[illegible]	22.0
2	4784		.04	0		G26					G26				
3	3725		.04	0		G26					G26				
4	34000419		.04	0		G26					G26				
5	4123		.04	0		G26					G26				
6	6007		.04	0		G26					G26				
7	4098		.04	0		G26					G26				
8	3525		.04	0		G26					G26				
9	4301		.04	0		G26					G26				
10	5167		.04	0		G26					G26				
11	3200		.04	0		G26					G26				
12	5709		.04	0		G26					G26				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☐TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Review
4312	1/19/23	54031	ABJ		XXXXXXX				1/19/23	DMB
4784					XXXXXXX					
3725					XXXXXXX					
34000419					XXXXXXX					
4123	1/20/23	54043	KPJ		XXXXXXX				1/20/23	DMB
6007 DMB 1/19/23	~~1/19/23~~ 1/19/23	54033	ABJ		XXXXXXX				1/19/23	CC
4098					XXXXXXX					
3525					XXXXXXX					
4301					XXXXXXX					
5167					XXXXXXX					
3200	1/20/23	54045	ABJ		XXXXXXX				1/20/23	CC
5709					XXXXXXX					

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

0.04 IND CERTIFIED

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4312 Lab Sample ID: 200-66478-1

Matrix: Air Lab File ID: 54031-021.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 02:05

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4312 Lab Sample ID: 200-66478-1

Matrix: Air Lab File ID: 54031-021.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 02:05

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4312 Lab Sample ID: 200-66478-1

Matrix: Air Lab File ID: 54031-021.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 02:05

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-021.D
Lims ID: 200-66478-A-1
Client ID: 4312
Sample Type: Client
Inject. Date: 19-Jan-2023 02:05:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054031-021
Misc. Info.: 66478-1
Operator ID: vtp Instrument ID: CHC.i

Method: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 08:57:11 Calib Date: 18-Jan-2023 00:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHC.i\20230117-54020.b\54020-013.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: BKZ7 Date: 19-Jan-2023 09:01:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.805				ND	7
2 Dichlorodifluoromethane	85		2.869				ND	7
3 Chlorodifluoromethane	51		2.901				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.093				ND	7
5 Chloromethane	50		3.194				ND	7
6 Butane	43		3.381				ND	7
7 Vinyl chloride	62		3.402				ND	
8 Butadiene	54		3.472				ND	
9 Bromomethane	94		4.043				ND	
10 Chloroethane	64		4.251				ND	
13 Vinyl bromide	106		4.608				ND	
14 Trichlorofluoromethane	101		4.731				ND	
16 Ethanol	45	5.361	5.278	0.080	94	3114	0.2187	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.756				ND	
20 1,1-Dichloroethene	96		5.756				ND	
21 Acetone	43		5.953				ND	7
22 Carbon disulfide	76		6.114				ND	
23 Isopropyl alcohol	45		6.332				ND	7
24 3-Chloro-1-propene	41		6.487				ND	7
26 Methylene Chloride	49		6.759				ND	7
28 2-Methyl-2-propanol	59		7.095				ND	
29 trans-1,2-Dichloroethene	61		7.218				ND	
30 Methyl tert-butyl ether	73		7.240				ND	
32 Hexane	57		7.656				ND	
33 1,1-Dichloroethane	63		8.035				ND	
34 Vinyl acetate	43		8.142				ND	
35 cis-1,2-Dichloroethene	96		9.108				ND	
36 2-Butanone (MEK)	72		9.161				ND	
37 Ethyl acetate	88		9.257				ND	
* 38 Chlorobromomethane	128	9.534	9.540	-0.006	90	183469	20.0	
39 Tetrahydrofuran	42		9.615				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.695				ND	
	41 1,1,1-Trichloroethane	97		9.967				ND	
	42 Cyclohexane	84		9.988				ND	
S	43 1,2-Dichloroethene, Total	61		10.200				ND	7
	44 Carbon tetrachloride	117		10.239				ND	
	45 Benzene	78		10.650				ND	7
	46 Isooctane	57		10.725				ND	
	47 1,2-Dichloroethane	62		10.789				ND	
	48 n-Heptane	43		11.130				ND	
*	49 1,4-Difluorobenzene	114	11.493	11.493	0.000	98	1038077	20.0	
	50 Trichloroethene	95		11.963				ND	
	53 1,2-Dichloropropane	63		12.448				ND	
	56 Dibromomethane	174		12.694				ND	
	55 Methyl methacrylate	69		12.699				ND	
	57 1,4-Dioxane	88		12.747				ND	
	58 Dichlorobromomethane	83		13.025				ND	
	59 cis-1,3-Dichloropropene	75		13.985				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		14.316				ND	
	62 Toluene	92		14.605				ND	
	66 trans-1,3-Dichloropropene	75		15.197				ND	
	67 1,1,2-Trichloroethane	83		15.554				ND	
	68 Tetrachloroethene	166		15.736				ND	
	69 2-Hexanone	43		16.078				ND	
	70 Chlorodibromomethane	129		16.328				ND	
	71 Ethylene Dibromide	107		16.568				ND	
*	72 Chlorobenzene-d5	117	17.513	17.513	0.000	99	875978	20.0	
	73 Chlorobenzene	112		17.577				ND	
	74 Ethylbenzene	91		17.764				ND	7
	76 m-Xylene & p-Xylene	106		18.015				ND	
	77 o-Xylene	106		18.842				ND	
	78 Styrene	104		18.890				ND	
	80 Bromoform	173		19.290				ND	
	81 Isopropylbenzene	105		19.600				ND	
S	82 Xylenes, Total	106		20.100				ND	7
	83 1,1,2,2-Tetrachloroethane	83		20.299				ND	
	85 N-Propylbenzene	91		20.422				ND	7
	86 2-Chlorotoluene	91		20.614				ND	7
	87 4-Ethyltoluene	105		20.635				ND	
	89 1,3,5-Trimethylbenzene	105		20.758				ND	
	91 tert-Butylbenzene	119		21.286				ND	
	92 1,2,4-Trimethylbenzene	105		21.388				ND	
	93 sec-Butylbenzene	105		21.644				ND	
	95 1,3-Dichlorobenzene	146		21.863				ND	
	94 4-Isopropyltoluene	119		21.868				ND	
	96 1,4-Dichlorobenzene	146		22.007				ND	
	97 Benzyl chloride	91		22.194				ND	7
	98 n-Butylbenzene	91		22.460				ND	7
	100 1,2-Dichlorobenzene	146		22.535				ND	
	102 1,2,4-Trichlorobenzene	180		24.825				ND	
	103 Hexachlorobutadiene	225		25.038				ND	
	104 Naphthalene	128		25.220				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

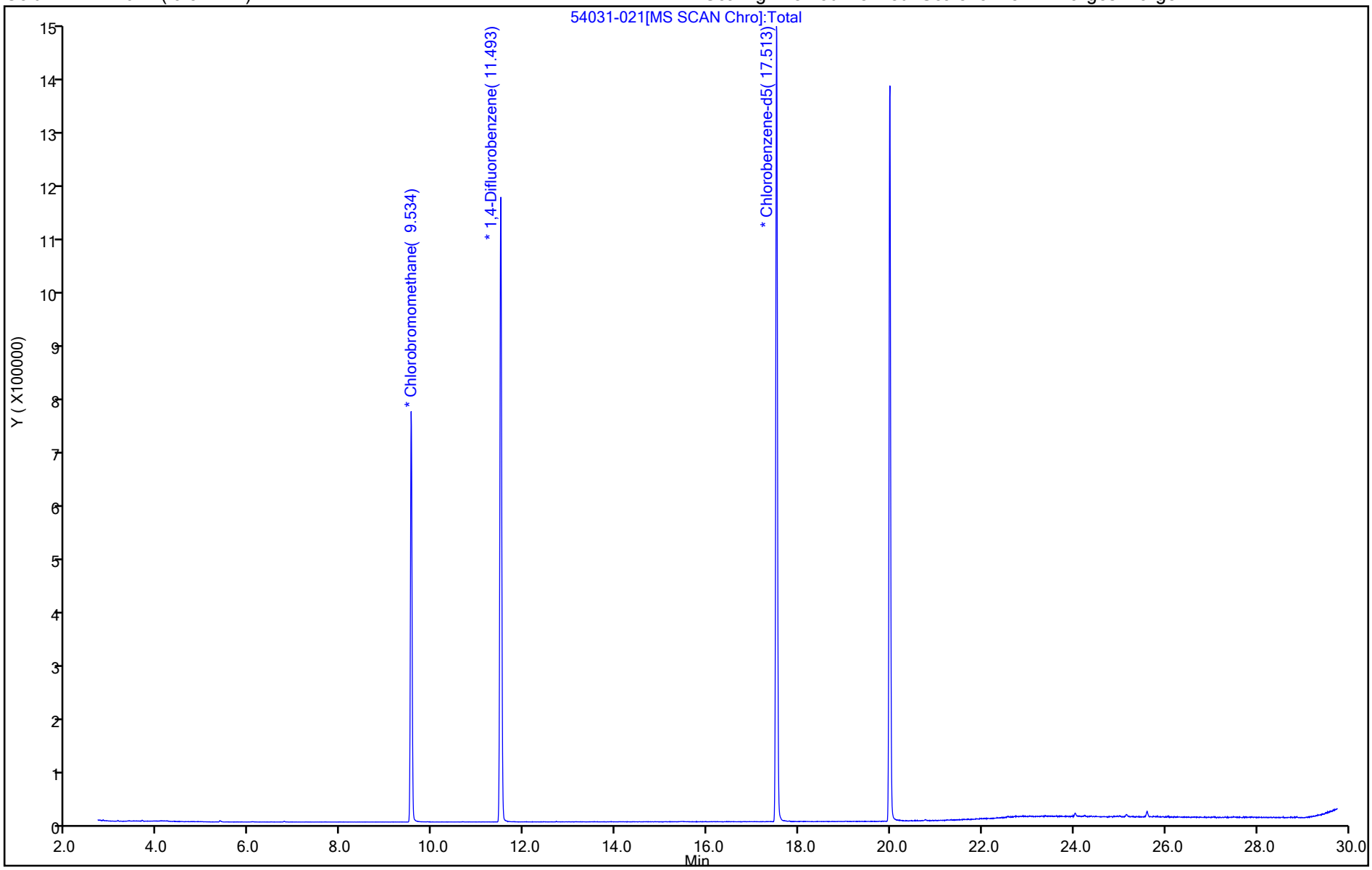
ATTO15CISs_00011 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 19-Jan-2023 09:01:49 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-021.D				
Injection Date:	19-Jan-2023 02:05:30	Instrument ID:	CHC.i	Operator ID:	vtp
Lims ID:	200-66478-A-1	Lab Sample ID:	200-66478-1	Worklist Smp#:	21
Client ID:	4312				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	20
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4784 Lab Sample ID: 200-66478-2

Matrix: Air Lab File ID: 54031-022.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 03:04

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4784 Lab Sample ID: 200-66478-2

Matrix: Air Lab File ID: 54031-022.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 03:04

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4784 | Lab Sample ID: 200-66478-2

Matrix: Air | Lab File ID: 54031-022.D

Analysis Method: TO-15 | Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 01/19/2023 03:04

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 187599 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-022.D
Lims ID: 200-66478-A-2
Client ID: 4784
Sample Type: Client
Inject. Date: 19-Jan-2023 03:04:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054031-022
Misc. Info.: 66478-2
Operator ID: vtp Instrument ID: CHC.i

Method: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 08:57:11 Calib Date: 18-Jan-2023 00:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHC.i\20230117-54020.b\54020-013.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: BKZ7 Date: 19-Jan-2023 09:02:20

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		2.805				ND	
2	Dichlorodifluoromethane	85		2.869				ND	7
3	Chlorodifluoromethane	51		2.901				ND	7
4	1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.093				ND	7
5	Chloromethane	50		3.194				ND	
6	Butane	43		3.381				ND	7
7	Vinyl chloride	62		3.402				ND	
8	Butadiene	54		3.472				ND	
9	Bromomethane	94		4.043				ND	
10	Chloroethane	64		4.251				ND	
13	Vinyl bromide	106		4.608				ND	
14	Trichlorofluoromethane	101		4.731				ND	
16	Ethanol	45		5.281				ND	
19	1,1,2-Trichloro-1,2,2-trifluoroe	101		5.756				ND	
20	1,1-Dichloroethene	96		5.756				ND	
21	Acetone	43		5.953				ND	
22	Carbon disulfide	76		6.114				ND	
23	Isopropyl alcohol	45		6.332				ND	
24	3-Chloro-1-propene	41		6.487				ND	
26	Methylene Chloride	49		6.759				ND	7
28	2-Methyl-2-propanol	59		7.095				ND	
29	trans-1,2-Dichloroethene	61		7.218				ND	
30	Methyl tert-butyl ether	73		7.240				ND	
32	Hexane	57		7.656				ND	
33	1,1-Dichloroethane	63		8.035				ND	
34	Vinyl acetate	43		8.142				ND	
35	cis-1,2-Dichloroethene	96		9.108				ND	
36	2-Butanone (MEK)	72		9.161				ND	
37	Ethyl acetate	88		9.257				ND	
* 38	Chlorobromomethane	128	9.540	9.540	0.000	89	173385	20.0	
39	Tetrahydrofuran	42		9.615				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.695				ND	
	41 1,1,1-Trichloroethane	97		9.967				ND	
	42 Cyclohexane	84		9.988				ND	
S	43 1,2-Dichloroethene, Total	61		10.200				ND	7
	44 Carbon tetrachloride	117		10.239				ND	
	45 Benzene	78		10.650				ND	
	46 Isooctane	57		10.725				ND	
	47 1,2-Dichloroethane	62		10.789				ND	
	48 n-Heptane	43		11.130				ND	
*	49 1,4-Difluorobenzene	114	11.493	11.493	0.000	98	978184	20.0	
	50 Trichloroethene	95		11.963				ND	
	53 1,2-Dichloropropane	63		12.448				ND	
	56 Dibromomethane	174		12.694				ND	
	55 Methyl methacrylate	69		12.699				ND	
	57 1,4-Dioxane	88		12.747				ND	
	58 Dichlorobromomethane	83		13.025				ND	
	59 cis-1,3-Dichloropropene	75		13.985				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		14.316				ND	
	62 Toluene	92		14.605				ND	
	66 trans-1,3-Dichloropropene	75		15.197				ND	
	67 1,1,2-Trichloroethane	83		15.554				ND	
	68 Tetrachloroethene	166		15.736				ND	
	69 2-Hexanone	43		16.078				ND	
	70 Chlorodibromomethane	129		16.328				ND	
	71 Ethylene Dibromide	107		16.568				ND	
*	72 Chlorobenzene-d5	117	17.518	17.513	0.005	99	805783	20.0	
	73 Chlorobenzene	112		17.577				ND	
	74 Ethylbenzene	91		17.764				ND	
	76 m-Xylene & p-Xylene	106		18.015				ND	
	77 o-Xylene	106		18.842				ND	
	78 Styrene	104		18.890				ND	
	80 Bromoform	173		19.290				ND	
	81 Isopropylbenzene	105		19.600				ND	
S	82 Xylenes, Total	106		20.100				ND	7
	83 1,1,2,2-Tetrachloroethane	83		20.299				ND	
	85 N-Propylbenzene	91		20.422				ND	
	86 2-Chlorotoluene	91		20.614				ND	
	87 4-Ethyltoluene	105		20.635				ND	
	89 1,3,5-Trimethylbenzene	105		20.758				ND	
	91 tert-Butylbenzene	119		21.286				ND	
	92 1,2,4-Trimethylbenzene	105		21.388				ND	
	93 sec-Butylbenzene	105		21.644				ND	
	95 1,3-Dichlorobenzene	146		21.863				ND	
	94 4-Isopropyltoluene	119		21.868				ND	7
	96 1,4-Dichlorobenzene	146		22.007				ND	
	97 Benzyl chloride	91		22.194				ND	7
	98 n-Butylbenzene	91		22.460				ND	7
	100 1,2-Dichlorobenzene	146		22.535				ND	
	102 1,2,4-Trichlorobenzene	180		24.825				ND	
	103 Hexachlorobutadiene	225		25.038				ND	
	104 Naphthalene	128		25.220				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

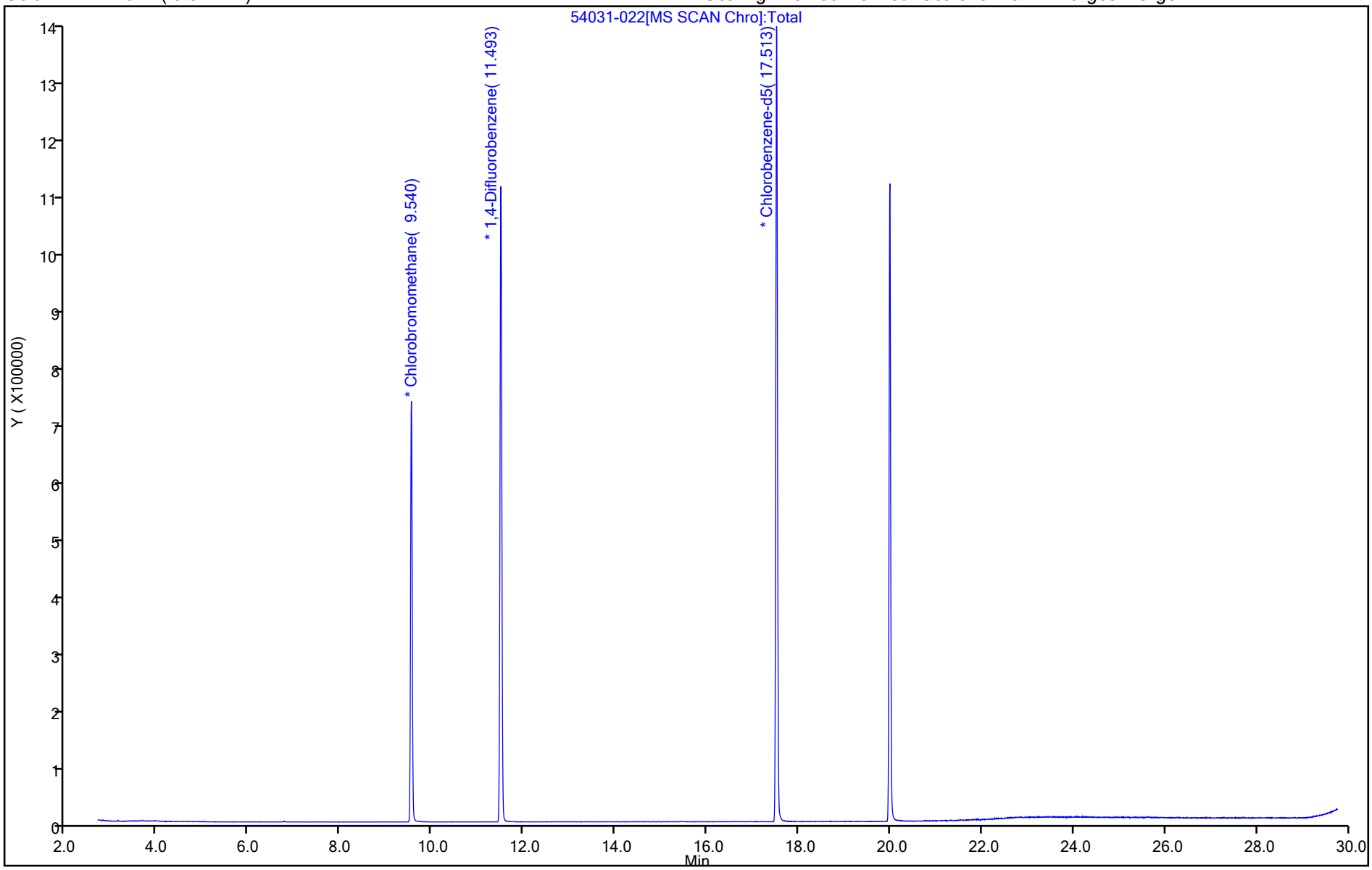
ATTO15CISs_00011 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 19-Jan-2023 09:02:20 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-022.D				
Injection Date:	19-Jan-2023 03:04:30	Instrument ID:	CHC.i	Operator ID:	vtp
Lims ID:	200-66478-A-2	Lab Sample ID:	200-66478-2	Worklist Smp#:	22
Client ID:	4784				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	21
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3725 | Lab Sample ID: 200-66478-3

Matrix: Air | Lab File ID: 54031-023.D

Analysis Method: TO-15 | Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 01/19/2023 04:03

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 187599 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3725 Lab Sample ID: 200-66478-3

Matrix: Air Lab File ID: 54031-023.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 04:03

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3725 Lab Sample ID: 200-66478-3

Matrix: Air Lab File ID: 54031-023.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 04:03

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-023.D
Lims ID: 200-66478-A-3
Client ID: 3725
Sample Type: Client
Inject. Date: 19-Jan-2023 04:03:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054031-023
Misc. Info.: 66478-3
Operator ID: vtp Instrument ID: CHC.i

Method: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 08:57:11 Calib Date: 18-Jan-2023 00:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHC.i\20230117-54020.b\54020-013.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: BKZ7 Date: 19-Jan-2023 09:02:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.805				ND	
2 Dichlorodifluoromethane	85		2.869				ND	7
3 Chlorodifluoromethane	51		2.901				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.093				ND	7
5 Chloromethane	50		3.194				ND	7
6 Butane	43		3.381				ND	7
7 Vinyl chloride	62		3.402				ND	
8 Butadiene	54		3.472				ND	
9 Bromomethane	94		4.043				ND	
10 Chloroethane	64		4.251				ND	
13 Vinyl bromide	106		4.608				ND	
14 Trichlorofluoromethane	101		4.731				ND	
16 Ethanol	45		5.281				ND	7
19 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.756				ND	
20 1,1-Dichloroethene	96		5.756				ND	
21 Acetone	43		5.953				ND	7
22 Carbon disulfide	76		6.114				ND	
23 Isopropyl alcohol	45		6.332				ND	
24 3-Chloro-1-propene	41		6.487				ND	
26 Methylene Chloride	49		6.759				ND	7
28 2-Methyl-2-propanol	59		7.095				ND	
29 trans-1,2-Dichloroethene	61		7.218				ND	
30 Methyl tert-butyl ether	73		7.240				ND	
32 Hexane	57		7.656				ND	
33 1,1-Dichloroethane	63		8.035				ND	
34 Vinyl acetate	43		8.142				ND	
35 cis-1,2-Dichloroethene	96		9.108				ND	
36 2-Butanone (MEK)	72		9.161				ND	
37 Ethyl acetate	88		9.257				ND	
* 38 Chlorobromomethane	128	9.535	9.540	-0.005	89	166840	20.0	
39 Tetrahydrofuran	42		9.615				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.695				ND	
	41 1,1,1-Trichloroethane	97		9.967				ND	
	42 Cyclohexane	84		9.988				ND	
S	43 1,2-Dichloroethene, Total	61		10.200				ND	7
	44 Carbon tetrachloride	117		10.239				ND	
	45 Benzene	78		10.650				ND	7
	46 Isooctane	57		10.725				ND	
	47 1,2-Dichloroethane	62		10.789				ND	
	48 n-Heptane	43		11.130				ND	
*	49 1,4-Difluorobenzene	114	11.493	11.493	0.000	98	933829	20.0	
	50 Trichloroethene	95		11.963				ND	
	53 1,2-Dichloropropane	63		12.448				ND	
	56 Dibromomethane	174		12.694				ND	
	55 Methyl methacrylate	69		12.699				ND	
	57 1,4-Dioxane	88		12.747				ND	
	58 Dichlorobromomethane	83		13.025				ND	
	59 cis-1,3-Dichloropropene	75		13.985				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		14.316				ND	
	62 Toluene	92		14.605				ND	
	66 trans-1,3-Dichloropropene	75		15.197				ND	
	67 1,1,2-Trichloroethane	83		15.554				ND	
	68 Tetrachloroethene	166		15.736				ND	
	69 2-Hexanone	43		16.078				ND	
	70 Chlorodibromomethane	129		16.328				ND	
	71 Ethylene Dibromide	107		16.568				ND	
*	72 Chlorobenzene-d5	117	17.513	17.513	0.000	98	765753	20.0	
	73 Chlorobenzene	112		17.577				ND	
	74 Ethylbenzene	91		17.764				ND	
	76 m-Xylene & p-Xylene	106		18.015				ND	
	77 o-Xylene	106		18.842				ND	
	78 Styrene	104		18.890				ND	
	80 Bromoform	173		19.290				ND	
	81 Isopropylbenzene	105		19.600				ND	
S	82 Xylenes, Total	106		20.100				ND	7
	83 1,1,2,2-Tetrachloroethane	83		20.299				ND	
	85 N-Propylbenzene	91		20.422				ND	
	86 2-Chlorotoluene	91		20.614				ND	7
	87 4-Ethyltoluene	105		20.635				ND	
	89 1,3,5-Trimethylbenzene	105		20.758				ND	
	91 tert-Butylbenzene	119		21.286				ND	
	92 1,2,4-Trimethylbenzene	105		21.388				ND	
	93 sec-Butylbenzene	105		21.644				ND	
	95 1,3-Dichlorobenzene	146		21.863				ND	
	94 4-Isopropyltoluene	119		21.868				ND	
	96 1,4-Dichlorobenzene	146		22.007				ND	
	97 Benzyl chloride	91		22.194				ND	7
	98 n-Butylbenzene	91		22.460				ND	7
	100 1,2-Dichlorobenzene	146		22.535				ND	
	102 1,2,4-Trichlorobenzene	180		24.825				ND	
	103 Hexachlorobutadiene	225		25.038				ND	
	104 Naphthalene	128		25.220				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

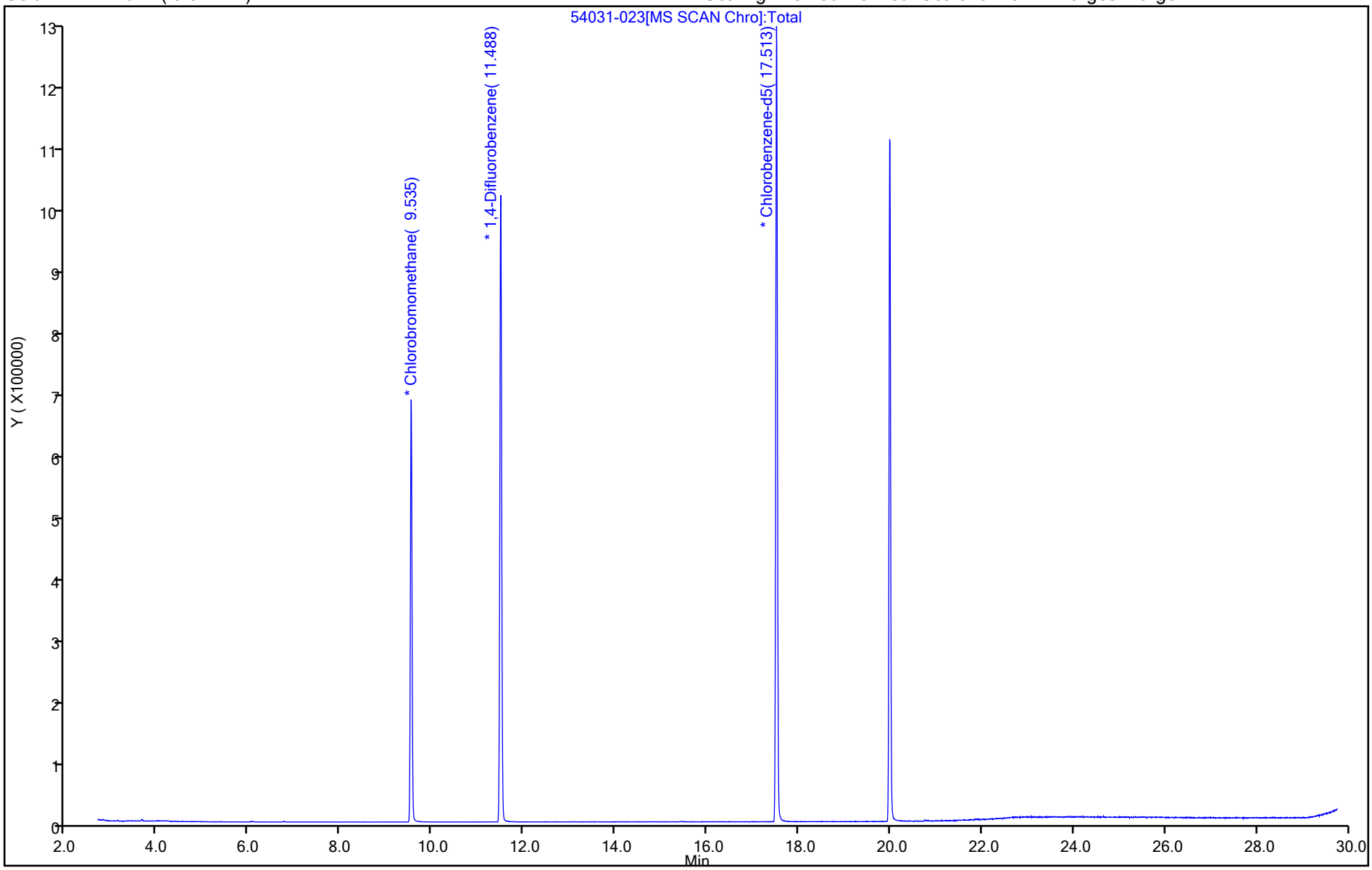
ATTO15ClSs_00011 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 19-Jan-2023 09:02:52 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-023.D				
Injection Date:	19-Jan-2023 04:03:30	Instrument ID:	CHC.i	Operator ID:	vtp
Lims ID:	200-66478-A-3	Lab Sample ID:	200-66478-3	Worklist Smp#:	23
Client ID:	3725				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	22
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 34000419 Lab Sample ID: 200-66478-4

Matrix: Air Lab File ID: 54031-024.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 05:01

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66478-1

SDG No.:

Client Sample ID: 34000419 | Lab Sample ID: 200-66478-4

Matrix: Air | Lab File ID: 54031-024.D

Analysis Method: TO-15 | Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 01/19/2023 05:01

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 187599 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 34000419 Lab Sample ID: 200-66478-4

Matrix: Air Lab File ID: 54031-024.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 05:01

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187599 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-024.D
Lims ID: 200-66478-A-4
Client ID: 34000419
Sample Type: Client
Inject. Date: 19-Jan-2023 05:01:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054031-024
Misc. Info.: 66478-4
Operator ID: vtp Instrument ID: CHC.i

Method: \\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 08:57:11 Calib Date: 18-Jan-2023 00:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHC.i\20230117-54020.b\54020-013.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: BKZ7 Date: 19-Jan-2023 09:03:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		2.805				ND	
2	Dichlorodifluoromethane	85		2.869				ND	7
3	Chlorodifluoromethane	51		2.901				ND	7
4	1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.093				ND	7
5	Chloromethane	50		3.194				ND	7
6	Butane	43		3.381				ND	7
7	Vinyl chloride	62		3.402				ND	
8	Butadiene	54		3.472				ND	
9	Bromomethane	94		4.043				ND	
10	Chloroethane	64		4.251				ND	
13	Vinyl bromide	106		4.608				ND	
14	Trichlorofluoromethane	101		4.731				ND	
16	Ethanol	45		5.281				ND	
19	1,1,2-Trichloro-1,2,2-trifluoroe	101		5.756				ND	
20	1,1-Dichloroethene	96		5.756				ND	
21	Acetone	43		5.953				ND	
22	Carbon disulfide	76		6.114				ND	
23	Isopropyl alcohol	45		6.332				ND	
24	3-Chloro-1-propene	41		6.487				ND	
26	Methylene Chloride	49		6.759				ND	7
28	2-Methyl-2-propanol	59		7.095				ND	
29	trans-1,2-Dichloroethene	61		7.218				ND	
30	Methyl tert-butyl ether	73		7.240				ND	
32	Hexane	57		7.656				ND	
33	1,1-Dichloroethane	63		8.035				ND	
34	Vinyl acetate	43		8.142				ND	
35	cis-1,2-Dichloroethene	96		9.108				ND	
36	2-Butanone (MEK)	72		9.161				ND	
37	Ethyl acetate	88		9.257				ND	
* 38	Chlorobromomethane	128	9.535	9.540	-0.005	89	163105	20.0	
39	Tetrahydrofuran	42		9.615				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.695				ND	
	41 1,1,1-Trichloroethane	97		9.967				ND	
	42 Cyclohexane	84		9.988				ND	
S	43 1,2-Dichloroethene, Total	61		10.200				ND	7
	44 Carbon tetrachloride	117		10.239				ND	
	45 Benzene	78		10.650				ND	
	46 Isooctane	57		10.725				ND	
	47 1,2-Dichloroethane	62		10.789				ND	
	48 n-Heptane	43		11.130				ND	
*	49 1,4-Difluorobenzene	114	11.493	11.493	0.000	98	904078	20.0	
	50 Trichloroethene	95		11.963				ND	
	53 1,2-Dichloropropane	63		12.448				ND	
	56 Dibromomethane	174		12.694				ND	
	55 Methyl methacrylate	69		12.699				ND	
	57 1,4-Dioxane	88		12.747				ND	
	58 Dichlorobromomethane	83		13.025				ND	
	59 cis-1,3-Dichloropropene	75		13.985				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		14.316				ND	
	62 Toluene	92		14.605				ND	
	66 trans-1,3-Dichloropropene	75		15.197				ND	
	67 1,1,2-Trichloroethane	83		15.554				ND	
	68 Tetrachloroethene	166		15.736				ND	
	69 2-Hexanone	43		16.078				ND	
	70 Chlorodibromomethane	129		16.328				ND	
	71 Ethylene Dibromide	107		16.568				ND	
*	72 Chlorobenzene-d5	117	17.513	17.513	0.000	98	742668	20.0	
	73 Chlorobenzene	112		17.577				ND	
	74 Ethylbenzene	91		17.764				ND	
	76 m-Xylene & p-Xylene	106		18.015				ND	
	77 o-Xylene	106		18.842				ND	
	78 Styrene	104		18.890				ND	
	80 Bromoform	173		19.290				ND	
	81 Isopropylbenzene	105		19.600				ND	
S	82 Xylenes, Total	106		20.100				ND	7
	83 1,1,2,2-Tetrachloroethane	83		20.299				ND	
	85 N-Propylbenzene	91		20.422				ND	
	86 2-Chlorotoluene	91		20.614				ND	
	87 4-Ethyltoluene	105		20.635				ND	
	89 1,3,5-Trimethylbenzene	105		20.758				ND	
	91 tert-Butylbenzene	119		21.286				ND	
	92 1,2,4-Trimethylbenzene	105		21.388				ND	
	93 sec-Butylbenzene	105		21.644				ND	
	95 1,3-Dichlorobenzene	146		21.863				ND	
	94 4-Isopropyltoluene	119		21.868				ND	
	96 1,4-Dichlorobenzene	146		22.007				ND	
	97 Benzyl chloride	91		22.194				ND	7
	98 n-Butylbenzene	91		22.460				ND	7
	100 1,2-Dichlorobenzene	146		22.535				ND	
	102 1,2,4-Trichlorobenzene	180		24.825				ND	
	103 Hexachlorobutadiene	225		25.038				ND	
	104 Naphthalene	128		25.220				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

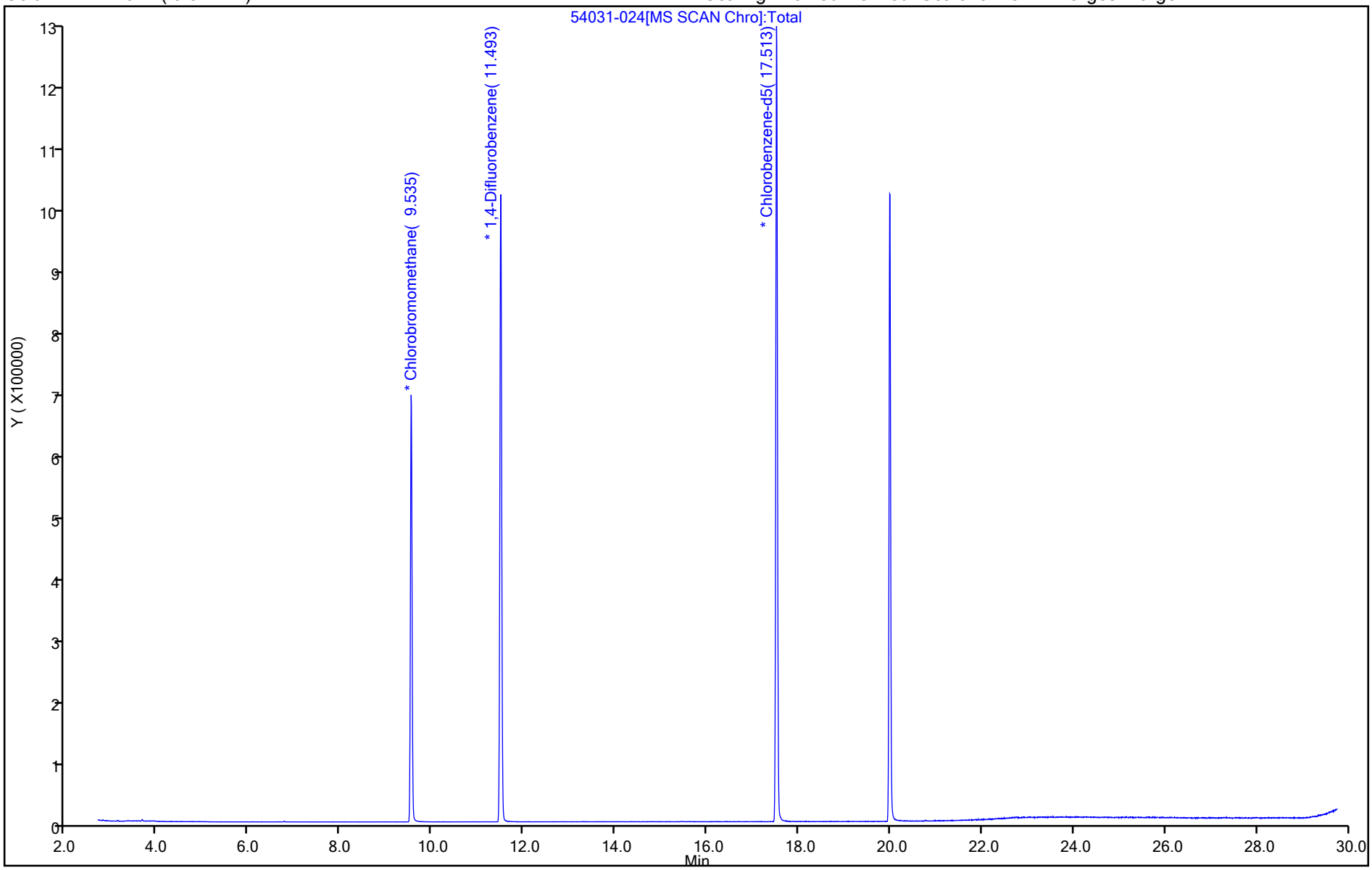
ATTO15ClSs_00011 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 19-Jan-2023 09:03:25 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20230118-54031.b\54031-024.D				
Injection Date:	19-Jan-2023 05:01:30	Instrument ID:	CHC.i	Operator ID:	vtp
Lims ID:	200-66478-A-4	Lab Sample ID:	200-66478-4	Worklist Smp#:	24
Client ID:	34000419				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	23
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4123 Lab Sample ID: 200-66478-5

Matrix: Air Lab File ID: 54043-005.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 10:50

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187638 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4123 Lab Sample ID: 200-66478-5

Matrix: Air Lab File ID: 54043-005.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 10:50

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187638 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4123 Lab Sample ID: 200-66478-5

Matrix: Air Lab File ID: 54043-005.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 10:50

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187638 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHC.i\20230119-54043.b\54043-005.D
Lims ID: 200-66478-A-5
Client ID: 4123
Sample Type: Client
Inject. Date: 19-Jan-2023 10:50:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054043-005
Misc. Info.: 66478-5
Operator ID: vtp Instrument ID: CHC.i

Method: \\chromfs\Burlington\ChromData\CHC.i\20230119-54043.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jan-2023 07:07:40 Calib Date: 18-Jan-2023 00:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHC.i\20230117-54020.b\54020-013.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1610

First Level Reviewer: puangmaleek Date: 20-Jan-2023 07:07:40

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		2.810				ND	7
2	Dichlorodifluoromethane	85		2.869				ND	7
3	Chlorodifluoromethane	51		2.906				ND	7
4	1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.093				ND	7
5	Chloromethane	50		3.200				ND	7
6	Butane	43		3.381				ND	7
7	Vinyl chloride	62		3.408				ND	
8	Butadiene	54		3.472				ND	
9	Bromomethane	94		4.043				ND	
10	Chloroethane	64		4.256				ND	
13	Vinyl bromide	106		4.614				ND	
14	Trichlorofluoromethane	101		4.731				ND	
16	Ethanol	45		5.286				ND	
19	1,1,2-Trichloro-1,2,2-trifluoroe	101		5.756				ND	
20	1,1-Dichloroethene	96		5.761				ND	
21	Acetone	43		5.959				ND	7
22	Carbon disulfide	76		6.114				ND	7
23	Isopropyl alcohol	45		6.338				ND	
24	3-Chloro-1-propene	41		6.492				ND	
26	Methylene Chloride	49		6.759				ND	7
28	2-Methyl-2-propanol	59		7.106				ND	
29	trans-1,2-Dichloroethene	61		7.224				ND	
30	Methyl tert-butyl ether	73		7.245				ND	
32	Hexane	57		7.661				ND	
33	1,1-Dichloroethane	63		8.035				ND	
34	Vinyl acetate	43		8.147				ND	
35	cis-1,2-Dichloroethene	96		9.108				ND	
36	2-Butanone (MEK)	72		9.161				ND	
37	Ethyl acetate	88		9.262				ND	
* 38	Chlorobromomethane	128	9.540	9.540	0.000	89	163083	20.0	
39	Tetrahydrofuran	42		9.620				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.700				ND	
	41 1,1,1-Trichloroethane	97		9.972				ND	
	42 Cyclohexane	84		9.988				ND	
S	43 1,2-Dichloroethene, Total	61		10.200				ND	7
	44 Carbon tetrachloride	117		10.239				ND	
	45 Benzene	78		10.650				ND	7
	46 Isooctane	57		10.725				ND	
	47 1,2-Dichloroethane	62		10.794				ND	
	48 n-Heptane	43		11.130				ND	
*	49 1,4-Difluorobenzene	114	11.493	11.493	0.000	98	908883	20.0	
	50 Trichloroethene	95		11.963				ND	
	53 1,2-Dichloropropane	63		12.448				ND	
	56 Dibromomethane	174		12.694				ND	
	55 Methyl methacrylate	69		12.705				ND	
	57 1,4-Dioxane	88		12.753				ND	
	58 Dichlorobromomethane	83		13.025				ND	
	59 cis-1,3-Dichloropropene	75		13.985				ND	
	61 4-Methyl-2-pentanone (MIBK)	43		14.322				ND	
	62 Toluene	92		14.605				ND	
	66 trans-1,3-Dichloropropene	75		15.197				ND	
	67 1,1,2-Trichloroethane	83		15.555				ND	
	68 Tetrachloroethene	166		15.736				ND	
	69 2-Hexanone	43		16.078				ND	
	70 Chlorodibromomethane	129		16.328				ND	
	71 Ethylene Dibromide	107		16.569				ND	
*	72 Chlorobenzene-d5	117	17.513	17.518	-0.005	98	749781	20.0	
	73 Chlorobenzene	112		17.572				ND	
	74 Ethylbenzene	91		17.759				ND	MU
	76 m-Xylene & p-Xylene	106		18.015				ND	
	77 o-Xylene	106		18.842				ND	
	78 Styrene	104		18.890				ND	
	80 Bromoform	173		19.290				ND	
	81 Isopropylbenzene	105		19.600				ND	
S	82 Xylenes, Total	106		20.100				ND	7
	83 1,1,2,2-Tetrachloroethane	83		20.299				ND	
	85 N-Propylbenzene	91		20.416				ND	7
	86 2-Chlorotoluene	91		20.614				ND	7
	87 4-Ethyltoluene	105		20.635				ND	
	89 1,3,5-Trimethylbenzene	105		20.758				ND	
	91 tert-Butylbenzene	119		21.286				ND	
	92 1,2,4-Trimethylbenzene	105		21.388				ND	
	93 sec-Butylbenzene	105		21.639				ND	
	95 1,3-Dichlorobenzene	146		21.863				ND	
	94 4-Isopropyltoluene	119		21.863				ND	
	96 1,4-Dichlorobenzene	146		22.001				ND	
	97 Benzyl chloride	91		22.194				ND	7
	98 n-Butylbenzene	91		22.455				ND	7
	100 1,2-Dichlorobenzene	146		22.535				ND	
	102 1,2,4-Trichlorobenzene	180		24.825				ND	
	103 Hexachlorobutadiene	225		25.038				ND	
	104 Naphthalene	128		25.220				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

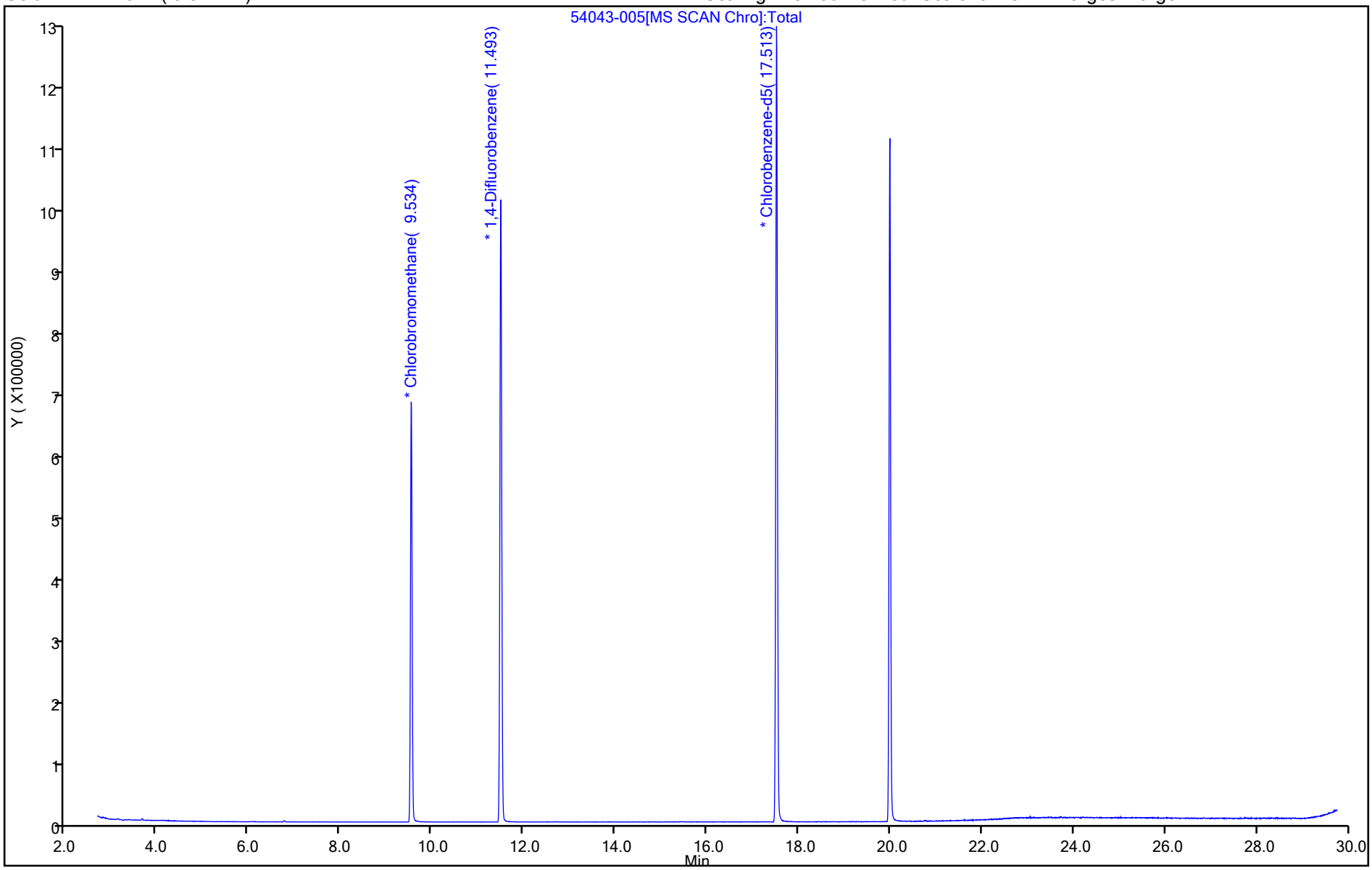
ATTO15CISs_00011	Amount Added:	40.00	Units: mL	Run Reagent

Report Date: 20-Jan-2023 07:07:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20230119-54043.b\54043-005.D				
Injection Date:	19-Jan-2023 10:50:30	Instrument ID:	CHC.i	Operator ID:	vtp
Lims ID:	200-66478-A-5	Lab Sample ID:	200-66478-5	Worklist Smp#:	5
Client ID:	4123				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



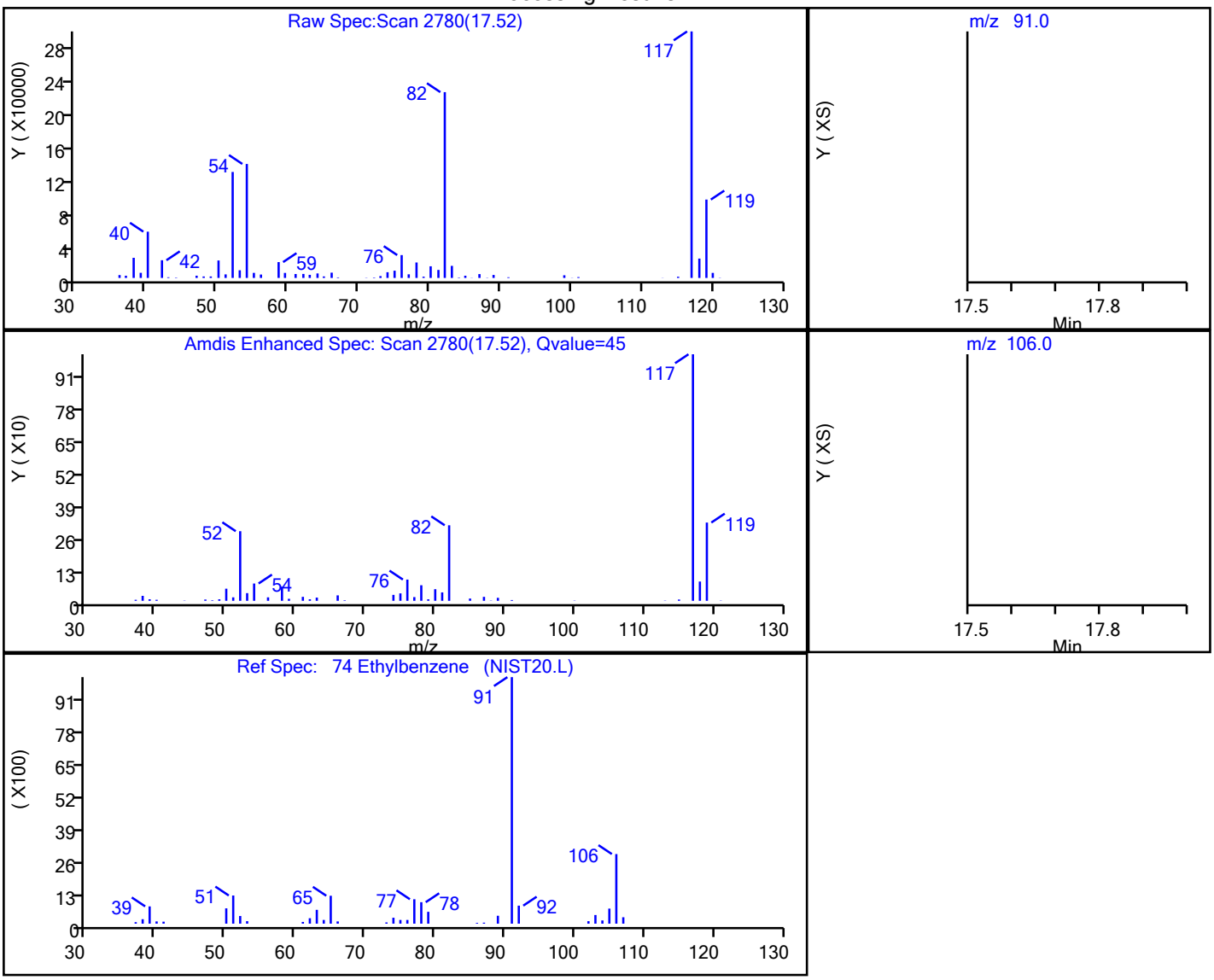
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHC.i\20230119-54043.b\54043-005.D				
Injection Date:	19-Jan-2023 10:50:30	Instrument ID:	CHC.i		
Lims ID:	200-66478-A-5	Lab Sample ID:	200-66478-5		
Client ID:	4123				
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
17.52	91.00	1878	0.016695
17.76	106.00	0	

Reviewer: puangmaleek, 20-Jan-2023 07:07:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 6007 Lab Sample ID: 200-66478-6

Matrix: Air Lab File ID: 200-54033-019.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 00:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 6007 Lab Sample ID: 200-66478-6

Matrix: Air Lab File ID: 200-54033-019.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 00:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 6007 Lab Sample ID: 200-66478-6

Matrix: Air Lab File ID: 200-54033-019.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 00:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-019.D
Lims ID: 200-66478-A-6
Client ID: 6007
Sample Type: Client
Inject. Date: 19-Jan-2023 00:56:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054033-019
Misc. Info.: 66478-6
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 10:16:04 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: W5NX Date: 19-Jan-2023 10:16:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.104				ND	MU
2 Dichlorodifluoromethane	85		3.163				ND	
3 Chlorodifluoromethane	51		3.185				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.383				ND	
5 Chloromethane	50		3.463				ND	
6 Vinyl chloride	62		3.666				ND	
7 Butane	43		3.672				ND	
8 Butadiene	54		3.741				ND	
9 Bromomethane	94		4.244				ND	
10 Chloroethane	64		4.437				ND	
12 Vinyl bromide	106		4.763				ND	
13 Trichlorofluoromethane	101		4.891				ND	
15 Ethanol	45	5.303	5.183	0.123	15	742	0.1624	
18 1,1-Dichloroethene	96		5.790				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.854				ND	7
22 Isopropyl alcohol	45		6.111				ND	
23 Carbon disulfide	76		6.170				ND	
25 3-Chloro-1-propene	41		6.421				ND	
26 Methylene Chloride	49		6.641				ND	7
27 2-Methyl-2-propanol	59		6.844				ND	
29 trans-1,2-Dichloroethene	61		7.127				ND	
30 Methyl tert-butyl ether	73		7.143				ND	
31 Hexane	57		7.630				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.887				ND	
34 2-Butanone (MEK)	72		8.850				ND	
35 cis-1,2-Dichloroethene	96		8.861				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.289	9.278	0.011	75	199764	10.0	
38 Tetrahydrofuran	42		9.348				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
39 Chloroform	83		9.465				ND	
S 43 1,2-Dichloroethene, Total	61		9.665				ND	7
40 1,1,1-Trichloroethane	97		9.786				ND	
41 Cyclohexane	84		9.931				ND	
42 Carbon tetrachloride	117		10.080				ND	
44 Benzene	78	10.460	10.455	0.005	1	1719	0.0290	
45 1,2-Dichloroethane	62		10.530				ND	
46 Isooctane	57		10.706				ND	
47 n-Heptane	43		11.049				ND	7
* 48 1,4-Difluorobenzene	114	11.273	11.268	0.005	94	1121162	10.0	
50 Trichloroethene	95		11.755				ND	
51 1,2-Dichloropropane	63		12.263				ND	
54 Methyl methacrylate	69		12.392				ND	
53 Dibromomethane	174		12.429				ND	7
55 1,4-Dioxane	88		12.429				ND	
56 Dichlorobromomethane	83		12.782				ND	
58 cis-1,3-Dichloropropene	75		13.670				ND	
59 4-Methyl-2-pentanone (MIBK)	43		13.986				ND	
60 Toluene	92		14.371				ND	MU
65 trans-1,3-Dichloropropene	75		14.826				ND	
66 1,1,2-Trichloroethane	83		15.227				ND	
67 Tetrachloroethene	166		15.441				ND	
68 2-Hexanone	43		15.698				ND	
69 Chlorodibromomethane	129		16.008				ND	
70 Ethylene Dibromide	107		16.259				ND	
* 71 Chlorobenzene-d5	117	17.238	17.233	0.005	86	818719	10.0	
72 Chlorobenzene	112		17.297				ND	
73 Ethylbenzene	91		17.511				ND	MU
74 m-Xylene & p-Xylene	106		17.795				ND	
76 o-Xylene	106	18.603	18.603	-0.001	94	1256	0.0374	M
77 Styrene	104		18.640				ND	
78 Bromoform	173		19.004				ND	
79 Isopropylbenzene	105		19.362				ND	
S 82 Xylenes, Total	106				0		0.0374	
80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
83 N-Propylbenzene	91		20.127				ND	
84 2-Chlorotoluene	91		20.277				ND	
85 4-Ethyltoluene	105		20.341				ND	
86 1,3,5-Trimethylbenzene	105		20.443				ND	
89 tert-Butylbenzene	119		20.946				ND	7
90 1,2,4-Trimethylbenzene	105		21.037				ND	
91 sec-Butylbenzene	105		21.283				ND	
92 1,3-Dichlorobenzene	146		21.454				ND	7
93 4-Isopropyltoluene	119		21.507				ND	7
94 1,4-Dichlorobenzene	146		21.598				ND	7
95 Benzyl chloride	91		21.754				ND	
97 n-Butylbenzene	91		22.074				ND	
96 1,2-Dichlorobenzene	146		22.096				ND	7
100 1,2,4-Trichlorobenzene	180		24.557				ND	
101 Hexachlorobutadiene	225		24.808				ND	
102 Naphthalene	128		25.033				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

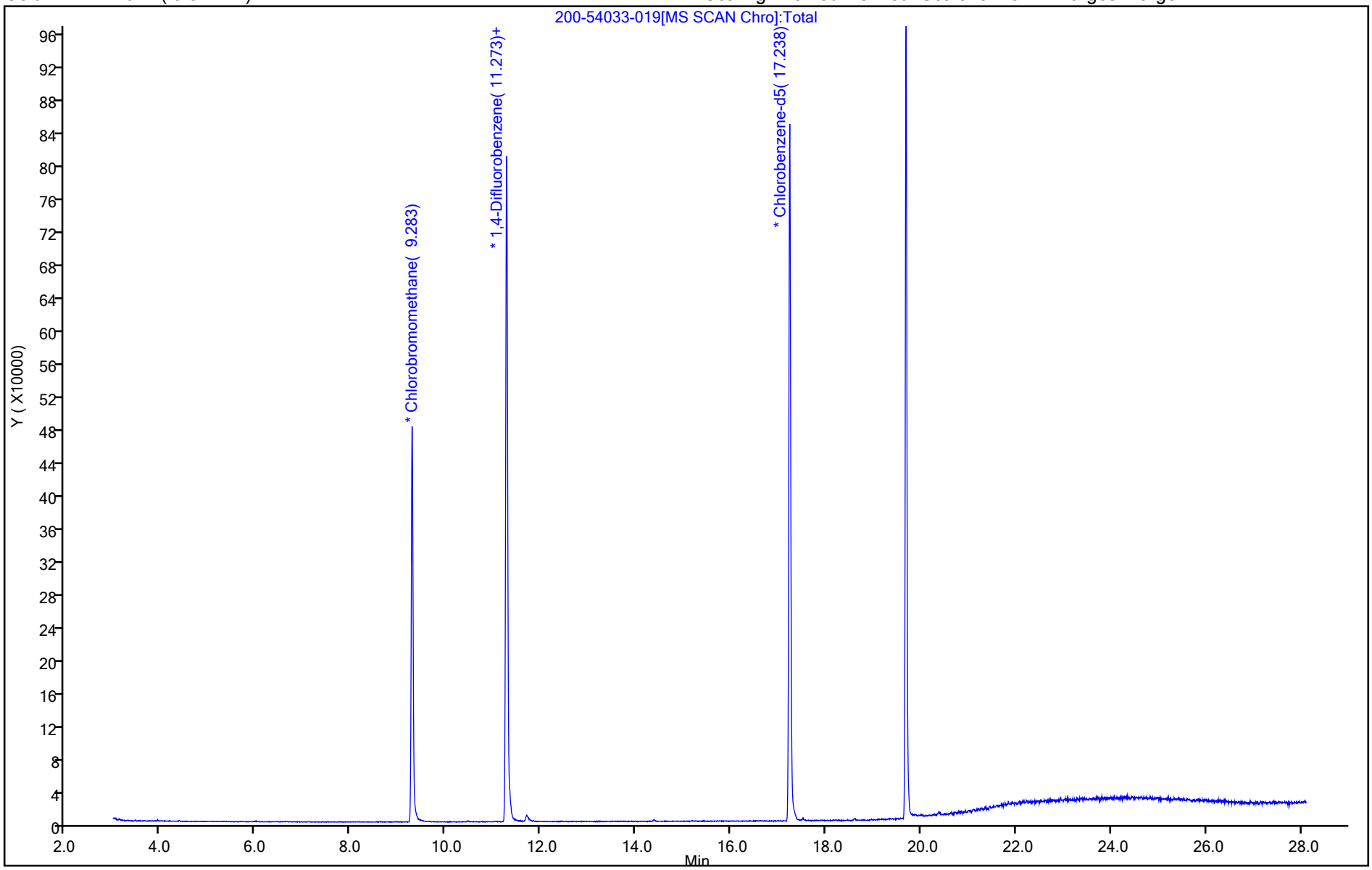
ATTO15GIS_00019	Amount Added: 20.00	Units: mL	Run Reagent

Report Date: 19-Jan-2023 10:16:52 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-019.D				
Injection Date:	19-Jan-2023 00:56:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-6	Lab Sample ID:	200-66478-6	Worklist Smp#:	19
Client ID:	6007				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	19
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



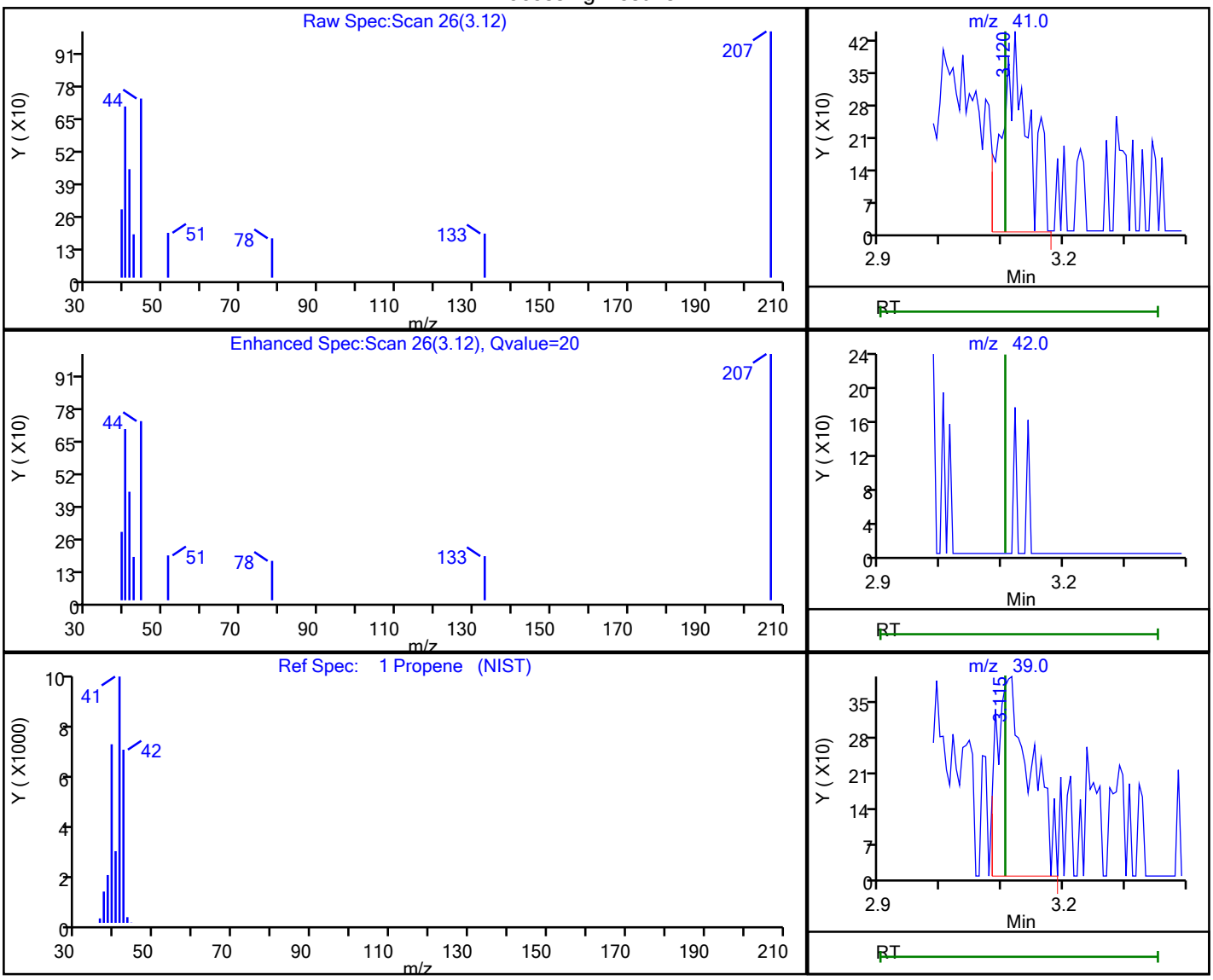
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-019.D				
Injection Date:	19-Jan-2023 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-6	Lab Sample ID:	200-66478-6		
Client ID:	6007				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

1 Propene, CAS: 115-07-1

Processing Results



RT	Mass	Response	Amount
3.12	41.00	1272	0.108503
3.10	42.00	0	
3.12	39.00	1520	

Reviewer: W5NX, 19-Jan-2023 10:14:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

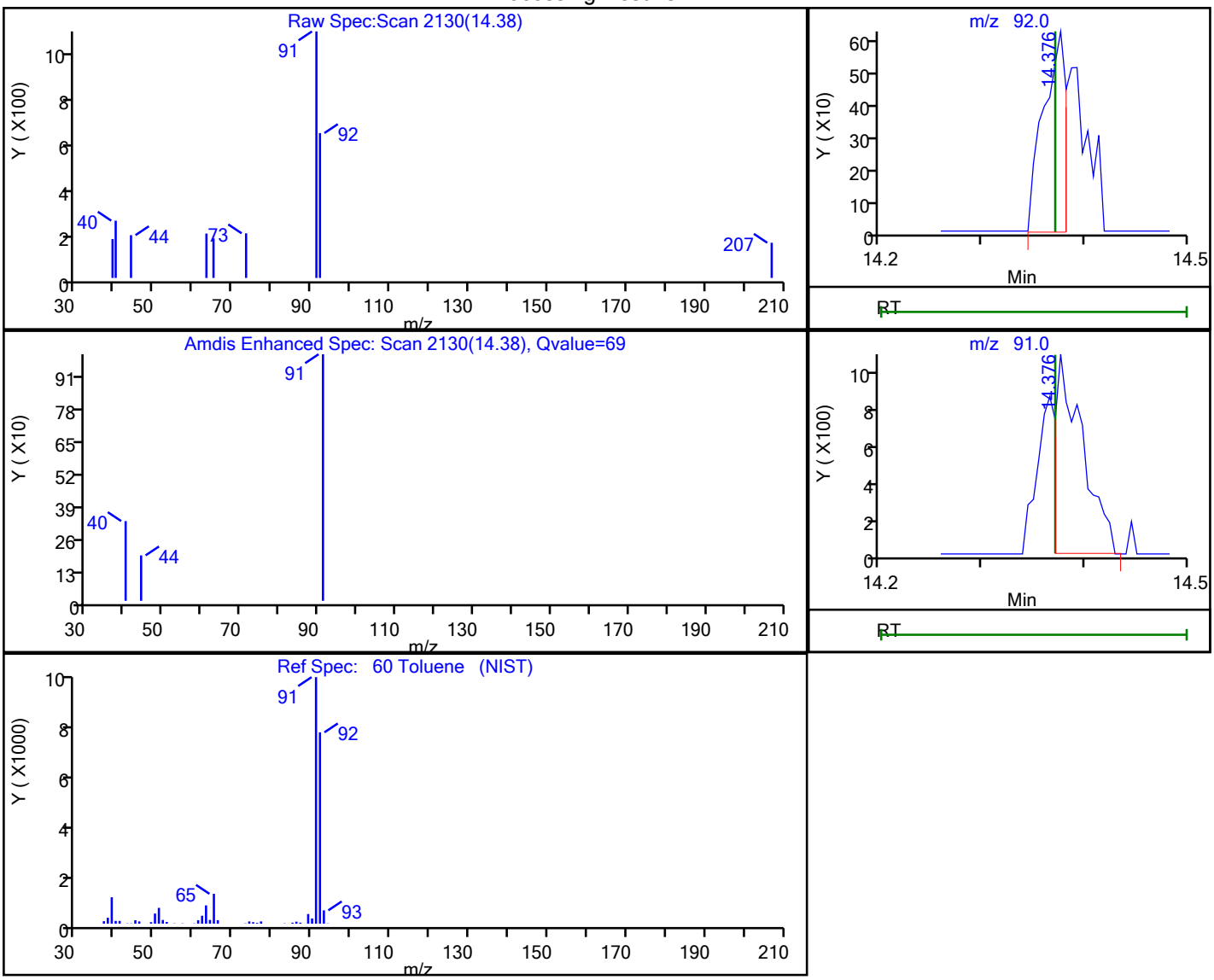
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-019.D				
Injection Date:	19-Jan-2023 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-6	Lab Sample ID:	200-66478-6		
Client ID:	6007				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
14.38	92.00	957	0.024760
14.38	91.00	1978	

Reviewer: W5NX, 19-Jan-2023 10:15:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

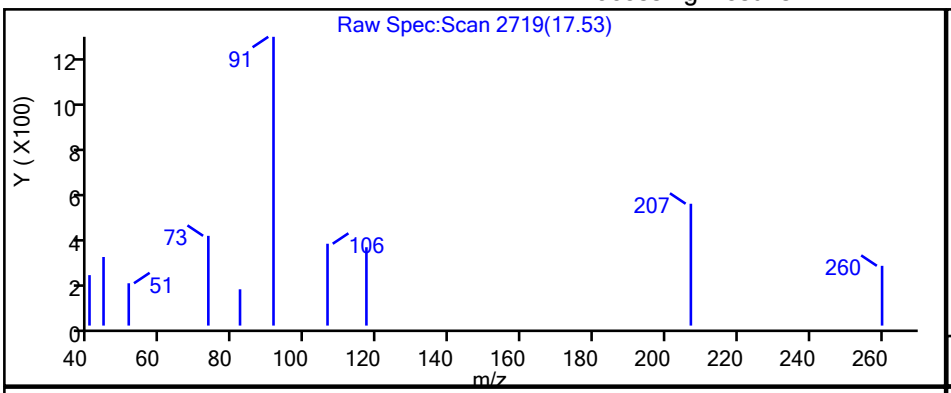
User Disabled Compound Report

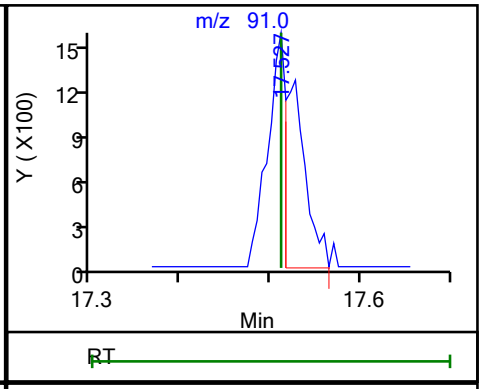
Eurofins Burlington

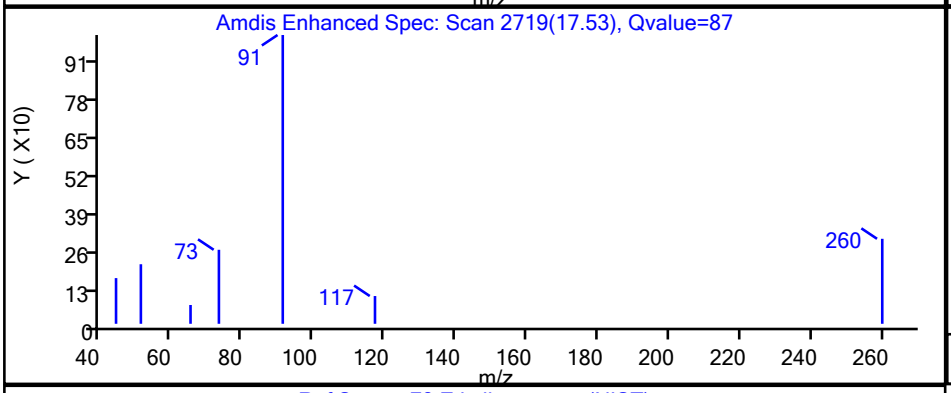
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-019.D				
Injection Date:	19-Jan-2023 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-6	Lab Sample ID:	200-66478-6		
Client ID:	6007				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

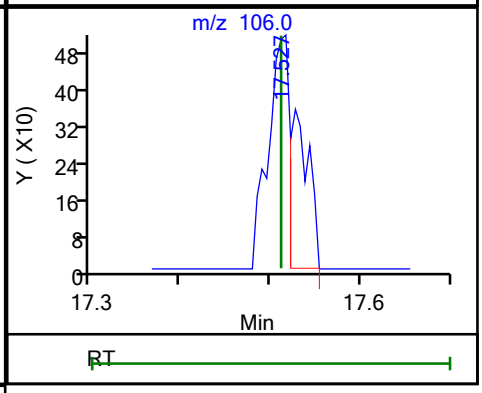
73 Ethylbenzene, CAS: 100-41-4

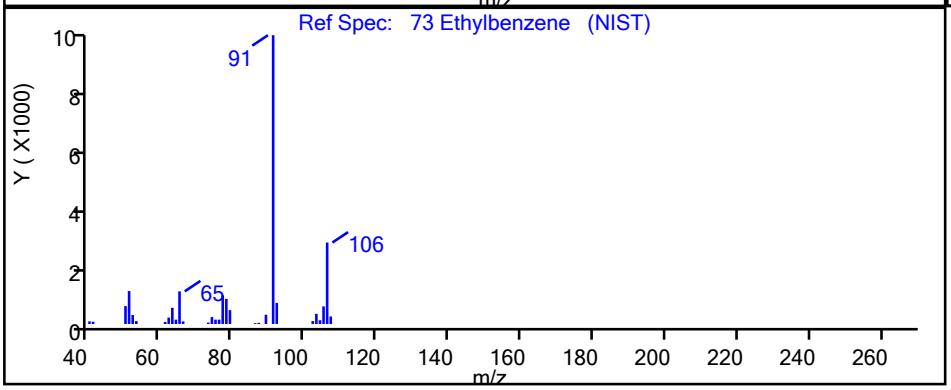
Processing Results











RT	Mass	Response	Amount
17.53	91.00	1954	0.022167
17.53	106.00	508	

Reviewer: W5NX, 19-Jan-2023 10:15:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Burlington

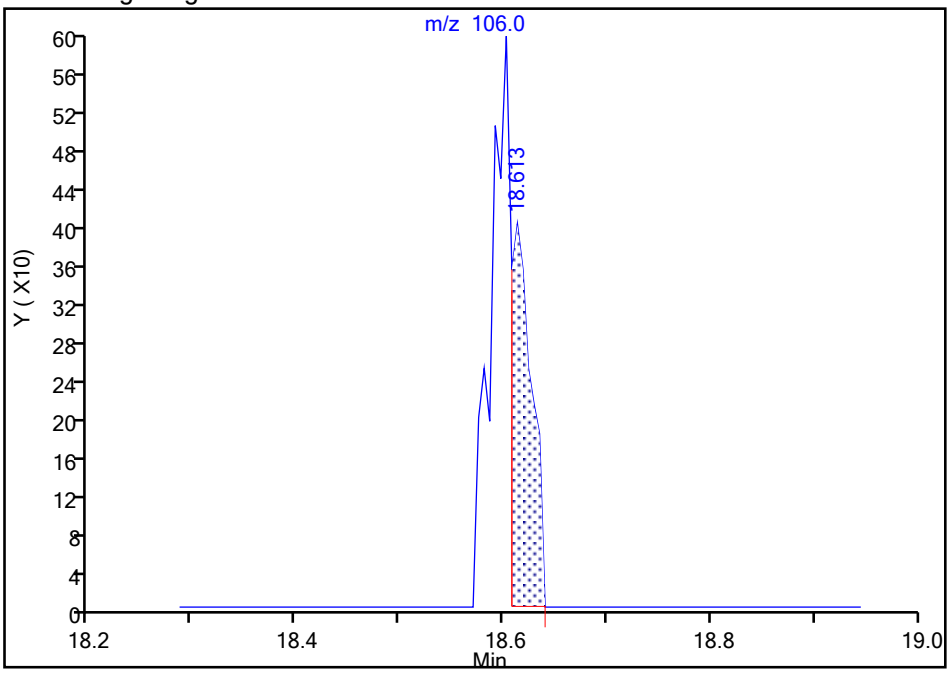
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-019.D				
Injection Date:	19-Jan-2023 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-6	Lab Sample ID:	200-66478-6		
Client ID:	6007				
Operator ID:	vtp	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 o-Xylene, CAS: 95-47-6

Signal: 1

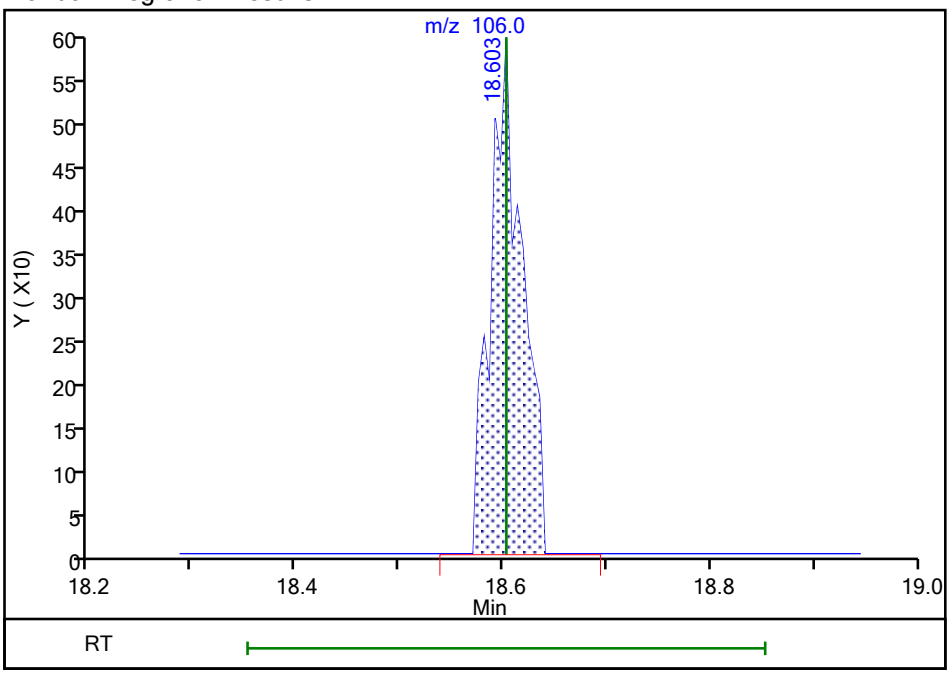
Processing Integration Results

RT: 18.61
Area: 558
Amount: 0.016621
Amount Units: ppb v/v



Manual Integration Results

RT: 18.60
Area: 1256
Amount: 0.037413
Amount Units: ppb v/v



Reviewer: W5NX, 19-Jan-2023 10:15:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4098 Lab Sample ID: 200-66478-7

Matrix: Air Lab File ID: 200-54033-020.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 01:49

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4098 | Lab Sample ID: 200-66478-7

Matrix: Air | Lab File ID: 200-54033-020.D

Analysis Method: TO-15 | Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 01/19/2023 01:49

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 187602 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4098 Lab Sample ID: 200-66478-7

Matrix: Air Lab File ID: 200-54033-020.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 01:49

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-020.D
Lims ID: 200-66478-A-7
Client ID: 4098
Sample Type: Client
Inject. Date: 19-Jan-2023 01:49:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054033-020
Misc. Info.: 66478-7
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 10:19:21 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: W5NX Date: 19-Jan-2023 10:19:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.104				ND	7
2 Dichlorodifluoromethane	85		3.163				ND	
3 Chlorodifluoromethane	51		3.185				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.383				ND	
5 Chloromethane	50		3.463				ND	
6 Vinyl chloride	62		3.666				ND	
7 Butane	43		3.672				ND	
8 Butadiene	54		3.741				ND	
9 Bromomethane	94		4.244				ND	
10 Chloroethane	64		4.437				ND	
12 Vinyl bromide	106		4.763				ND	
13 Trichlorofluoromethane	101		4.891				ND	
15 Ethanol	45		5.180				ND	MU
18 1,1-Dichloroethene	96		5.790				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.854				ND	7
22 Isopropyl alcohol	45		6.111				ND	7
23 Carbon disulfide	76		6.170				ND	
25 3-Chloro-1-propene	41		6.421				ND	7
26 Methylene Chloride	49		6.641				ND	7
27 2-Methyl-2-propanol	59		6.844				ND	
29 trans-1,2-Dichloroethene	61		7.127				ND	
30 Methyl tert-butyl ether	73		7.143				ND	
31 Hexane	57		7.630				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.887				ND	
34 2-Butanone (MEK)	72		8.850				ND	
35 cis-1,2-Dichloroethene	96		8.861				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.283	9.278	0.005	75	201988	10.0	
38 Tetrahydrofuran	42		9.348				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
39 Chloroform	83		9.465				ND	
S 43 1,2-Dichloroethene, Total	61		9.665				ND	7
40 1,1,1-Trichloroethane	97		9.786				ND	
41 Cyclohexane	84		9.931				ND	
42 Carbon tetrachloride	117		10.080				ND	
44 Benzene	78	10.466	10.455	0.011	14	1840	0.0312	
45 1,2-Dichloroethane	62		10.530				ND	
46 Isooctane	57		10.706				ND	
47 n-Heptane	43		11.049				ND	
* 48 1,4-Difluorobenzene	114	11.279	11.268	0.011	94	1115504	10.0	
50 Trichloroethene	95		11.755				ND	
51 1,2-Dichloropropane	63		12.263				ND	
54 Methyl methacrylate	69		12.392				ND	
53 Dibromomethane	174		12.429				ND	7
55 1,4-Dioxane	88		12.429				ND	
56 Dichlorobromomethane	83		12.782				ND	
58 cis-1,3-Dichloropropene	75		13.670				ND	
59 4-Methyl-2-pentanone (MIBK)	43		13.986				ND	
60 Toluene	92	14.371	14.366	0.000	93	1555	0.0381	
65 trans-1,3-Dichloropropene	75		14.826				ND	
66 1,1,2-Trichloroethane	83		15.227				ND	
67 Tetrachloroethene	166		15.441				ND	
68 2-Hexanone	43		15.698				ND	
69 Chlorodibromomethane	129		16.008				ND	
70 Ethylene Dibromide	107		16.259				ND	
* 71 Chlorobenzene-d5	117	17.238	17.233	0.005	85	864137	10.0	
72 Chlorobenzene	112		17.297				ND	
73 Ethylbenzene	91	17.517	17.511	0.006	93	4154	0.0446	
74 m-Xylene & p-Xylene	106		17.795				ND	
76 o-Xylene	106	18.613	18.613	0.010	94	1549	0.0437	M
77 Styrene	104		18.640				ND	
78 Bromoform	173		19.004				ND	
79 Isopropylbenzene	105		19.362				ND	
S 82 Xylenes, Total	106				0		0.0437	
80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
83 N-Propylbenzene	91		20.127				ND	
84 2-Chlorotoluene	91		20.277				ND	
85 4-Ethyltoluene	105		20.341				ND	
86 1,3,5-Trimethylbenzene	105		20.443				ND	
89 tert-Butylbenzene	119		20.946				ND	7
90 1,2,4-Trimethylbenzene	105		21.037				ND	7
91 sec-Butylbenzene	105		21.283				ND	
92 1,3-Dichlorobenzene	146		21.454				ND	7
93 4-Isopropyltoluene	119		21.507				ND	7
94 1,4-Dichlorobenzene	146		21.598				ND	7
95 Benzyl chloride	91		21.754				ND	
97 n-Butylbenzene	91		22.074				ND	
96 1,2-Dichlorobenzene	146		22.096				ND	7
100 1,2,4-Trichlorobenzene	180		24.557				ND	
101 Hexachlorobutadiene	225		24.808				ND	
102 Naphthalene	128		25.033				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

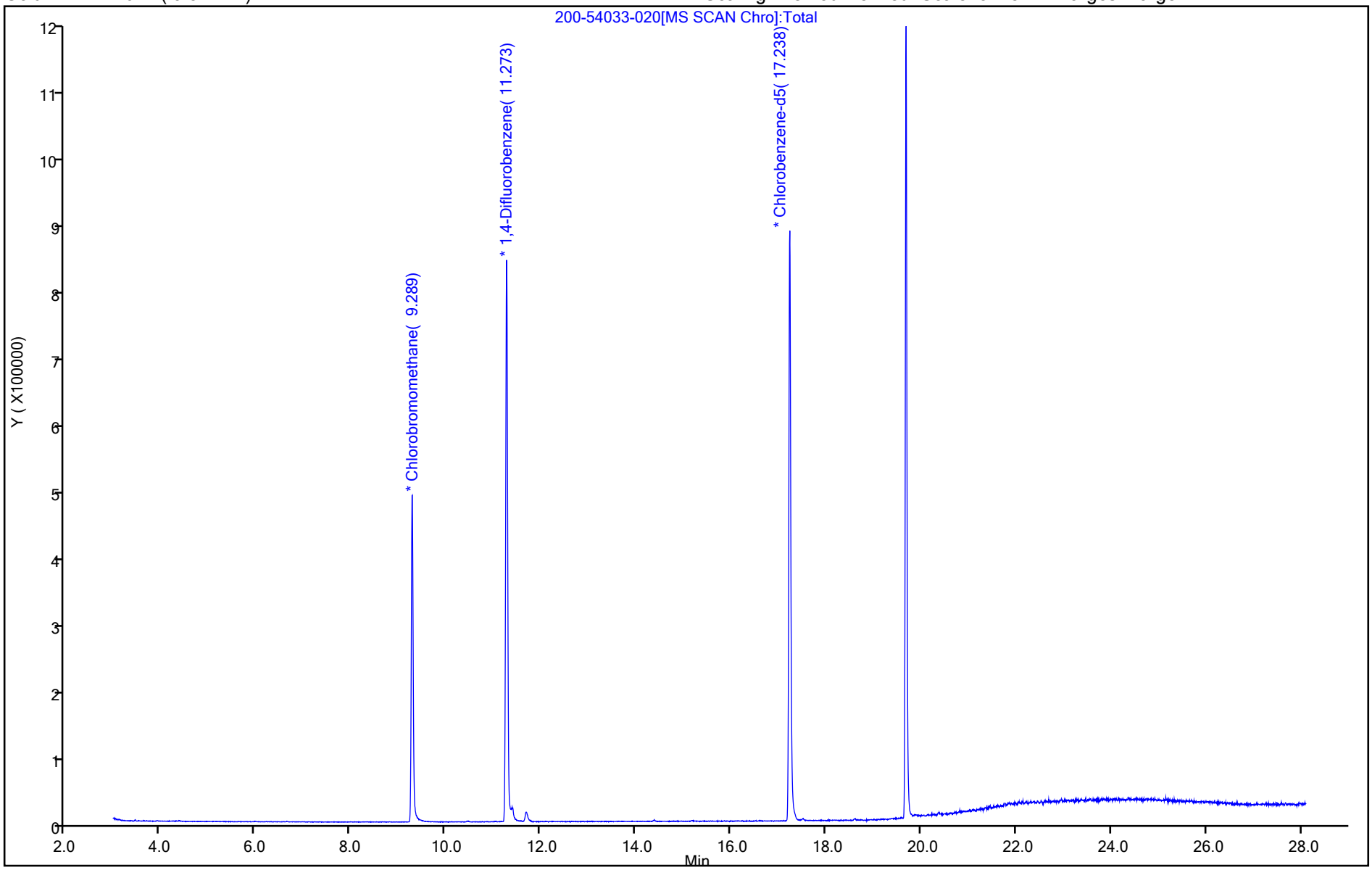
ATTO15GIS_00019	Amount Added: 20.00	Units: mL	Run Reagent

Report Date: 19-Jan-2023 10:19:22 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-020.D				
Injection Date:	19-Jan-2023 01:49:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-7	Lab Sample ID:	200-66478-7	Worklist Smp#:	20
Client ID:	4098				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	20
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



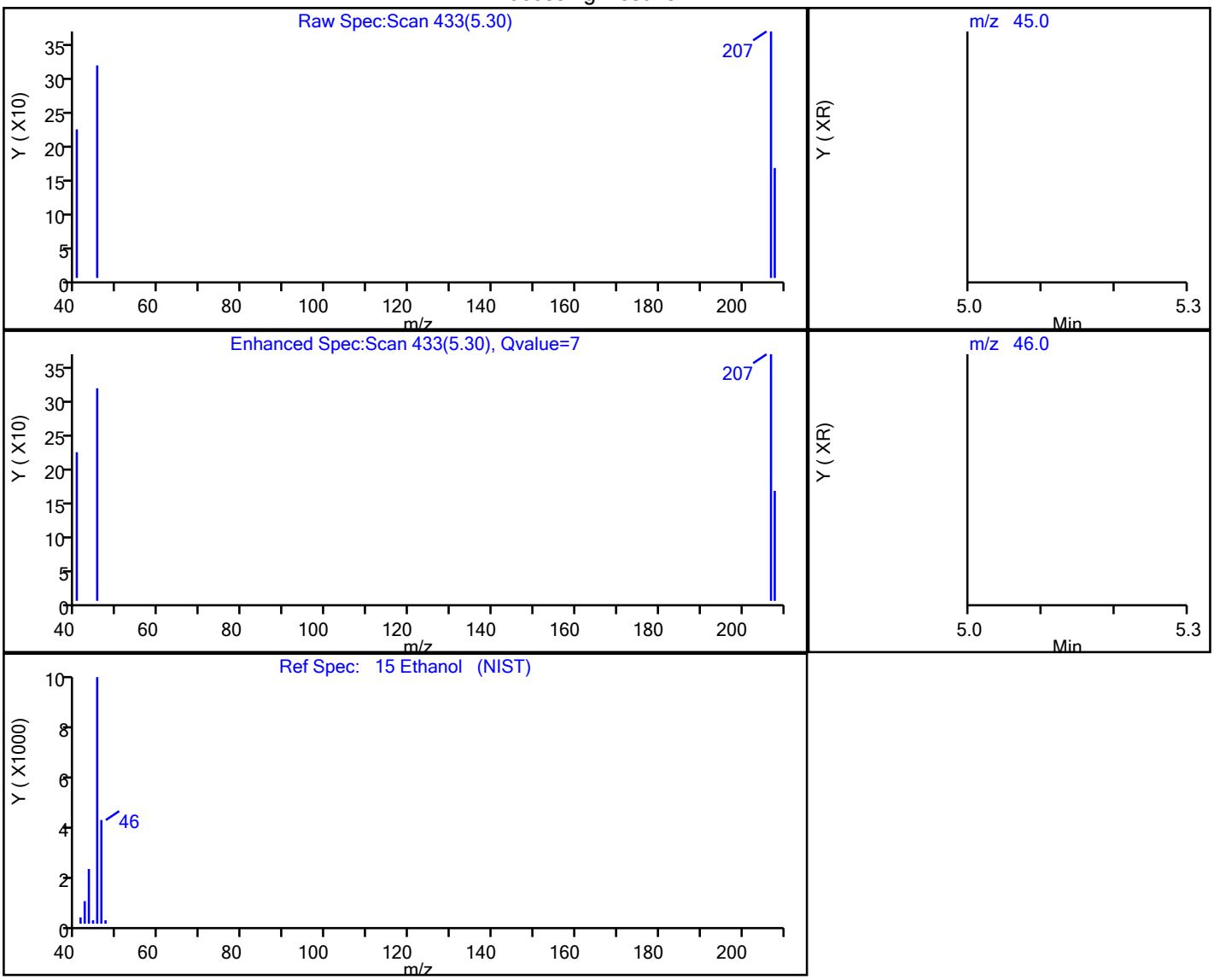
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-020.D				
Injection Date:	19-Jan-2023 01:49:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-7	Lab Sample ID:	200-66478-7		
Client ID:	4098				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

15 Ethanol, CAS: 64-17-5

Processing Results



RT	Mass	Response	Amount
5.30	45.00	312	0.067515
5.18	46.00	0	

Reviewer: W5NX, 19-Jan-2023 10:18:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

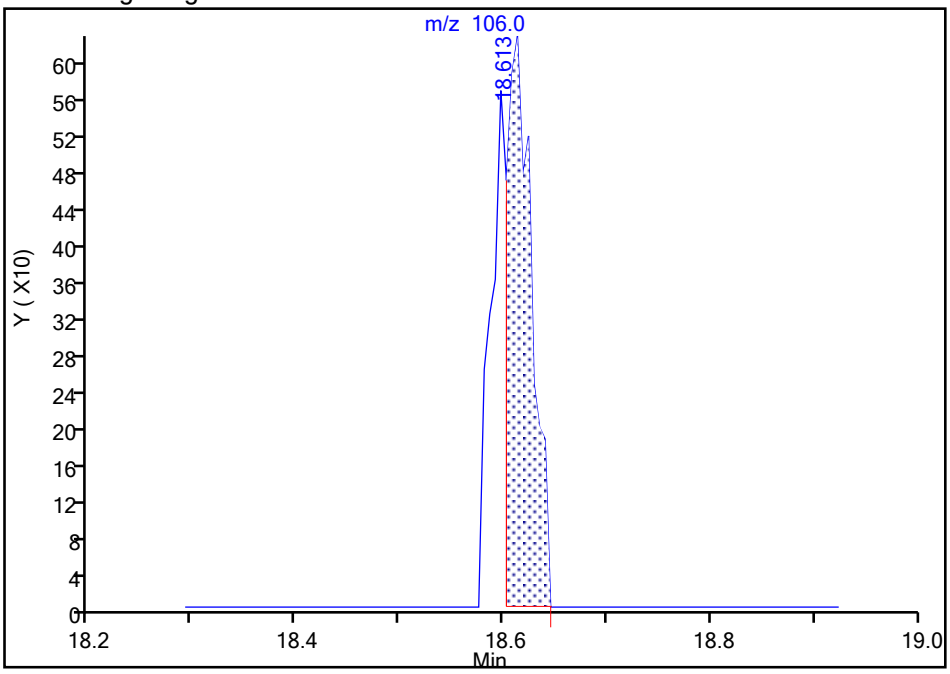
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-020.D				
Injection Date:	19-Jan-2023 01:49:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-7	Lab Sample ID:	200-66478-7		
Client ID:	4098				
Operator ID:	vtp	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 o-Xylene, CAS: 95-47-6

Signal: 1

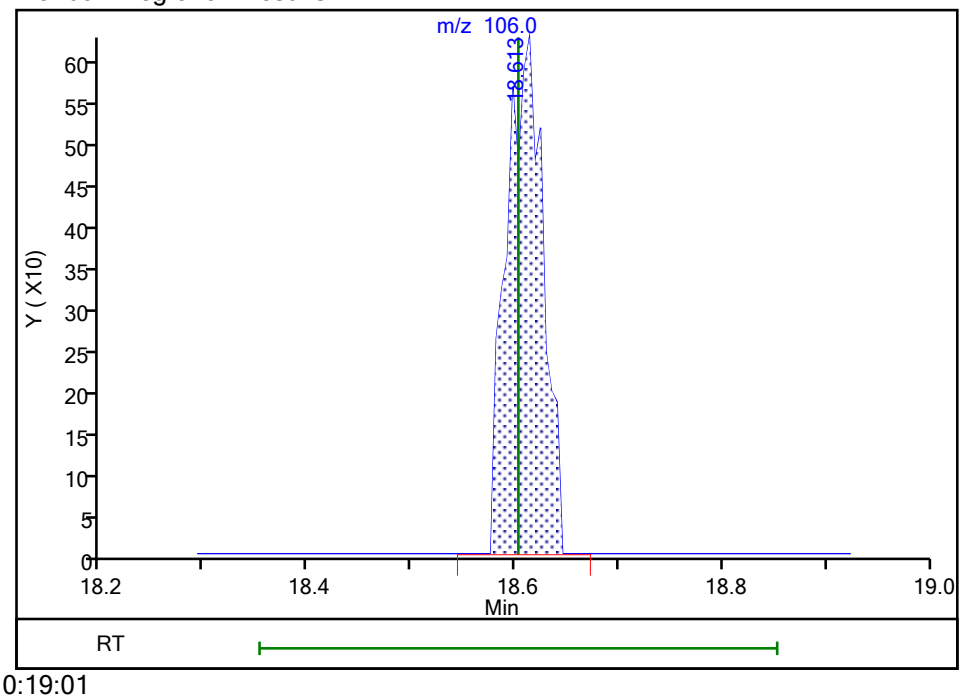
Processing Integration Results

RT: 18.61
Area: 1062
Amount: 0.029971
Amount Units: ppb v/v



Manual Integration Results

RT: 18.61
Area: 1549
Amount: 0.043715
Amount Units: ppb v/v



Reviewer: W5NX, 19-Jan-2023 10:19:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3525 Lab Sample ID: 200-66478-8

Matrix: Air Lab File ID: 200-54033-021.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 02:42

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3525 Lab Sample ID: 200-66478-8

Matrix: Air Lab File ID: 200-54033-021.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 02:42

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3525 Lab Sample ID: 200-66478-8

Matrix: Air Lab File ID: 200-54033-021.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 02:42

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D
Lims ID: 200-66478-A-8
Client ID: 3525
Sample Type: Client
Inject. Date: 19-Jan-2023 02:42:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054033-021
Misc. Info.: 66478-8
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 10:21:18 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: W5NX Date: 19-Jan-2023 10:21:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.104				ND	7
2 Dichlorodifluoromethane	85		3.163				ND	
3 Chlorodifluoromethane	51		3.185				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.383				ND	
5 Chloromethane	50		3.463				ND	
6 Vinyl chloride	62		3.666				ND	
7 Butane	43		3.672				ND	7
8 Butadiene	54		3.741				ND	
9 Bromomethane	94		4.244				ND	
10 Chloroethane	64		4.437				ND	
12 Vinyl bromide	106		4.763				ND	
13 Trichlorofluoromethane	101		4.891				ND	
15 Ethanol	45		5.180				ND	
18 1,1-Dichloroethene	96		5.790				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.854				ND	7
22 Isopropyl alcohol	45		6.111				ND	
23 Carbon disulfide	76		6.170				ND	
25 3-Chloro-1-propene	41		6.421				ND	
26 Methylene Chloride	49		6.641				ND	7
27 2-Methyl-2-propanol	59		6.844				ND	
29 trans-1,2-Dichloroethene	61		7.127				ND	
30 Methyl tert-butyl ether	73		7.143				ND	
31 Hexane	57		7.630				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.887				ND	
34 2-Butanone (MEK)	72		8.850				ND	
35 cis-1,2-Dichloroethene	96		8.861				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.283	9.278	0.005	75	193839	10.0	
38 Tetrahydrofuran	42		9.348				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
39 Chloroform	83		9.465				ND	
S 43 1,2-Dichloroethene, Total	61		9.665				ND	7
40 1,1,1-Trichloroethane	97		9.786				ND	
41 Cyclohexane	84		9.931				ND	
42 Carbon tetrachloride	117		10.080				ND	
44 Benzene	78		10.455				ND	MU
45 1,2-Dichloroethane	62		10.530				ND	
46 Isooctane	57		10.706				ND	
47 n-Heptane	43		11.049				ND	7
* 48 1,4-Difluorobenzene	114	11.274	11.268	0.006	94	1100659	10.0	
50 Trichloroethene	95		11.755				ND	
51 1,2-Dichloropropane	63		12.263				ND	
54 Methyl methacrylate	69		12.392				ND	
53 Dibromomethane	174		12.429				ND	7
55 1,4-Dioxane	88		12.429				ND	
56 Dichlorobromomethane	83		12.782				ND	
58 cis-1,3-Dichloropropene	75		13.670				ND	
59 4-Methyl-2-pentanone (MIBK)	43		13.986				ND	
60 Toluene	92	14.387	14.387	0.016	92	1261	0.0314	M
65 trans-1,3-Dichloropropene	75		14.826				ND	
66 1,1,2-Trichloroethane	83		15.227				ND	
67 Tetrachloroethene	166		15.441				ND	7
68 2-Hexanone	43		15.698				ND	
69 Chlorodibromomethane	129		16.008				ND	
70 Ethylene Dibromide	107		16.259				ND	
* 71 Chlorobenzene-d5	117	17.238	17.233	0.005	85	851524	10.0	
72 Chlorobenzene	112		17.297				ND	
73 Ethylbenzene	91	17.506	17.506	-0.005	96	4245	0.0463	M
74 m-Xylene & p-Xylene	106		17.795				ND	
76 o-Xylene	106	18.608	18.608	0.005	90	1316	0.0377	M
77 Styrene	104		18.640				ND	
78 Bromoform	173		19.004				ND	
79 Isopropylbenzene	105		19.362				ND	
S 82 Xylenes, Total	106				0		0.0377	
80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
83 N-Propylbenzene	91		20.127				ND	
84 2-Chlorotoluene	91		20.277				ND	
85 4-Ethyltoluene	105		20.341				ND	
86 1,3,5-Trimethylbenzene	105		20.443				ND	
89 tert-Butylbenzene	119		20.946				ND	MU
90 1,2,4-Trimethylbenzene	105		21.037				ND	
91 sec-Butylbenzene	105		21.283				ND	
92 1,3-Dichlorobenzene	146		21.454				ND	7
93 4-Isopropyltoluene	119		21.507				ND	7
94 1,4-Dichlorobenzene	146		21.598				ND	7
95 Benzyl chloride	91		21.754				ND	
97 n-Butylbenzene	91		22.074				ND	7
96 1,2-Dichlorobenzene	146		22.096				ND	7
100 1,2,4-Trichlorobenzene	180		24.557				ND	
101 Hexachlorobutadiene	225		24.808				ND	
102 Naphthalene	128		25.033				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

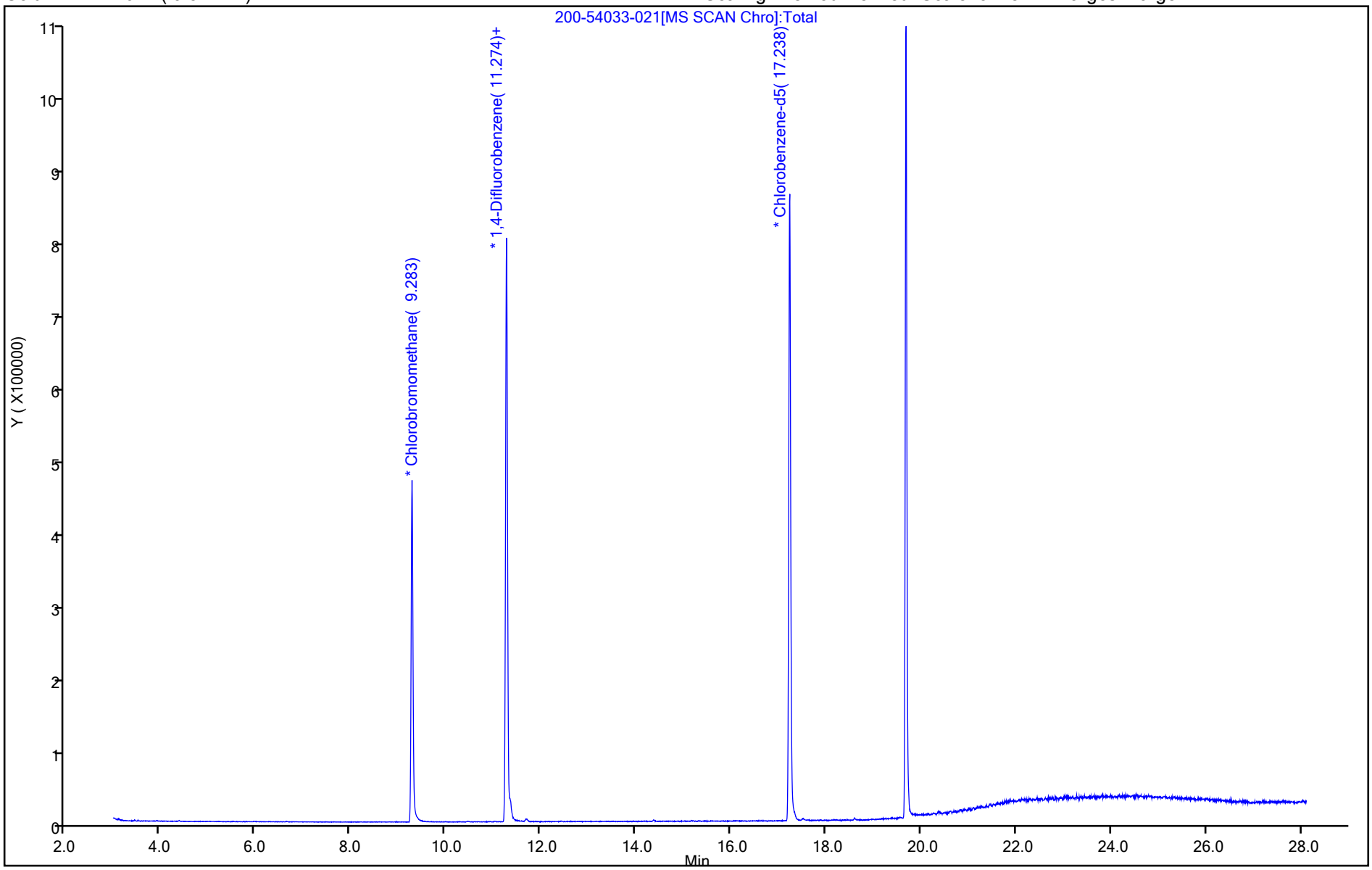
ATTO15GIS_00019 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 19-Jan-2023 10:21:19 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D				
Injection Date:	19-Jan-2023 02:42:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-8	Lab Sample ID:	200-66478-8	Worklist Smp#:	21
Client ID:	3525				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	21
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



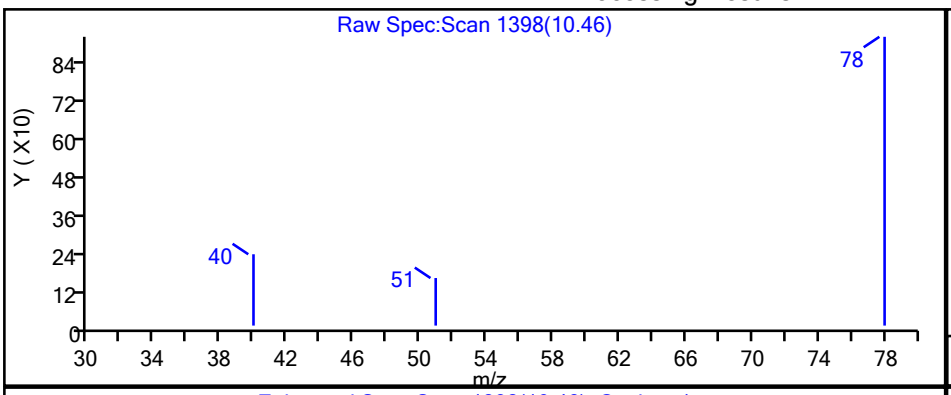
User Disabled Compound Report

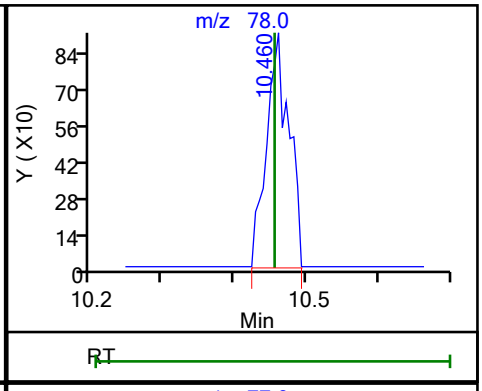
Eurofins Burlington

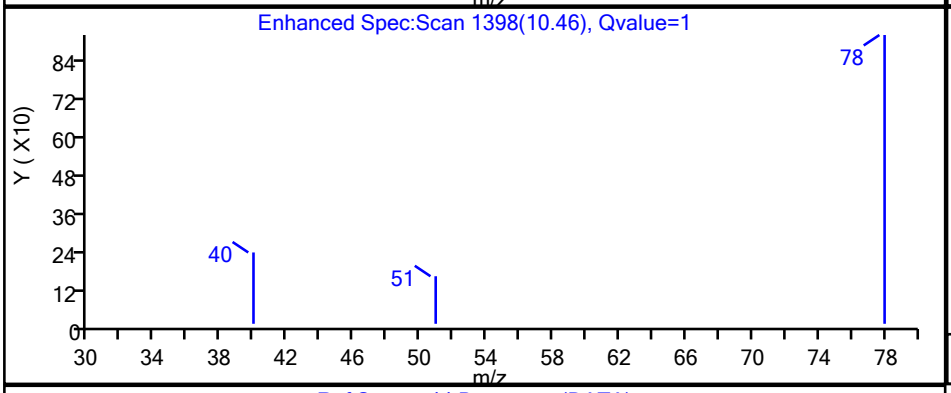
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D				
Injection Date:	19-Jan-2023 02:42:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-8	Lab Sample ID:	200-66478-8		
Client ID:	3525				
Operator ID:	vtp	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

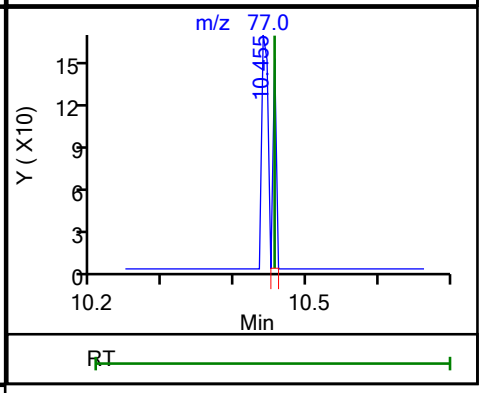
44 Benzene, CAS: 71-43-2

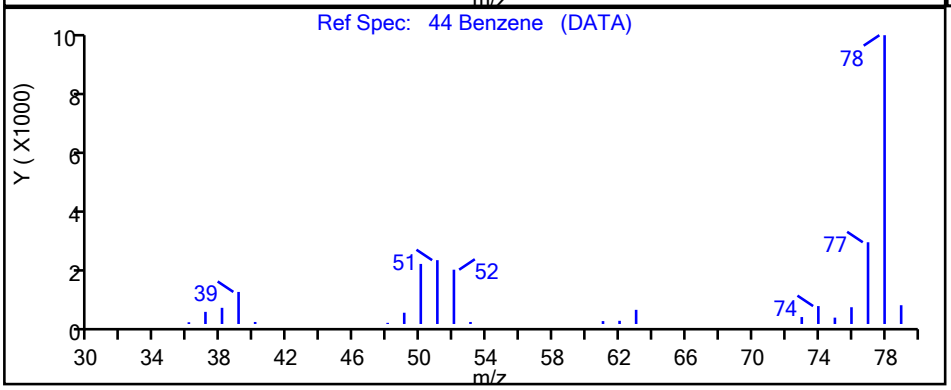
Processing Results











RT	Mass	Response	Amount
10.46	78.00	1976	0.034000
10.46	77.00	49	

Reviewer: W5NX, 19-Jan-2023 10:21:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Burlington

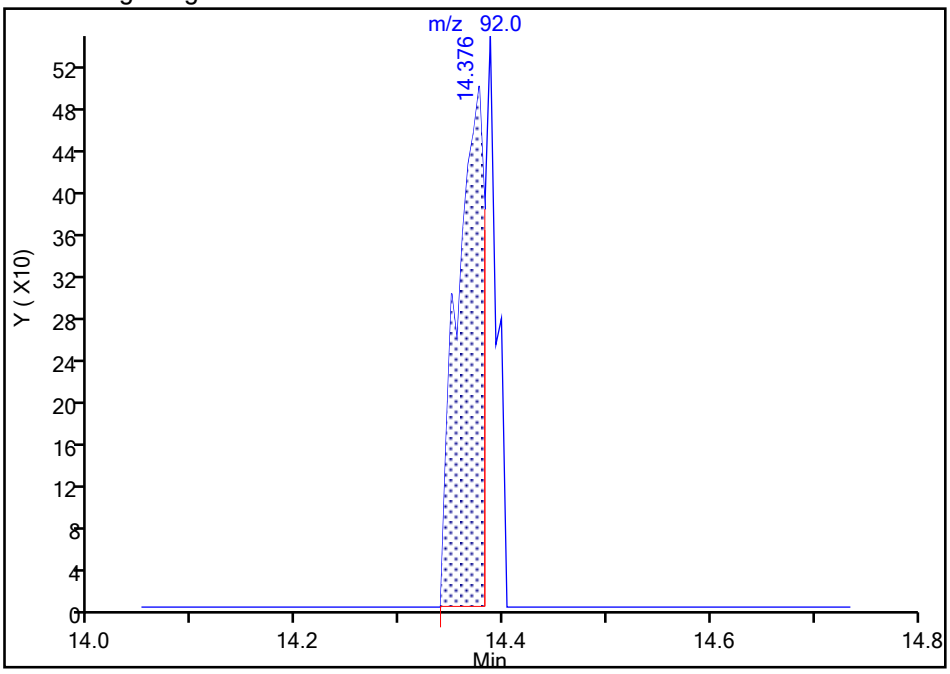
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D				
Injection Date:	19-Jan-2023 02:42:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-8	Lab Sample ID:	200-66478-8		
Client ID:	3525				
Operator ID:	vtp	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 Toluene, CAS: 108-88-3

Signal: 1

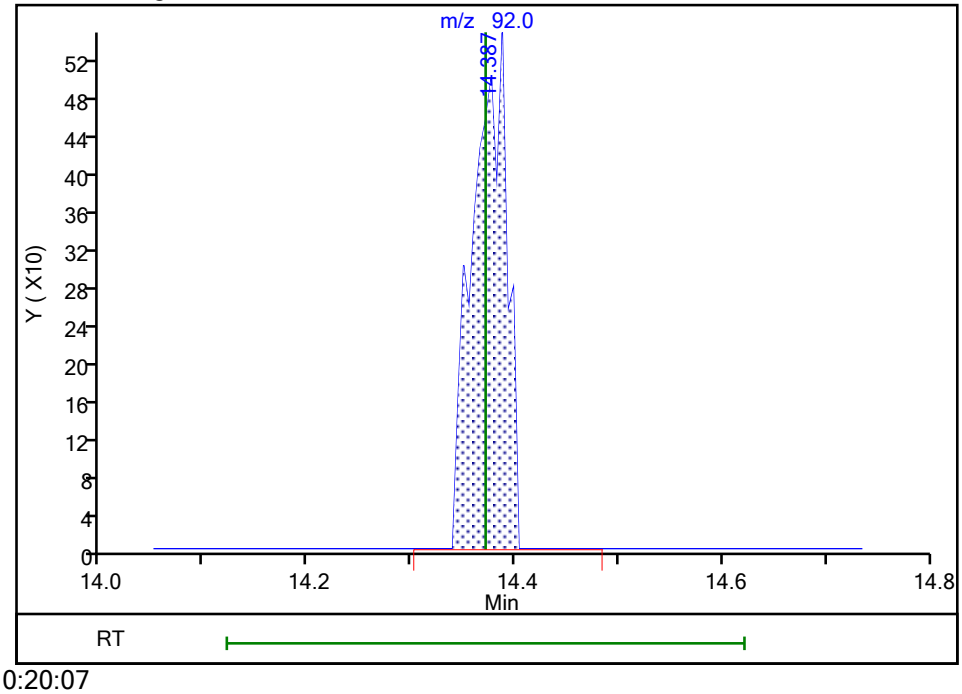
Processing Integration Results

RT: 14.38
Area: 914
Amount: 0.022736
Amount Units: ppb v/v



Manual Integration Results

RT: 14.39
Area: 1261
Amount: 0.031368
Amount Units: ppb v/v



Reviewer: W5NX, 19-Jan-2023 10:20:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Burlington

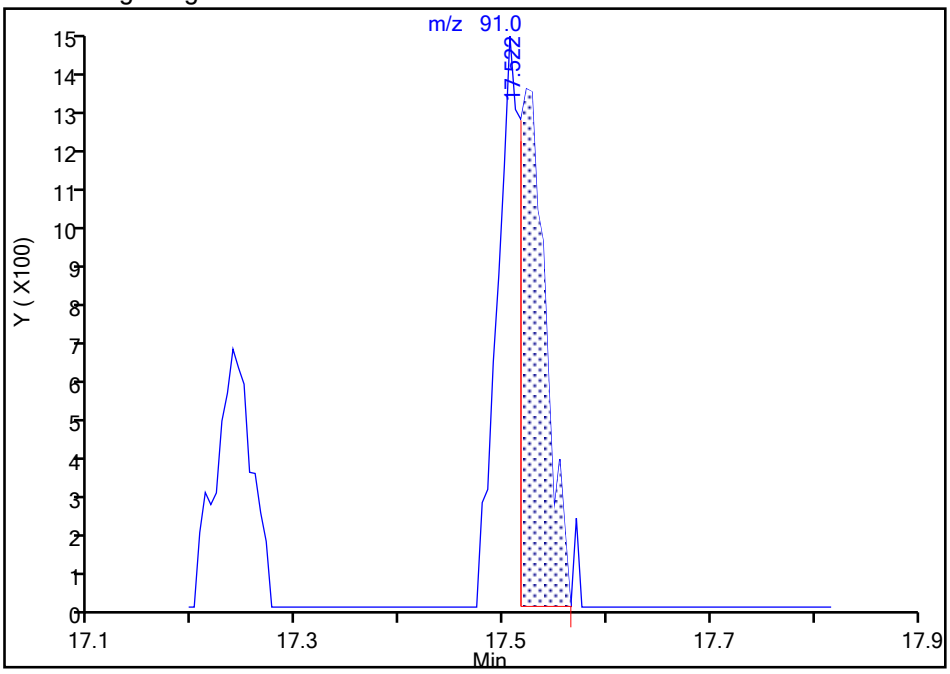
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D				
Injection Date:	19-Jan-2023 02:42:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-8	Lab Sample ID:	200-66478-8		
Client ID:	3525				
Operator ID:	vtp	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

73 Ethylbenzene, CAS: 100-41-4

Signal: 1

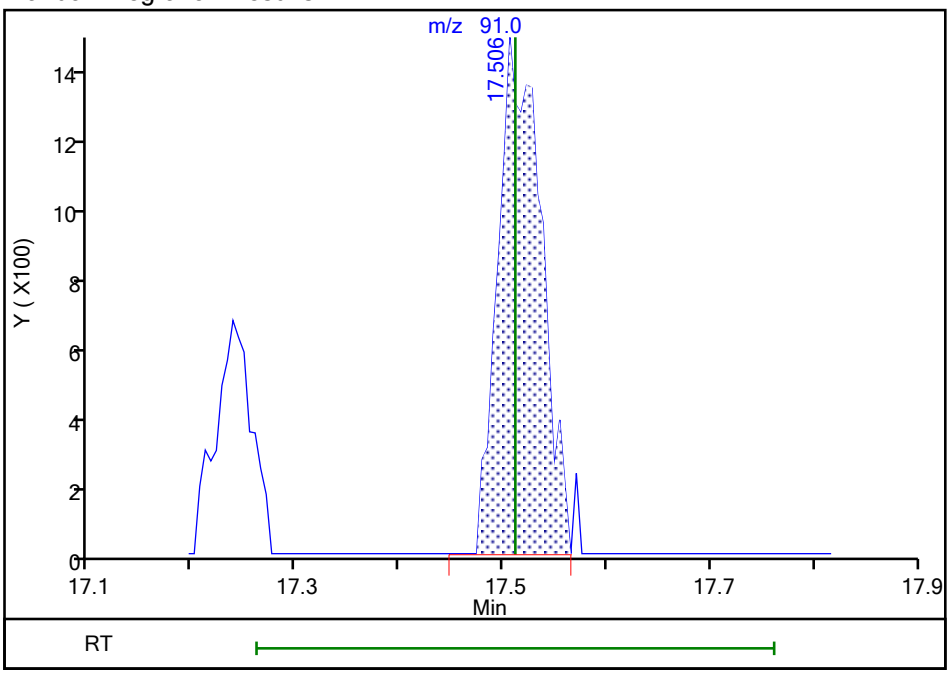
Processing Integration Results

RT: 17.52
Area: 2337
Amount: 0.025491
Amount Units: ppb v/v



Manual Integration Results

RT: 17.51
Area: 4245
Amount: 0.046302
Amount Units: ppb v/v



Reviewer: W5NX, 19-Jan-2023 10:20:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Burlington

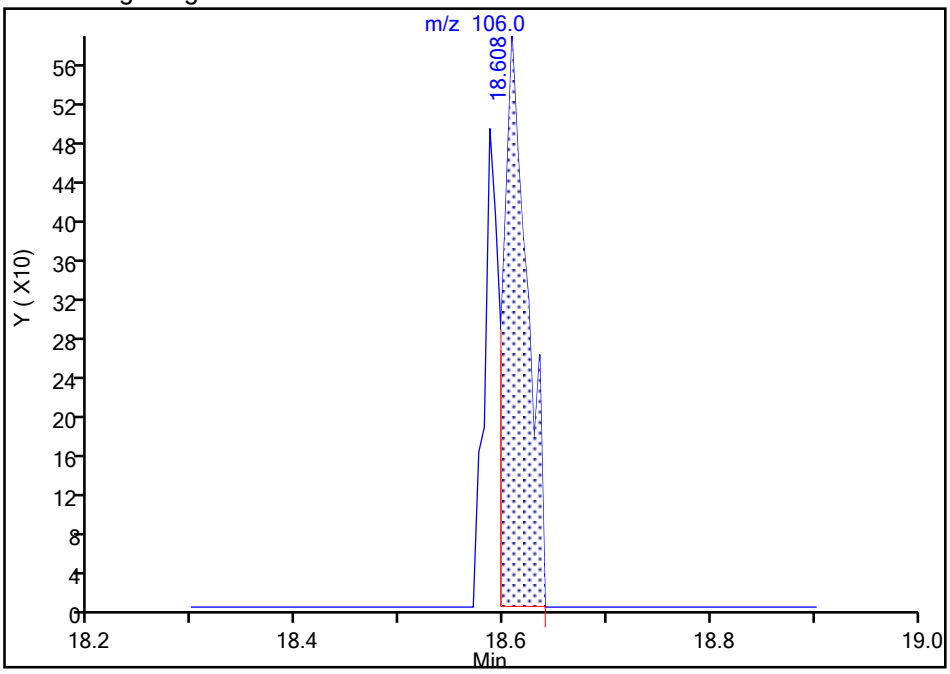
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D				
Injection Date:	19-Jan-2023 02:42:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-8	Lab Sample ID:	200-66478-8		
Client ID:	3525				
Operator ID:	vtp	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 o-Xylene, CAS: 95-47-6

Signal: 1

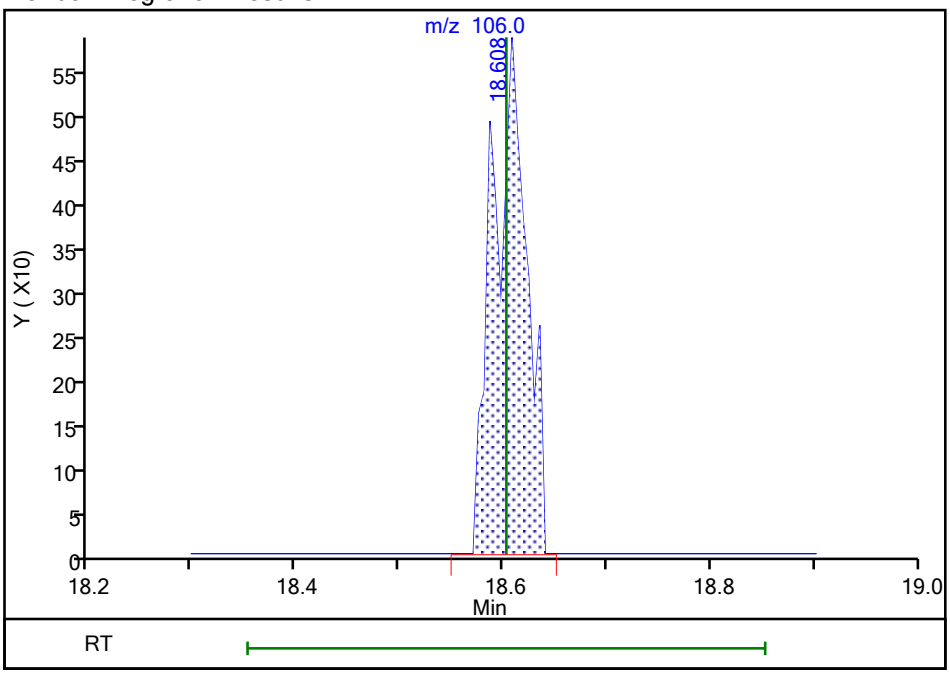
Processing Integration Results

RT: 18.61
Area: 922
Amount: 0.026406
Amount Units: ppb v/v



Manual Integration Results

RT: 18.61
Area: 1316
Amount: 0.037690
Amount Units: ppb v/v



Reviewer: W5NX, 19-Jan-2023 10:20:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

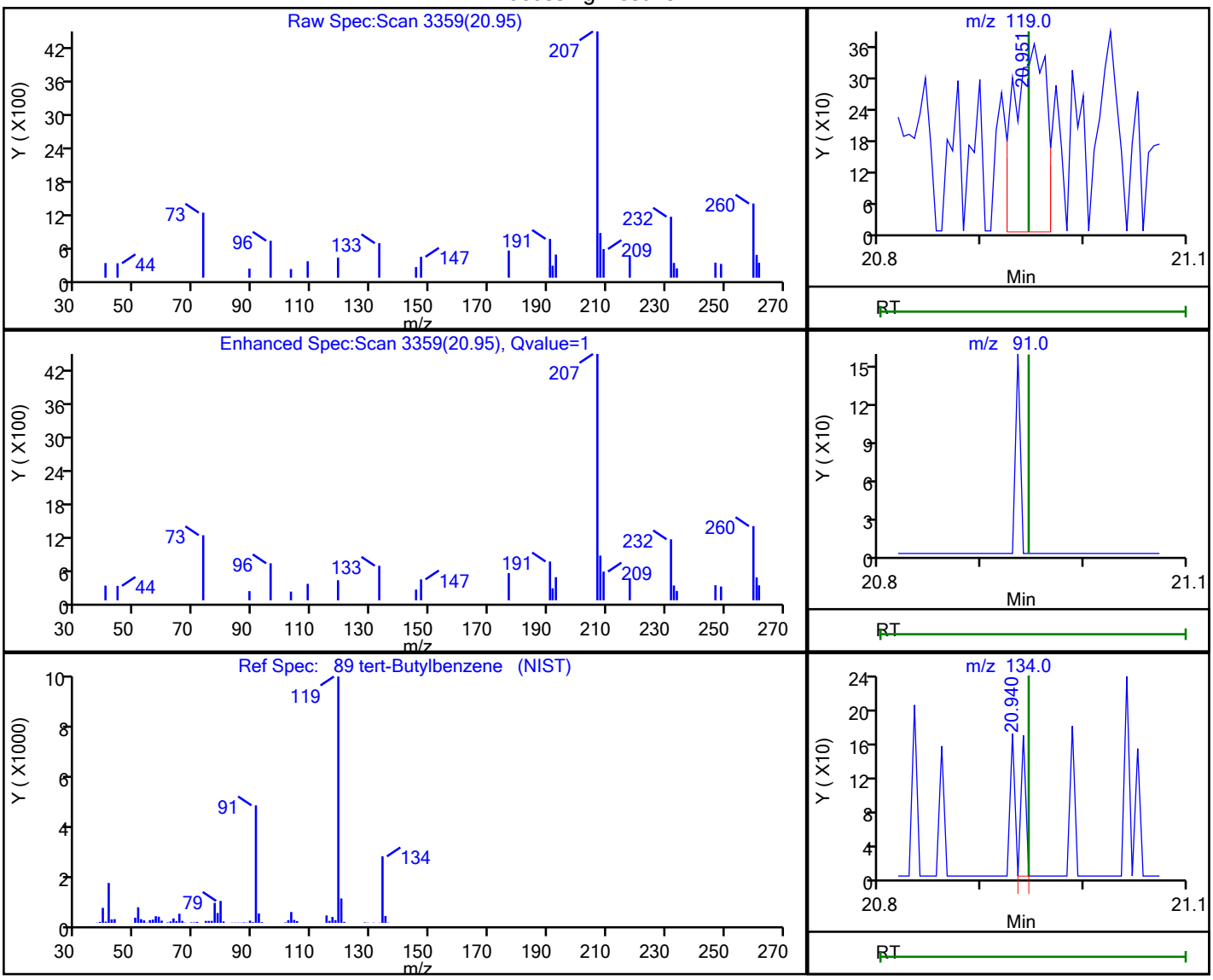
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-021.D				
Injection Date:	19-Jan-2023 02:42:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-8	Lab Sample ID:	200-66478-8		
Client ID:	3525				
Operator ID:	vtp	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

89 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
20.95	119.00	792	0.011250
20.95	91.00	0	
20.94	134.00	54	

Reviewer: W5NX, 19-Jan-2023 10:20:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4301 Lab Sample ID: 200-66478-9

Matrix: Air Lab File ID: 200-54033-022.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 03:35

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4301 Lab Sample ID: 200-66478-9

Matrix: Air Lab File ID: 200-54033-022.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 03:35

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 4301 Lab Sample ID: 200-66478-9

Matrix: Air Lab File ID: 200-54033-022.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 03:35

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) ___ pH:

% Moisture: ____ % Solids: ____ Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-022.D
Lims ID: 200-66478-A-9
Client ID: 4301
Sample Type: Client
Inject. Date: 19-Jan-2023 03:35:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054033-022
Misc. Info.: 66478-9
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 10:22:14 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: W5NX Date: 19-Jan-2023 10:22:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.104				ND	7
2 Dichlorodifluoromethane	85		3.163				ND	
3 Chlorodifluoromethane	51		3.185				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.383				ND	
5 Chloromethane	50		3.463				ND	
6 Vinyl chloride	62		3.666				ND	
7 Butane	43		3.672				ND	7
8 Butadiene	54		3.741				ND	
9 Bromomethane	94		4.244				ND	
10 Chloroethane	64		4.437				ND	
12 Vinyl bromide	106		4.763				ND	
13 Trichlorofluoromethane	101		4.891				ND	
15 Ethanol	45		5.180				ND	
18 1,1-Dichloroethene	96		5.790				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.854				ND	7
22 Isopropyl alcohol	45		6.111				ND	
23 Carbon disulfide	76		6.170				ND	
25 3-Chloro-1-propene	41		6.421				ND	
26 Methylene Chloride	49		6.641				ND	7
27 2-Methyl-2-propanol	59		6.844				ND	
29 trans-1,2-Dichloroethene	61		7.127				ND	
30 Methyl tert-butyl ether	73		7.143				ND	
31 Hexane	57		7.630				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.887				ND	
34 2-Butanone (MEK)	72		8.850				ND	
35 cis-1,2-Dichloroethene	96		8.861				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.289	9.278	0.011	74	180001	10.0	
38 Tetrahydrofuran	42		9.348				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
39 Chloroform	83		9.465				ND	
S 43 1,2-Dichloroethene, Total	61		9.665				ND	7
40 1,1,1-Trichloroethane	97		9.786				ND	
41 Cyclohexane	84		9.931				ND	
42 Carbon tetrachloride	117		10.080				ND	
44 Benzene	78		10.455				ND	MU
45 1,2-Dichloroethane	62		10.530				ND	
46 Isooctane	57		10.706				ND	
47 n-Heptane	43		11.049				ND	7
* 48 1,4-Difluorobenzene	114	11.274	11.268	0.006	94	1038399	10.0	
50 Trichloroethene	95		11.755				ND	
51 1,2-Dichloropropane	63		12.263				ND	
54 Methyl methacrylate	69		12.392				ND	
53 Dibromomethane	174		12.429				ND	7
55 1,4-Dioxane	88		12.429				ND	
56 Dichlorobromomethane	83		12.782				ND	
58 cis-1,3-Dichloropropene	75		13.670				ND	
59 4-Methyl-2-pentanone (MIBK)	43		13.986				ND	
60 Toluene	92		14.371				ND	MU
65 trans-1,3-Dichloropropene	75		14.826				ND	
66 1,1,2-Trichloroethane	83		15.227				ND	
67 Tetrachloroethene	166		15.441				ND	
68 2-Hexanone	43		15.698				ND	
69 Chlorodibromomethane	129		16.008				ND	
70 Ethylene Dibromide	107		16.259				ND	
* 71 Chlorobenzene-d5	117	17.233	17.233	0.000	85	805399	10.0	
72 Chlorobenzene	112		17.297				ND	
73 Ethylbenzene	91	17.506	17.506	-0.005	93	3585	0.0413	
74 m-Xylene & p-Xylene	106		17.795				ND	
76 o-Xylene	106	18.613	18.613	0.010	91	1079	0.0327	M
77 Styrene	104		18.640				ND	
78 Bromoform	173		19.004				ND	
79 Isopropylbenzene	105		19.362				ND	
S 82 Xylenes, Total	106				0		0.0327	
80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
83 N-Propylbenzene	91		20.127				ND	
84 2-Chlorotoluene	91		20.277				ND	
85 4-Ethyltoluene	105		20.341				ND	
86 1,3,5-Trimethylbenzene	105		20.443				ND	
89 tert-Butylbenzene	119		20.946				ND	7
90 1,2,4-Trimethylbenzene	105		21.037				ND	
91 sec-Butylbenzene	105		21.283				ND	
92 1,3-Dichlorobenzene	146		21.454				ND	7
93 4-Isopropyltoluene	119		21.507				ND	7
94 1,4-Dichlorobenzene	146		21.598				ND	7
95 Benzyl chloride	91		21.754				ND	
97 n-Butylbenzene	91		22.074				ND	
96 1,2-Dichlorobenzene	146		22.096				ND	7
100 1,2,4-Trichlorobenzene	180		24.557				ND	
101 Hexachlorobutadiene	225		24.808				ND	
102 Naphthalene	128		25.033				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

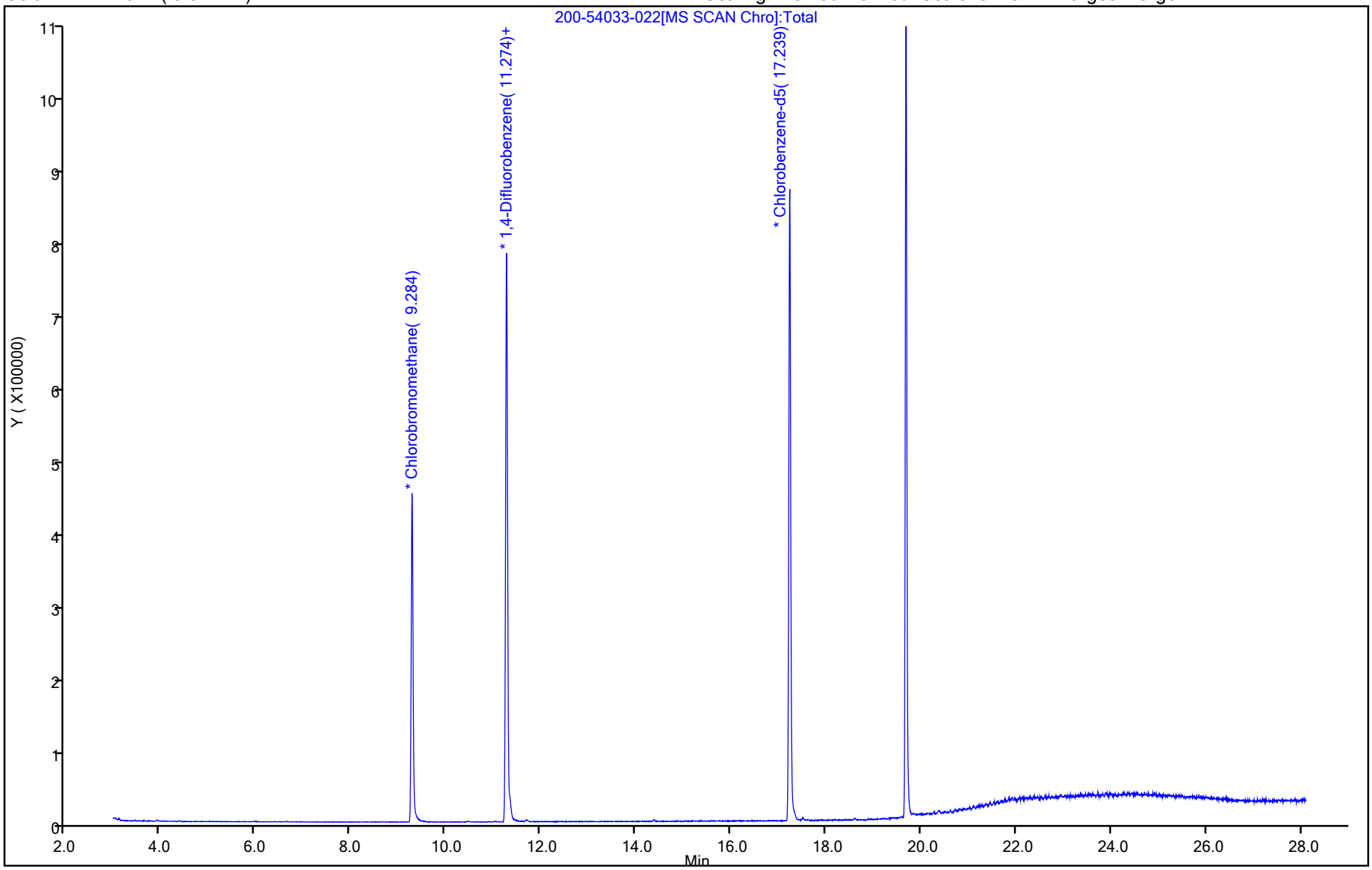
ATTO15GIS_00019	Amount Added: 20.00	Units: mL	Run Reagent

Report Date: 19-Jan-2023 10:22:14 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-022.D				
Injection Date:	19-Jan-2023 03:35:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-9	Lab Sample ID:	200-66478-9	Worklist Smp#:	22
Client ID:	4301				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	22
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



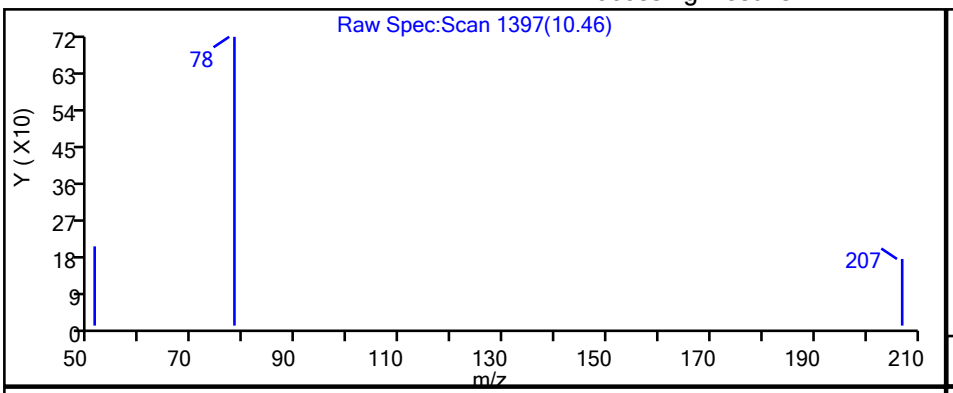
User Disabled Compound Report

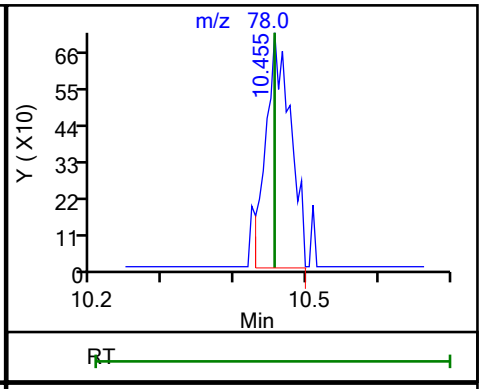
Eurofins Burlington

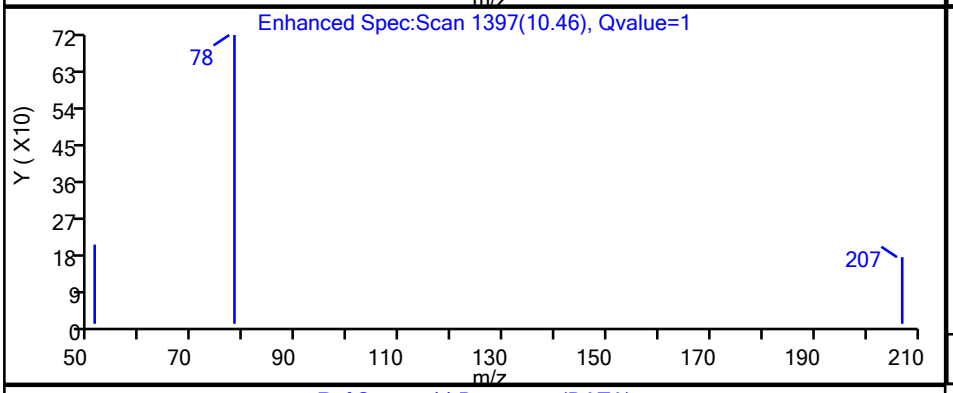
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-022.D				
Injection Date:	19-Jan-2023 03:35:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-9	Lab Sample ID:	200-66478-9		
Client ID:	4301				
Operator ID:	vtp	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

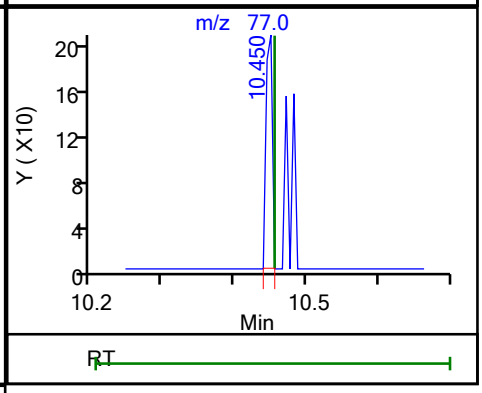
44 Benzene, CAS: 71-43-2

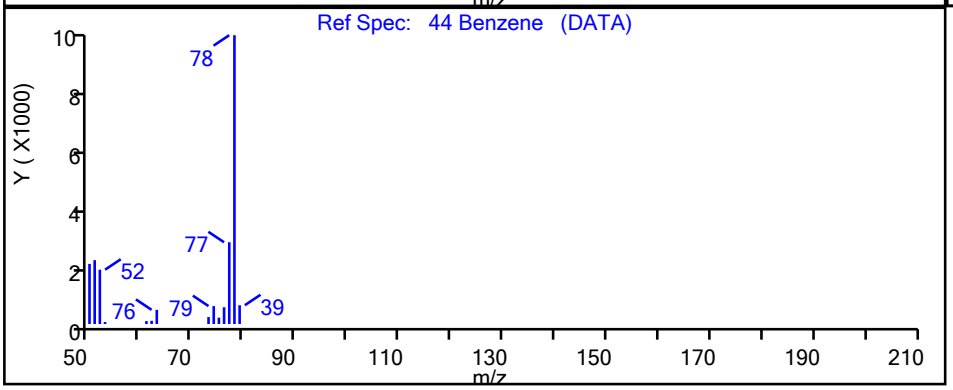
Processing Results











RT	Mass	Response	Amount
10.46	78.00	1693	0.030877
10.45	77.00	126	

Reviewer: W5NX, 19-Jan-2023 10:21:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

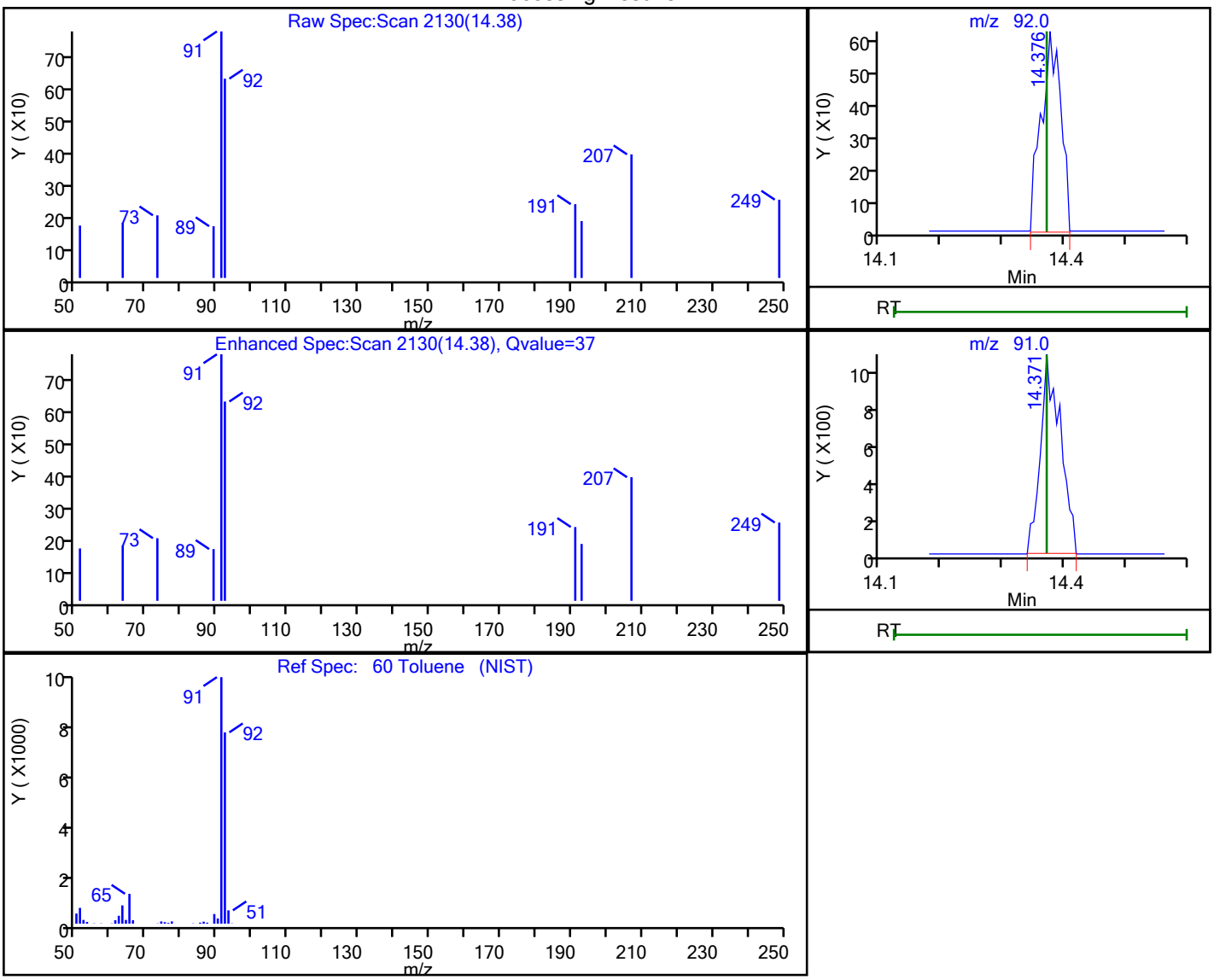
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-022.D				
Injection Date:	19-Jan-2023 03:35:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-9	Lab Sample ID:	200-66478-9		
Client ID:	4301				
Operator ID:	vtp	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
14.38	92.00	1380	0.036294
14.37	91.00	2274	

Reviewer: W5NX, 19-Jan-2023 10:21:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

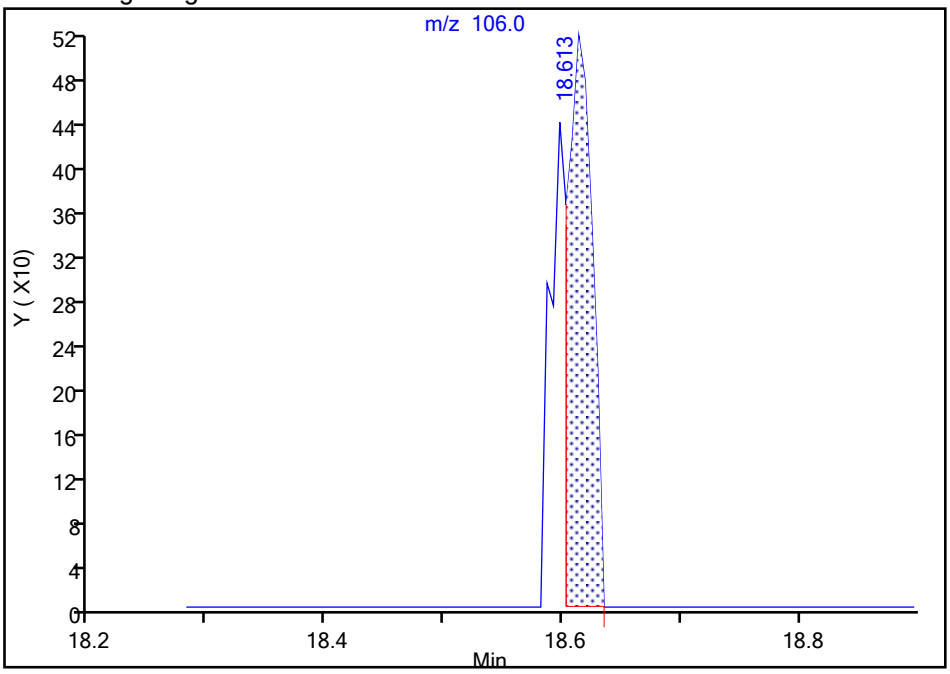
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-022.D				
Injection Date:	19-Jan-2023 03:35:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-9	Lab Sample ID:	200-66478-9		
Client ID:	4301				
Operator ID:	vtp	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 o-Xylene, CAS: 95-47-6

Signal: 1

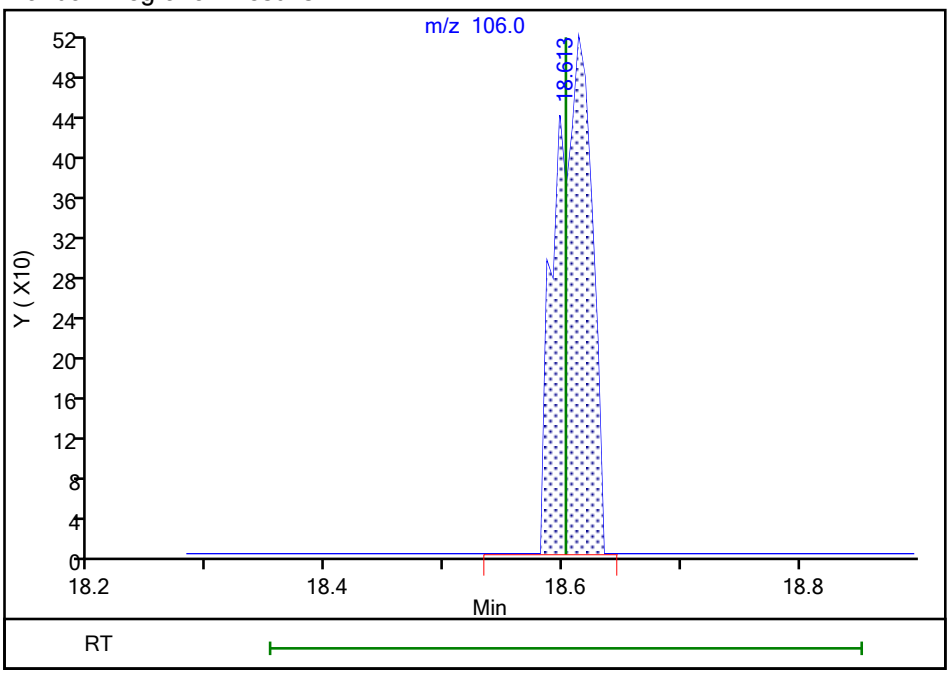
Processing Integration Results

RT: 18.61
Area: 756
Amount: 0.022891
Amount Units: ppb v/v



Manual Integration Results

RT: 18.61
Area: 1079
Amount: 0.032672
Amount Units: ppb v/v



Reviewer: W5NX, 19-Jan-2023 10:21:46
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 5167 Lab Sample ID: 200-66478-10

Matrix: Air Lab File ID: 200-54033-023.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 04:28

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 5167 Lab Sample ID: 200-66478-10

Matrix: Air Lab File ID: 200-54033-023.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 04:28

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 5167 Lab Sample ID: 200-66478-10

Matrix: Air Lab File ID: 200-54033-023.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 04:28

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187602 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-023.D
Lims ID: 200-66478-A-10
Client ID: 5167
Sample Type: Client
Inject. Date: 19-Jan-2023 04:28:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054033-023
Misc. Info.: 66478-10
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 19-Jan-2023 10:23:07 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1614

First Level Reviewer: W5NX Date: 19-Jan-2023 10:23:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.104				ND	7
2 Dichlorodifluoromethane	85		3.163				ND	
3 Chlorodifluoromethane	51		3.185				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.383				ND	
5 Chloromethane	50		3.463				ND	
6 Vinyl chloride	62		3.666				ND	
7 Butane	43		3.672				ND	7
8 Butadiene	54		3.741				ND	
9 Bromomethane	94		4.244				ND	
10 Chloroethane	64		4.437				ND	
12 Vinyl bromide	106		4.763				ND	
13 Trichlorofluoromethane	101		4.891				ND	
15 Ethanol	45		5.180				ND	
18 1,1-Dichloroethene	96		5.790				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.854				ND	7
22 Isopropyl alcohol	45		6.111				ND	
23 Carbon disulfide	76		6.170				ND	
25 3-Chloro-1-propene	41		6.421				ND	
26 Methylene Chloride	49		6.641				ND	7
27 2-Methyl-2-propanol	59		6.844				ND	
29 trans-1,2-Dichloroethene	61		7.127				ND	
30 Methyl tert-butyl ether	73		7.143				ND	
31 Hexane	57		7.630				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.887				ND	
34 2-Butanone (MEK)	72		8.850				ND	
35 cis-1,2-Dichloroethene	96		8.861				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.283	9.278	0.005	74	174206	10.0	
38 Tetrahydrofuran	42		9.348				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	39 Chloroform	83		9.465				ND	
S	43 1,2-Dichloroethene, Total	61		9.665				ND	7
	40 1,1,1-Trichloroethane	97		9.786				ND	
	41 Cyclohexane	84		9.931				ND	
	42 Carbon tetrachloride	117		10.080				ND	
	44 Benzene	78	10.455	10.455	0.000	1	1708	0.0334	
	45 1,2-Dichloroethane	62		10.530				ND	
	46 Isooctane	57		10.706				ND	
	47 n-Heptane	43		11.049				ND	7
*	48 1,4-Difluorobenzene	114	11.273	11.268	0.005	93	968016	10.0	
	50 Trichloroethene	95		11.755				ND	
	51 1,2-Dichloropropane	63		12.263				ND	
	54 Methyl methacrylate	69		12.392				ND	
	53 Dibromomethane	174		12.429				ND	7
	55 1,4-Dioxane	88		12.429				ND	
	56 Dichlorobromomethane	83		12.782				ND	
	58 cis-1,3-Dichloropropene	75		13.670				ND	
	59 4-Methyl-2-pentanone (MIBK)	43		13.986				ND	
	60 Toluene	92	14.376	14.387	0.005	92	1181	0.0337	
	65 trans-1,3-Dichloropropene	75		14.826				ND	
	66 1,1,2-Trichloroethane	83		15.227				ND	
	67 Tetrachloroethene	166		15.441				ND	
	68 2-Hexanone	43		15.698				ND	
	69 Chlorodibromomethane	129		16.008				ND	
	70 Ethylene Dibromide	107		16.259				ND	
*	71 Chlorobenzene-d5	117	17.238	17.233	0.005	85	742380	10.0	
	72 Chlorobenzene	112		17.297				ND	
	73 Ethylbenzene	91	17.511	17.506	0.000	94	3435	0.0430	
	74 m-Xylene & p-Xylene	106		17.795				ND	
	76 o-Xylene	106		18.603				ND	MU
	77 Styrene	104		18.640				ND	
	78 Bromoform	173		19.004				ND	
	79 Isopropylbenzene	105		19.362				ND	
S	82 Xylenes, Total	106		19.600				ND	7
	80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
	83 N-Propylbenzene	91		20.127				ND	
	84 2-Chlorotoluene	91		20.277				ND	
	85 4-Ethyltoluene	105		20.341				ND	
	86 1,3,5-Trimethylbenzene	105		20.443				ND	
	89 tert-Butylbenzene	119		20.946				ND	7
	90 1,2,4-Trimethylbenzene	105		21.037				ND	
	91 sec-Butylbenzene	105		21.283				ND	
	92 1,3-Dichlorobenzene	146		21.454				ND	7
	93 4-Isopropyltoluene	119		21.507				ND	7
	94 1,4-Dichlorobenzene	146		21.598				ND	7
	95 Benzyl chloride	91		21.754				ND	
	97 n-Butylbenzene	91		22.074				ND	
	96 1,2-Dichlorobenzene	146		22.096				ND	7
	100 1,2,4-Trichlorobenzene	180		24.557				ND	
	101 Hexachlorobutadiene	225		24.808				ND	
	102 Naphthalene	128		25.033				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15GIS_00019 Amount Added: 20.00 Units: mL Run Reagent

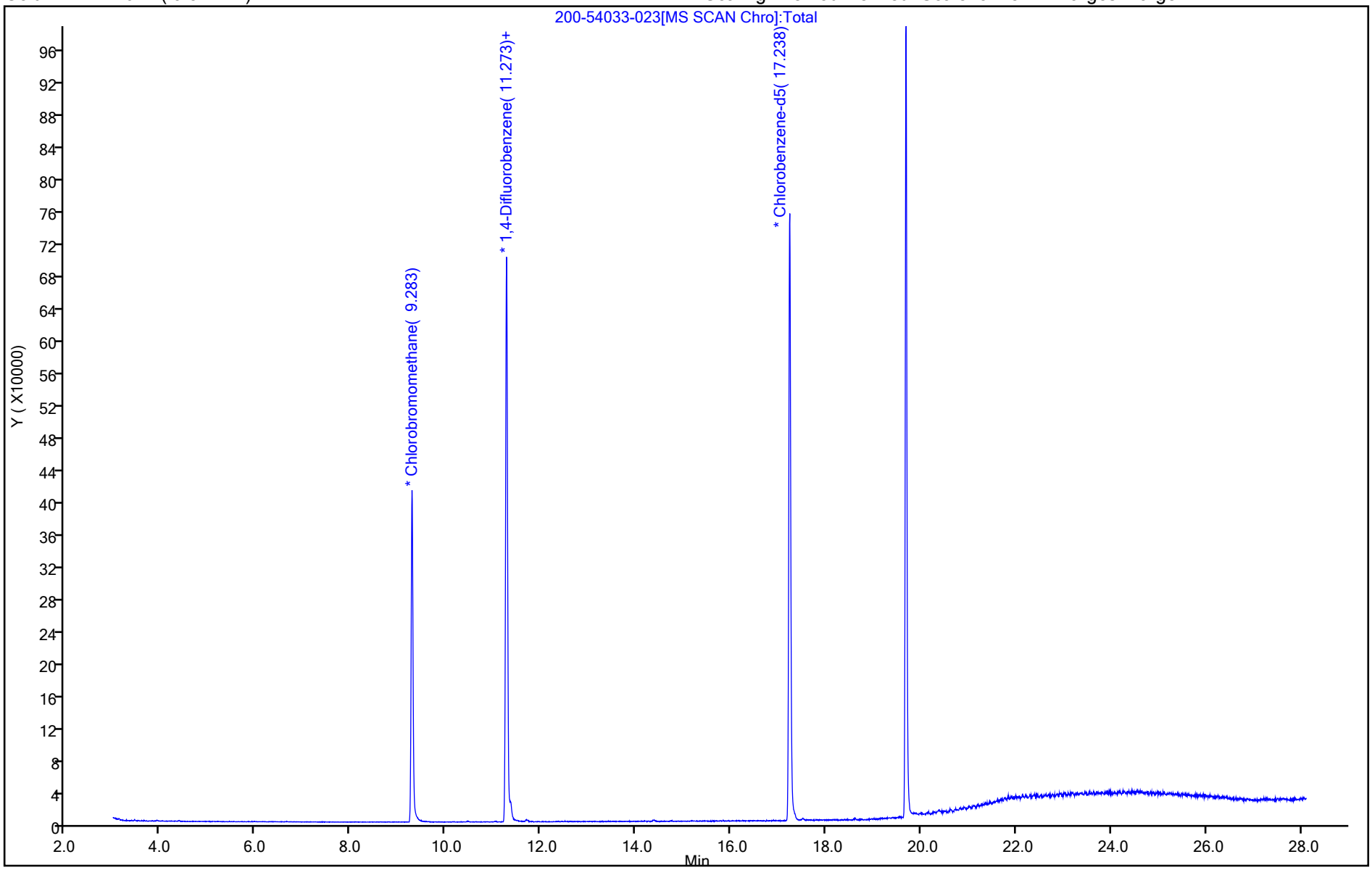
Report Date: 19-Jan-2023 10:23:07 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-023.D

Injection Date:	19-Jan-2023 04:28:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-10	Lab Sample ID:	200-66478-10	Worklist Smp#:	23
Client ID:	5167				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	23
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



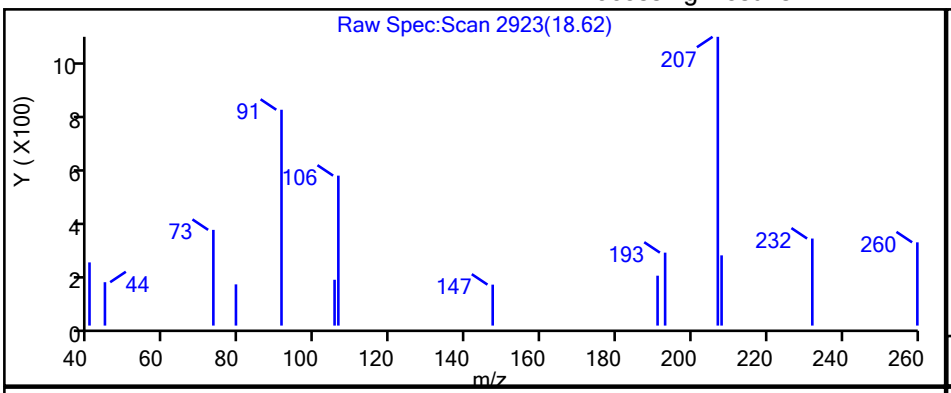
User Disabled Compound Report

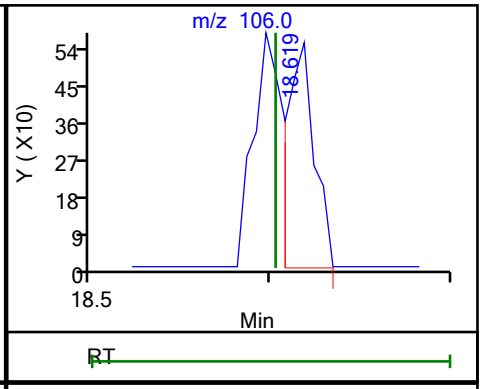
Eurofins Burlington

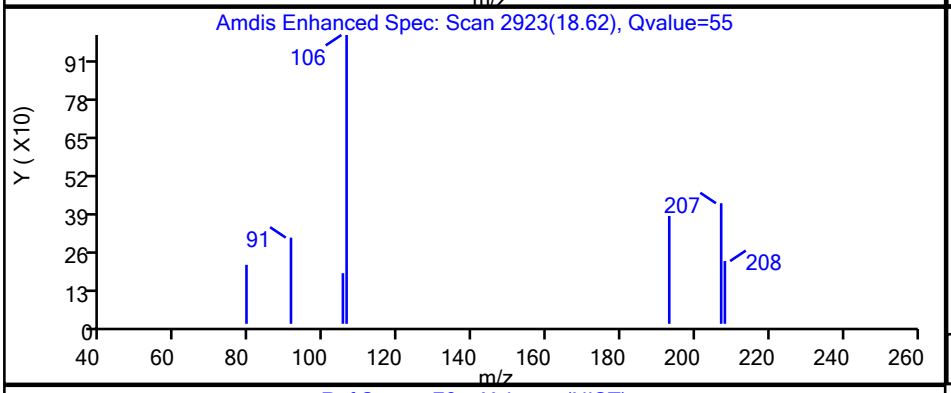
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230118-54033.b\200-54033-023.D				
Injection Date:	19-Jan-2023 04:28:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-10	Lab Sample ID:	200-66478-10		
Client ID:	5167				
Operator ID:	vtp	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

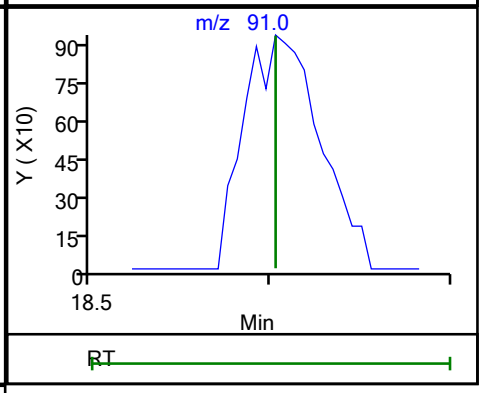
76 o-Xylene, CAS: 95-47-6

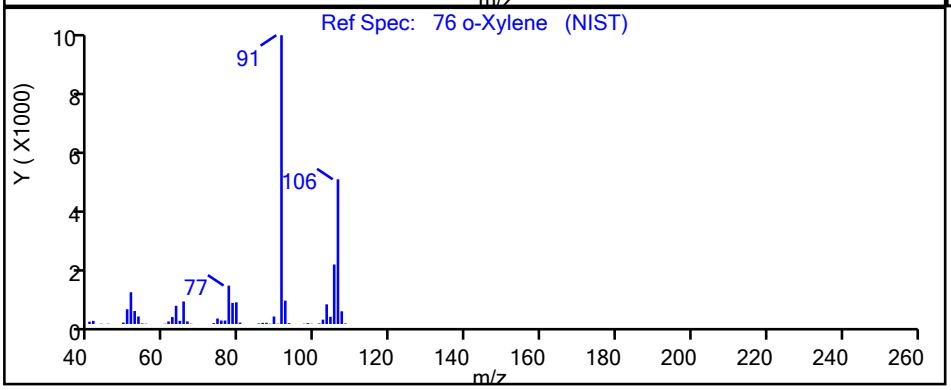
Processing Results











RT	Mass	Response	Amount
18.62	106.00	586	0.019250
18.60	91.00	0	

Reviewer: W5NX, 19-Jan-2023 10:22:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3200 Lab Sample ID: 200-66478-11

Matrix: Air Lab File ID: 200-54045-006.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 13:31

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187642 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3200 Lab Sample ID: 200-66478-11

Matrix: Air Lab File ID: 200-54045-006.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 13:31

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187642 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 3200 Lab Sample ID: 200-66478-11

Matrix: Air Lab File ID: 200-54045-006.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 13:31

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187642 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D
Lims ID: 200-66478-A-11
Client ID: 3200
Sample Type: Client
Inject. Date: 19-Jan-2023 13:31:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054045-006
Misc. Info.: 66478-11
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jan-2023 08:14:55 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: bunmaa Date: 20-Jan-2023 08:14:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.110				ND	7
2 Dichlorodifluoromethane	85		3.169				ND	
3 Chlorodifluoromethane	51		3.190				ND	
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.388				ND	
5 Chloromethane	50		3.474				ND	
6 Vinyl chloride	62		3.677				ND	
7 Butane	43		3.677				ND	
8 Butadiene	54		3.752				ND	
9 Bromomethane	94		4.249				ND	
10 Chloroethane	64		4.447				ND	
12 Vinyl bromide	106		4.774				ND	
13 Trichlorofluoromethane	101		4.897				ND	
15 Ethanol	45		5.191				ND	
18 1,1-Dichloroethene	96		5.795				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.865				ND	7
22 Isopropyl alcohol	45		6.127				ND	
23 Carbon disulfide	76		6.175				ND	
25 3-Chloro-1-propene	41		6.432				ND	
26 Methylene Chloride	49		6.646				ND	7
27 2-Methyl-2-propanol	59		6.860				ND	
29 trans-1,2-Dichloroethene	61		7.133				ND	
30 Methyl tert-butyl ether	73		7.149				ND	
31 Hexane	57		7.641				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.893				ND	
34 2-Butanone (MEK)	72		8.855				ND	
35 cis-1,2-Dichloroethene	96		8.866				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.289	9.278	0.011	72	160928	10.0	
38 Tetrahydrofuran	42		9.353				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
39 Chloroform	83		9.465				ND	
S 43 1,2-Dichloroethene, Total	61		9.665				ND	7
40 1,1,1-Trichloroethane	97		9.792				ND	
41 Cyclohexane	84		9.941				ND	
42 Carbon tetrachloride	117		10.086				ND	
44 Benzene	78		10.460				ND	MU
45 1,2-Dichloroethane	62		10.535				ND	
46 Isooctane	57		10.712				ND	
47 n-Heptane	43		11.054				ND	7
* 48 1,4-Difluorobenzene	114	11.274	11.274	0.000	94	867891	10.0	
50 Trichloroethene	95		11.755				ND	
51 1,2-Dichloropropane	63		12.263				ND	
54 Methyl methacrylate	69		12.397				ND	
53 Dibromomethane	174		12.434				ND	
55 1,4-Dioxane	88		12.434				ND	
56 Dichlorobromomethane	83		12.788				ND	
58 cis-1,3-Dichloropropene	75		13.676				ND	
59 4-Methyl-2-pentanone (MIBK)	43		13.991				ND	
60 Toluene	92	14.382	14.382	0.006	92	1164	0.0364	M
65 trans-1,3-Dichloropropene	75		14.826				ND	
66 1,1,2-Trichloroethane	83		15.227				ND	
67 Tetrachloroethene	166		15.441				ND	
68 2-Hexanone	43		15.703				ND	
69 Chlorodibromomethane	129		16.008				ND	
70 Ethylene Dibromide	107		16.259				ND	
* 71 Chlorobenzene-d5	117	17.239	17.238	0.001	85	677962	10.0	
72 Chlorobenzene	112		17.297				ND	
73 Ethylbenzene	91	17.511	17.511	0.000	95	3259	0.0446	M
74 m-Xylene & p-Xylene	106		17.789				ND	
76 o-Xylene	106	18.603	18.603	0.000	91	1175	0.0423	M
77 Styrene	104		18.640				ND	
78 Bromoform	173		19.004				ND	
79 Isopropylbenzene	105		19.368				ND	
S 82 Xylenes, Total	106				0		0.0423	
80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
83 N-Propylbenzene	91		20.133				ND	7
84 2-Chlorotoluene	91		20.277				ND	7
85 4-Ethyltoluene	105		20.341				ND	7
86 1,3,5-Trimethylbenzene	105		20.443				ND	7
89 tert-Butylbenzene	119		20.946				ND	7
90 1,2,4-Trimethylbenzene	105		21.037				ND	7
91 sec-Butylbenzene	105		21.283				ND	7
92 1,3-Dichlorobenzene	146		21.454				ND	MU
93 4-Isopropyltoluene	119		21.508				ND	7
94 1,4-Dichlorobenzene	146		21.598				ND	MU
95 Benzyl chloride	91		21.754				ND	MU
97 n-Butylbenzene	91		22.075				ND	7
96 1,2-Dichlorobenzene	146		22.096				ND	7
100 1,2,4-Trichlorobenzene	180		24.557				ND	MU
101 Hexachlorobutadiene	225		24.808				ND	
102 Naphthalene	128		25.033				ND	MU

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15GIS_00019	Amount Added: 20.00	Units: mL	Run Reagent

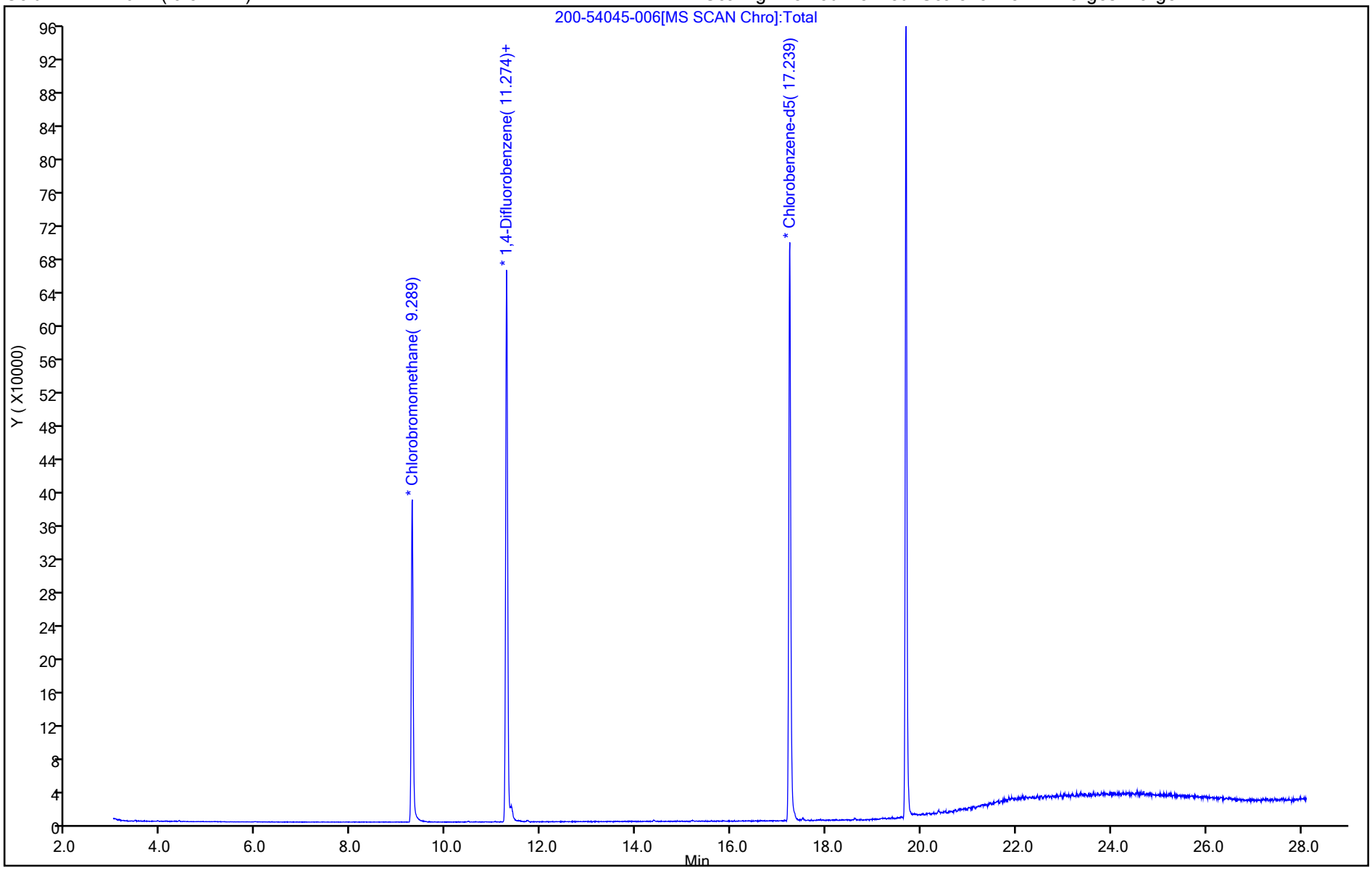
Report Date: 20-Jan-2023 08:14:55 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D

Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11	Worklist Smp#:	6
Client ID:	3200				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	6
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



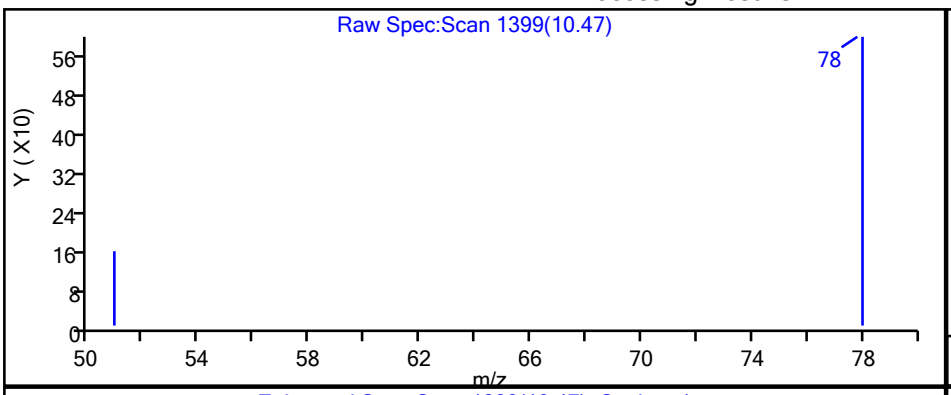
User Disabled Compound Report

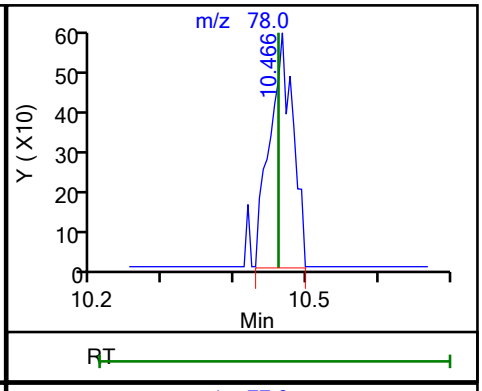
Eurofins Burlington

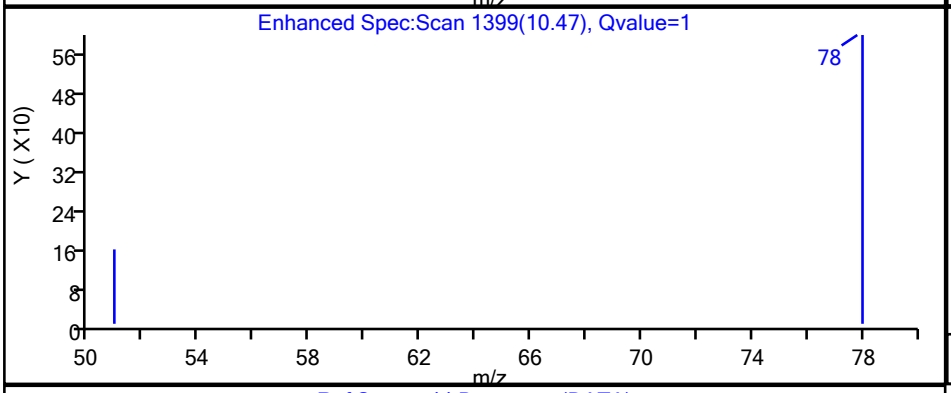
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

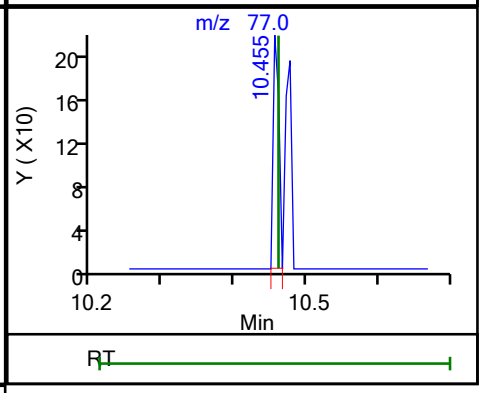
44 Benzene, CAS: 71-43-2

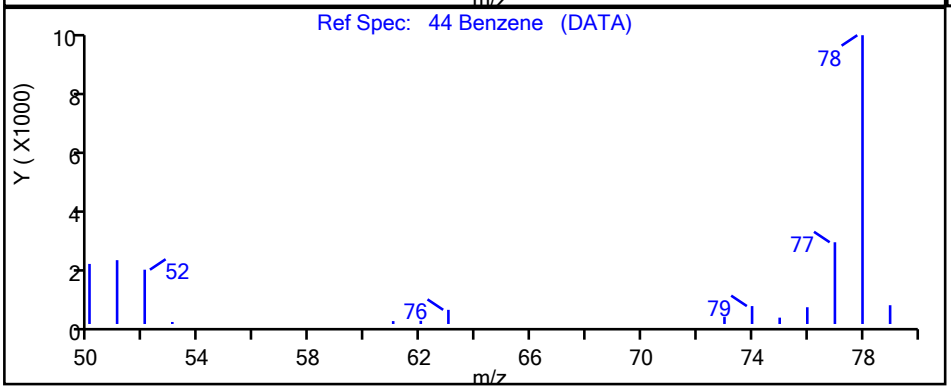
Processing Results











RT	Mass	Response	Amount
10.47	78.00	1334	0.029109
10.46	77.00	122	

Reviewer: bunmaa, 20-Jan-2023 08:12:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

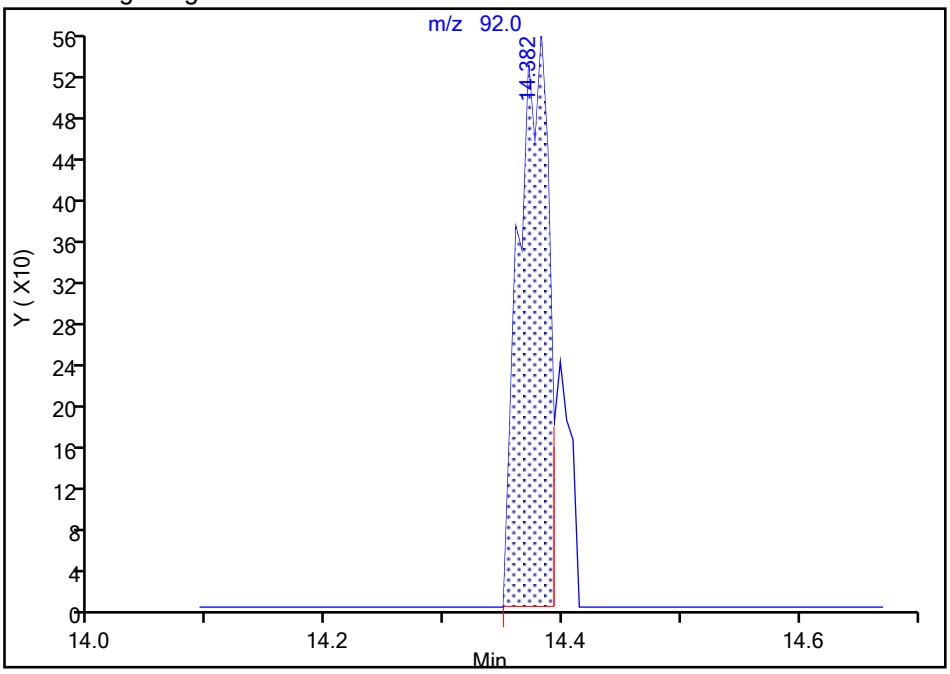
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 Toluene, CAS: 108-88-3

Signal: 1

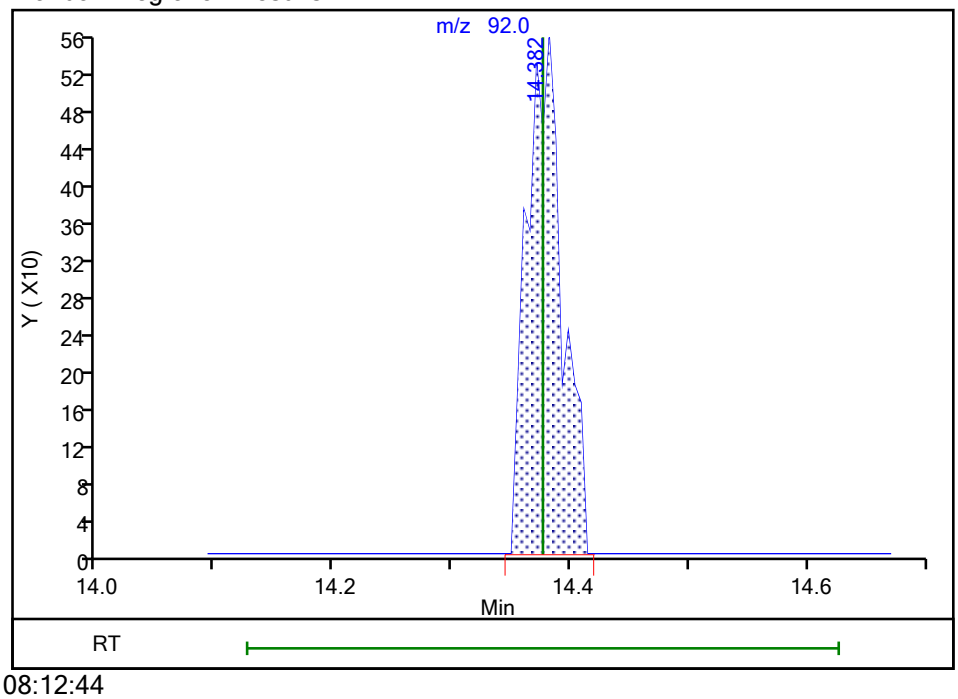
Processing Integration Results

RT: 14.38
Area: 977
Amount: 0.030525
Amount Units: ppb v/v



Manual Integration Results

RT: 14.38
Area: 1164
Amount: 0.036368
Amount Units: ppb v/v



Reviewer: bunmaa, 20-Jan-2023 08:12:44

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

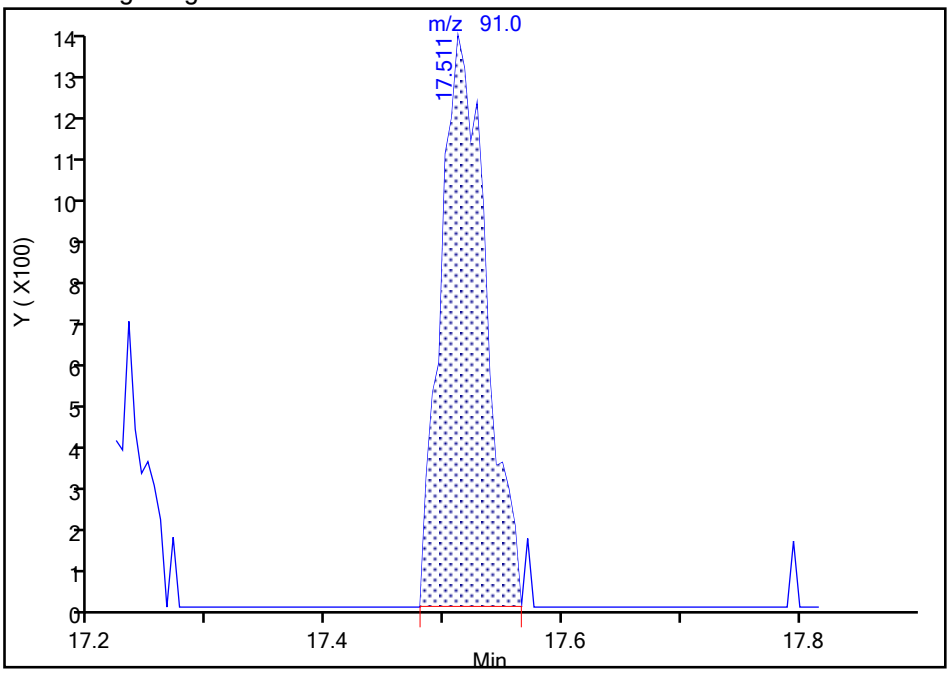
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

73 Ethylbenzene, CAS: 100-41-4

Signal: 1

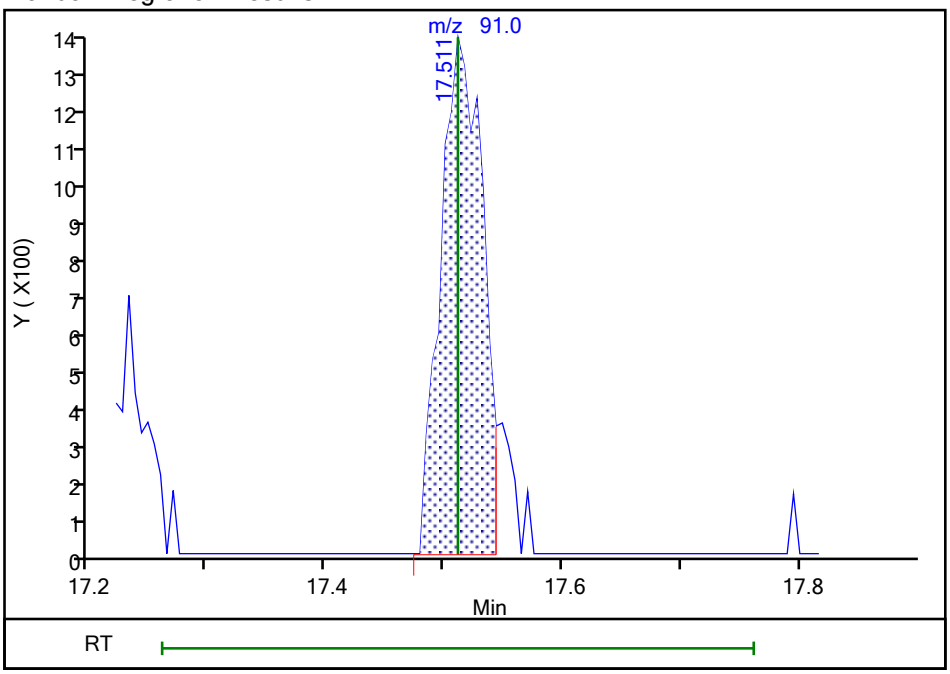
Processing Integration Results

RT: 17.51
Area: 3516
Amount: 0.048169
Amount Units: ppb v/v



Manual Integration Results

RT: 17.51
Area: 3259
Amount: 0.044648
Amount Units: ppb v/v



Reviewer: bunmaa, 20-Jan-2023 08:13:10

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

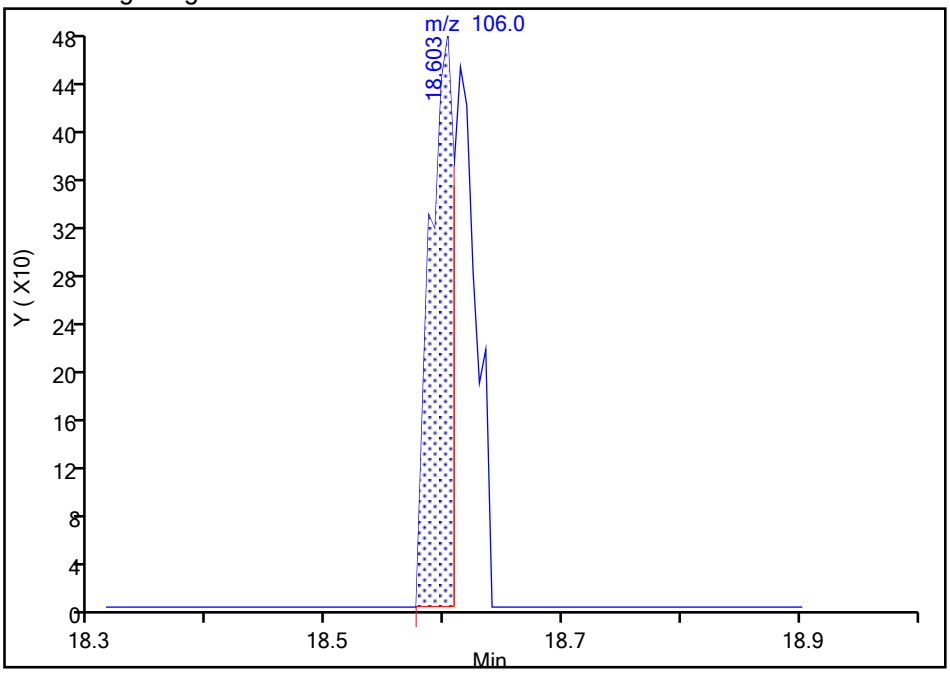
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 o-Xylene, CAS: 95-47-6

Signal: 1

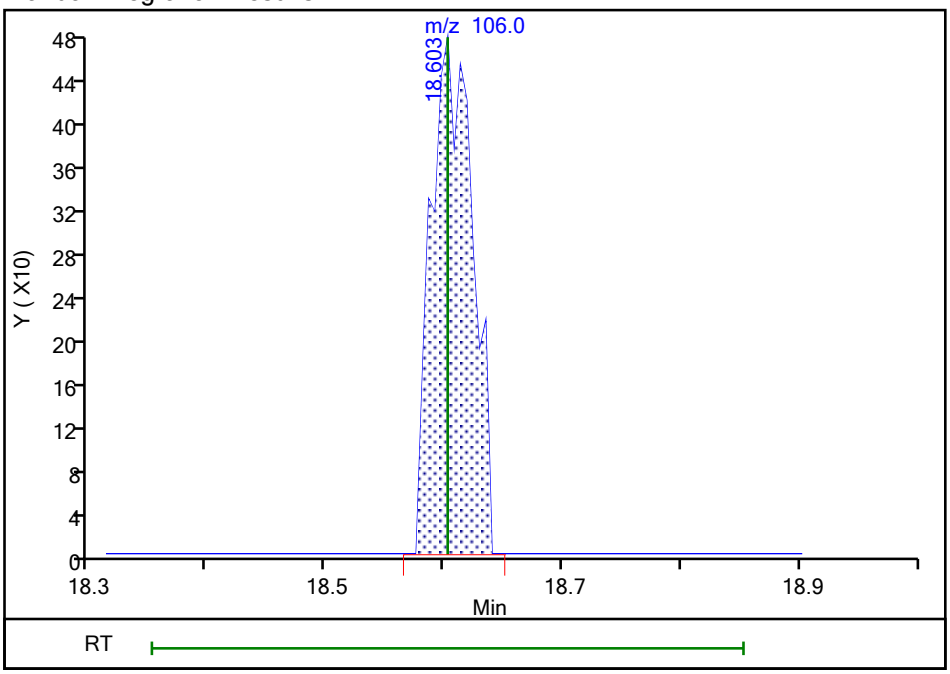
Processing Integration Results

RT: 18.60
Area: 675
Amount: 0.024281
Amount Units: ppb v/v



Manual Integration Results

RT: 18.60
Area: 1175
Amount: 0.042266
Amount Units: ppb v/v



Reviewer: bunmaa, 20-Jan-2023 08:13:26
Audit Action: Manually Integrated Audit Reason: Assign Peak

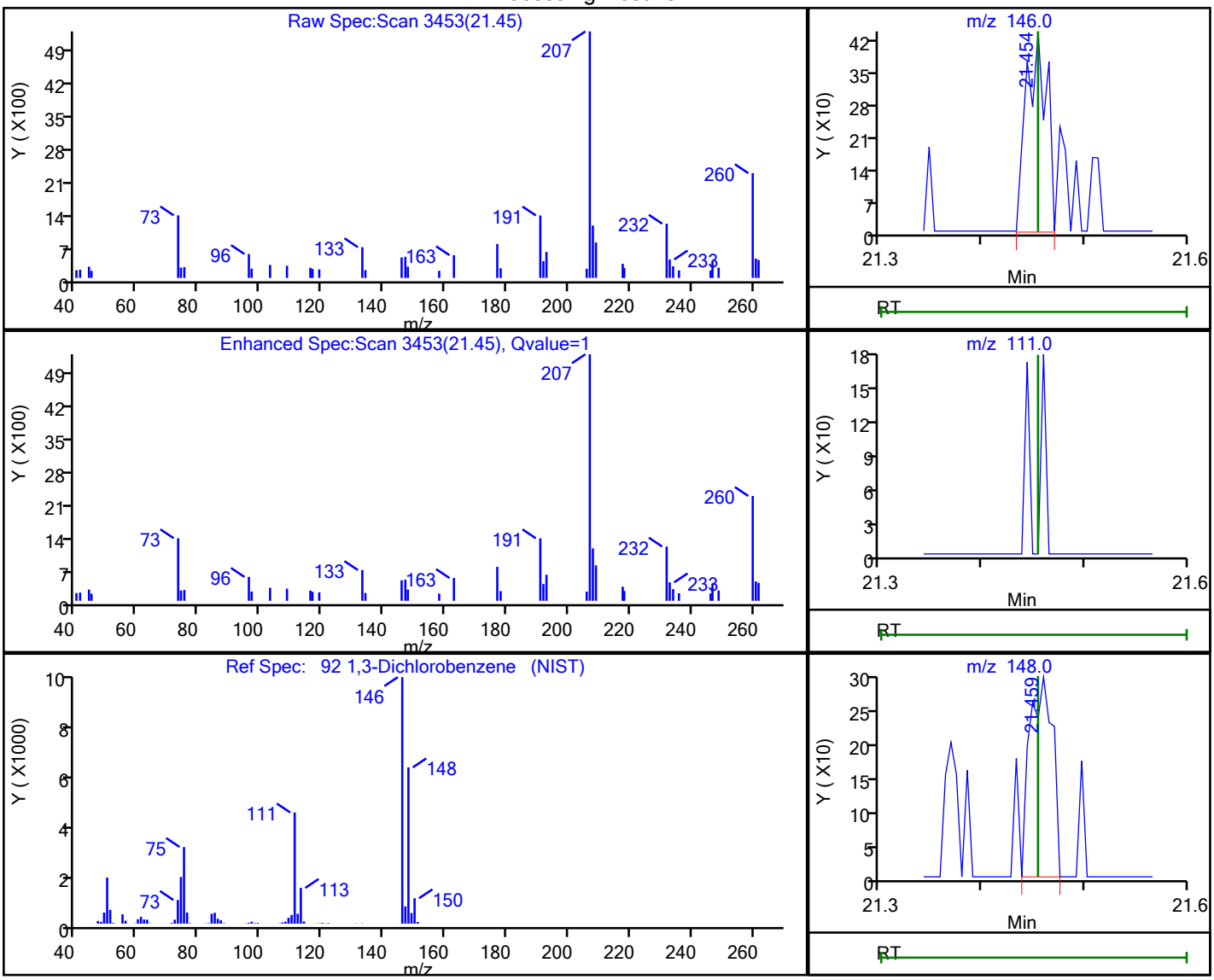
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

92 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
21.45	146.00	599	0.011512
21.45	111.00	0	
21.46	148.00	467	

Reviewer: bunmaa, 20-Jan-2023 08:14:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

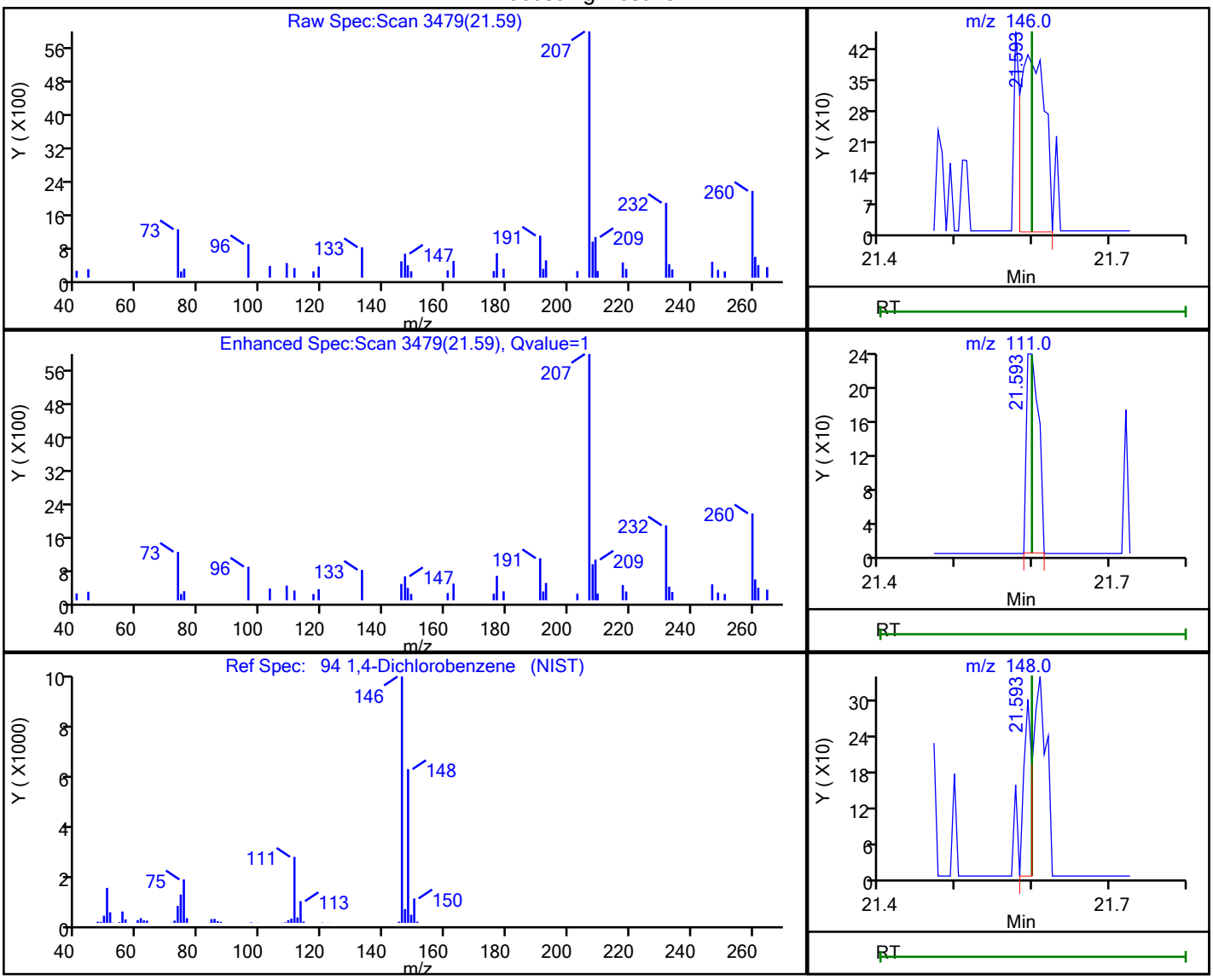
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
21.59	146.00	876	0.016687
21.59	111.00	260	
21.59	148.00	215	

Reviewer: bunmaa, 20-Jan-2023 08:14:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

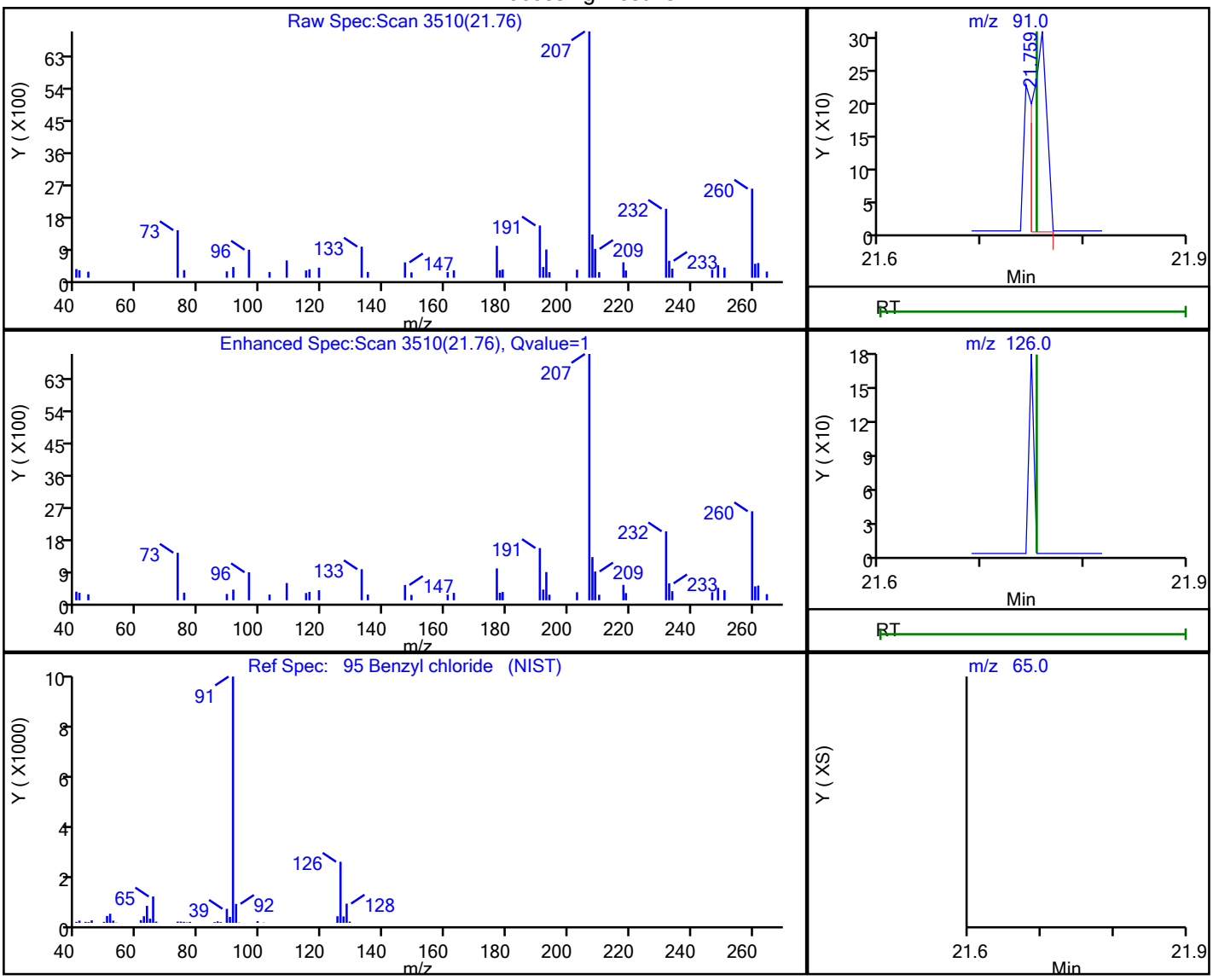
User Disabled Compound Report

Eurofins Burlington

Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
21.76	91.00	281	0.004700
21.75	126.00	0	
21.75	65.00	0	

Reviewer: bunmaa, 20-Jan-2023 08:14:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

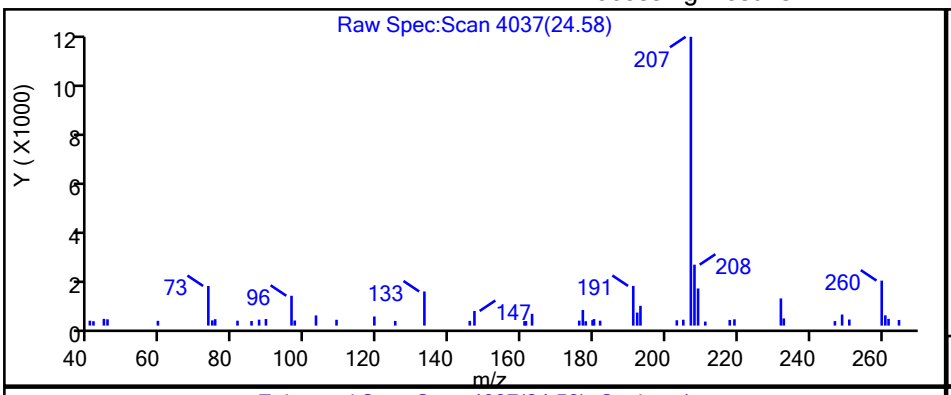
User Disabled Compound Report

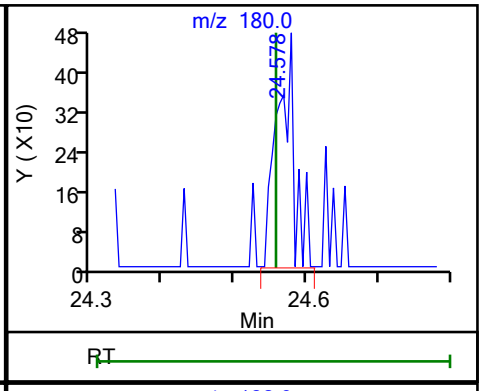
Eurofins Burlington

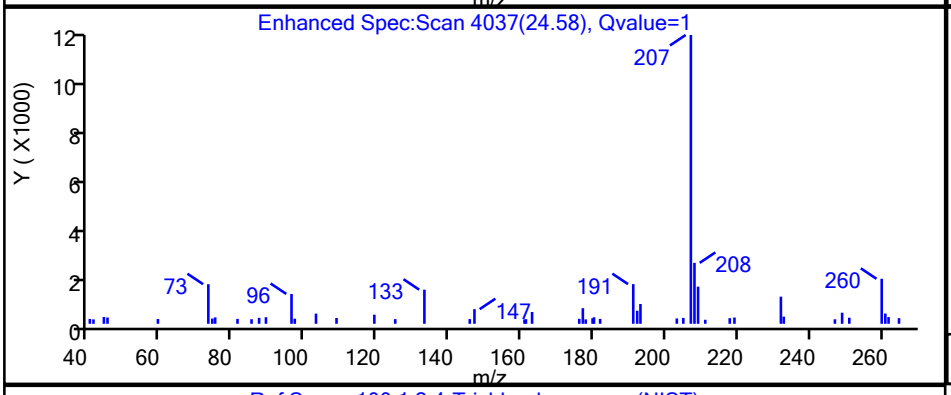
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

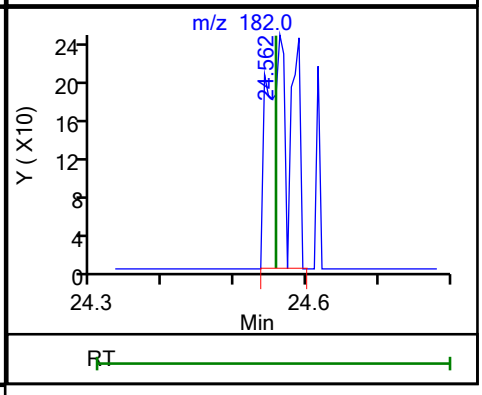
100 1,2,4-Trichlorobenzene, CAS: 120-82-1

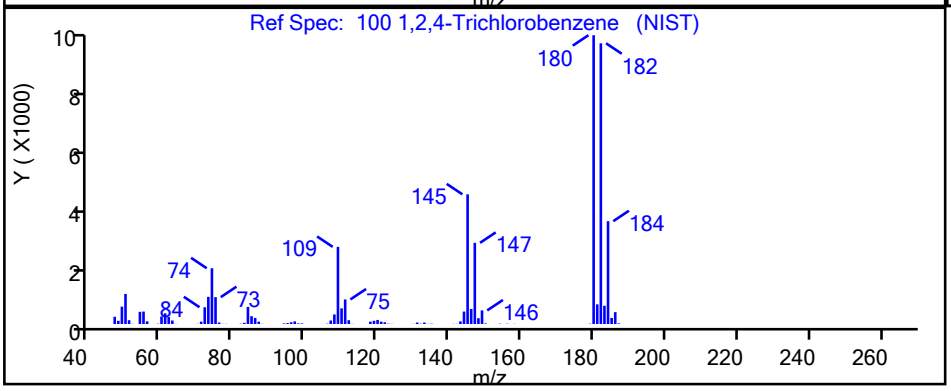
Processing Results











RT	Mass	Response	Amount
24.58	180.00	796	0.018125
24.56	182.00	602	

Reviewer: bunmaa, 20-Jan-2023 08:14:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

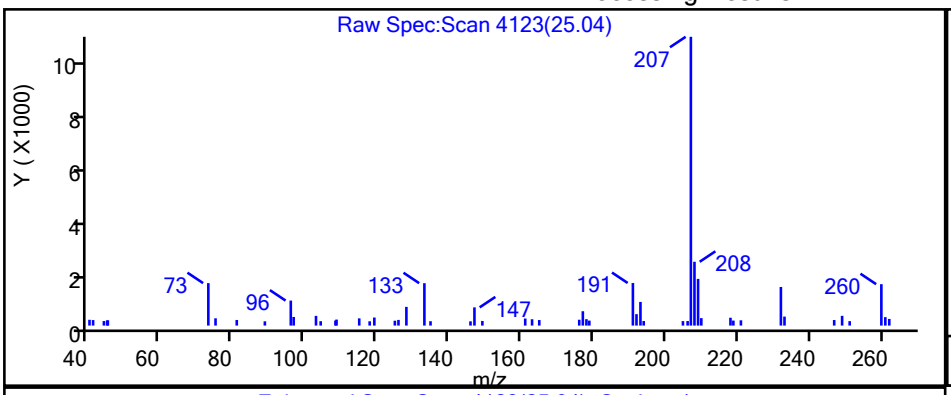
User Disabled Compound Report

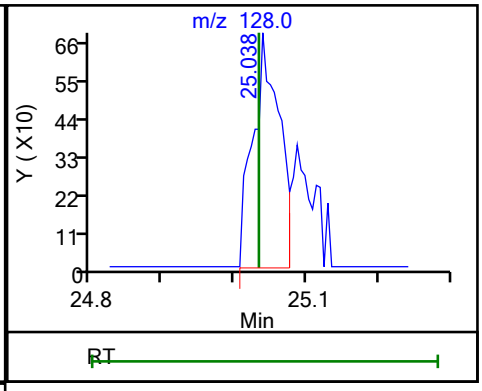
Eurofins Burlington

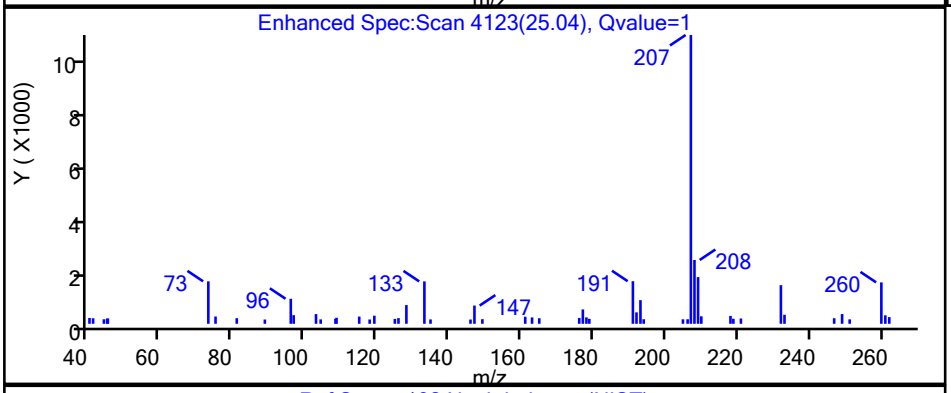
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-006.D				
Injection Date:	19-Jan-2023 13:31:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-11	Lab Sample ID:	200-66478-11		
Client ID:	3200				
Operator ID:	vtp	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

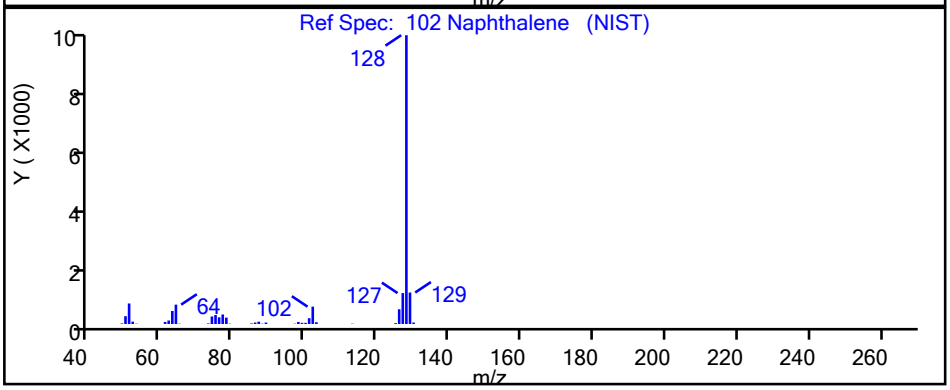
102 Naphthalene, CAS: 91-20-3

Processing Results









RT	Mass	Response	Amount
25.04	128.00	1743	0.020540

Reviewer: bunmaa, 20-Jan-2023 08:14:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 5709 Lab Sample ID: 200-66478-12

Matrix: Air Lab File ID: 200-54045-007.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 14:25

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187642 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.10	U	0.10	0.10
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-66478-1

SDG No.:

Client Sample ID: 5709 Lab Sample ID: 200-66478-12

Matrix: Air Lab File ID: 200-54045-007.D

Analysis Method: TO-15 Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/19/2023 14:25

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: Heated Purge: (Y/N) pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 187642 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington | Job No.: 200-66478-1

SDG No.:

Client Sample ID: 5709 | Lab Sample ID: 200-66478-12

Matrix: Air | Lab File ID: 200-54045-007.D

Analysis Method: TO-15 | Date Collected: 01/16/2023 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 01/19/2023 14:25

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

Purge Volume: | Heated Purge: (Y/N) pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 187642 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-007.D
Lims ID: 200-66478-A-12
Client ID: 5709
Sample Type: Client
Inject. Date: 19-Jan-2023 14:25:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0054045-007
Misc. Info.: 66478-12
Operator ID: vtp Instrument ID: CHG.i

Method: \\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jan-2023 08:18:04 Calib Date: 11-Jan-2023 03:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\CHG.i\20230110-53954.b\200-53954-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX1682

First Level Reviewer: bunmaa Date: 20-Jan-2023 08:18:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.110				ND	7
2 Dichlorodifluoromethane	85		3.169				ND	
3 Chlorodifluoromethane	51		3.190				ND	7
4 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.388				ND	
5 Chloromethane	50		3.474				ND	
6 Vinyl chloride	62		3.677				ND	
7 Butane	43		3.677				ND	
8 Butadiene	54		3.752				ND	
9 Bromomethane	94		4.249				ND	
10 Chloroethane	64		4.447				ND	
12 Vinyl bromide	106		4.774				ND	
13 Trichlorofluoromethane	101		4.897				ND	
15 Ethanol	45		5.191				ND	
18 1,1-Dichloroethene	96		5.795				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		5.822				ND	
19 Acetone	43		5.865				ND	7
22 Isopropyl alcohol	45		6.127				ND	
23 Carbon disulfide	76		6.175				ND	
25 3-Chloro-1-propene	41		6.432				ND	
26 Methylene Chloride	49		6.646				ND	7
27 2-Methyl-2-propanol	59		6.860				ND	
29 trans-1,2-Dichloroethene	61		7.133				ND	
30 Methyl tert-butyl ether	73		7.149				ND	
31 Hexane	57		7.641				ND	
32 1,1-Dichloroethane	63		7.876				ND	
33 Vinyl acetate	43		7.893				ND	
34 2-Butanone (MEK)	72		8.855				ND	
35 cis-1,2-Dichloroethene	96		8.866				ND	
36 Ethyl acetate	88		8.941				ND	
* 37 Chlorobromomethane	128	9.289	9.278	0.011	73	163999	10.0	
38 Tetrahydrofuran	42		9.353				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	39 Chloroform	83		9.465				ND	
S	43 1,2-Dichloroethene, Total	61		9.665				ND	7
	40 1,1,1-Trichloroethane	97		9.792				ND	
	41 Cyclohexane	84		9.941				ND	
	42 Carbon tetrachloride	117		10.086				ND	
	44 Benzene	78		10.460				ND	MU
	45 1,2-Dichloroethane	62		10.535				ND	
	46 Isooctane	57		10.712				ND	
	47 n-Heptane	43		11.054				ND	7
*	48 1,4-Difluorobenzene	114	11.279	11.274	0.005	94	937232	10.0	
	50 Trichloroethene	95		11.755				ND	
	51 1,2-Dichloropropane	63		12.263				ND	
	54 Methyl methacrylate	69		12.397				ND	
	53 Dibromomethane	174		12.434				ND	7
	55 1,4-Dioxane	88		12.434				ND	
	56 Dichlorobromomethane	83		12.788				ND	
	58 cis-1,3-Dichloropropene	75		13.676				ND	
	59 4-Methyl-2-pentanone (MIBK)	43		13.991				ND	
	60 Toluene	92	14.387	14.387	0.011	85	1068	0.0313	M
	65 trans-1,3-Dichloropropene	75		14.826				ND	
	66 1,1,2-Trichloroethane	83		15.227				ND	
	67 Tetrachloroethene	166		15.441				ND	
	68 2-Hexanone	43		15.703				ND	
	69 Chlorodibromomethane	129		16.008				ND	
	70 Ethylene Dibromide	107		16.259				ND	
*	71 Chlorobenzene-d5	117	17.238	17.238	0.000	85	723148	10.0	
	72 Chlorobenzene	112		17.297				ND	
	73 Ethylbenzene	91	17.522	17.511	0.011	1	3449	0.0443	
	74 m-Xylene & p-Xylene	106		17.789				ND	
	76 o-Xylene	106	18.603	18.603	0.000	1	991	0.0334	M
	77 Styrene	104		18.640				ND	
	78 Bromoform	173		19.004				ND	
	79 Isopropylbenzene	105		19.368				ND	
S	82 Xylenes, Total	106				0		0.0334	
	80 1,1,2,2-Tetrachloroethane	83		19.913				ND	7
	83 N-Propylbenzene	91		20.133				ND	
	84 2-Chlorotoluene	91		20.277				ND	
	85 4-Ethyltoluene	105		20.341				ND	
	86 1,3,5-Trimethylbenzene	105		20.443				ND	
	89 tert-Butylbenzene	119		20.946				ND	7
	90 1,2,4-Trimethylbenzene	105		21.037				ND	
	91 sec-Butylbenzene	105		21.283				ND	
	92 1,3-Dichlorobenzene	146		21.454				ND	7
	93 4-Isopropyltoluene	119		21.508				ND	7
	94 1,4-Dichlorobenzene	146		21.598				ND	7
	95 Benzyl chloride	91		21.754				ND	
	97 n-Butylbenzene	91		22.075				ND	
	96 1,2-Dichlorobenzene	146		22.096				ND	7
	100 1,2,4-Trichlorobenzene	180		24.557				ND	
	101 Hexachlorobutadiene	225		24.808				ND	
	102 Naphthalene	128		25.033				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15GIS_00019 Amount Added: 20.00 Units: mL Run Reagent

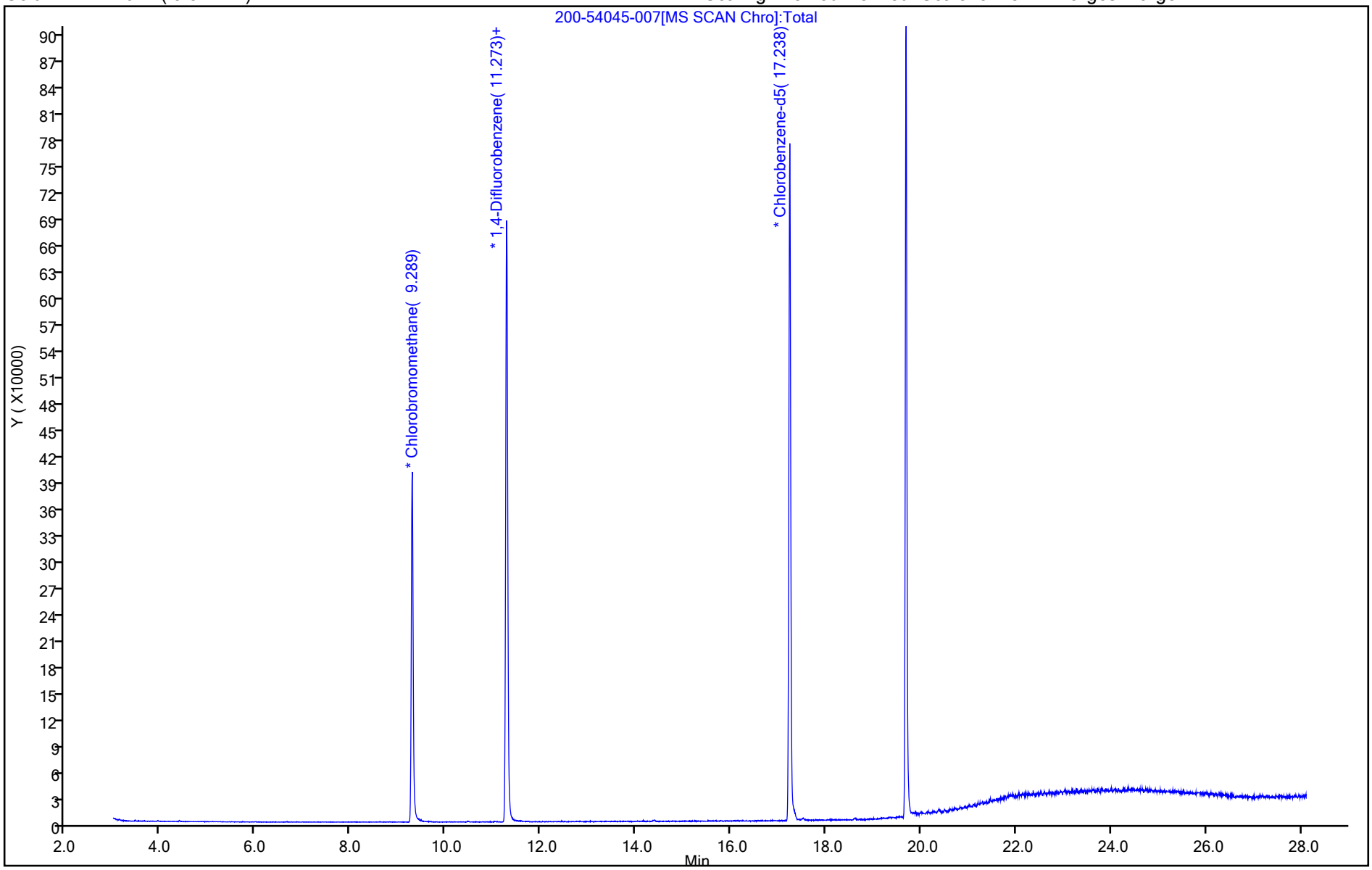
Report Date: 20-Jan-2023 08:18:04 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-007.D

Injection Date:	19-Jan-2023 14:25:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-66478-A-12	Lab Sample ID:	200-66478-12	Worklist Smp#:	7
Client ID:	5709				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



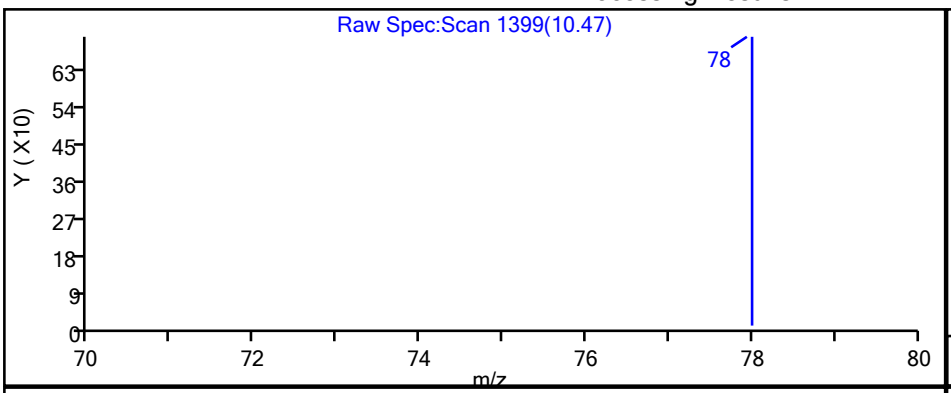
User Disabled Compound Report

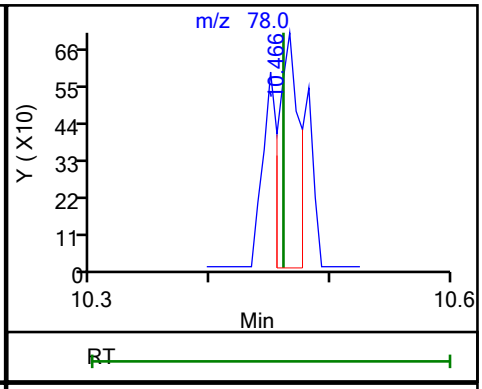
Eurofins Burlington

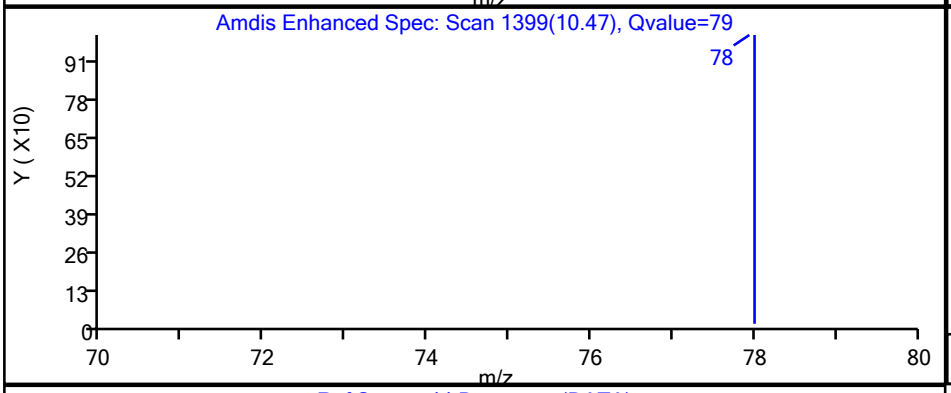
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-007.D				
Injection Date:	19-Jan-2023 14:25:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-12	Lab Sample ID:	200-66478-12		
Client ID:	5709				
Operator ID:	vtp	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

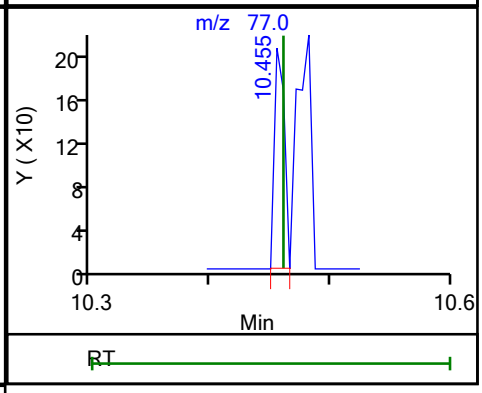
44 Benzene, CAS: 71-43-2

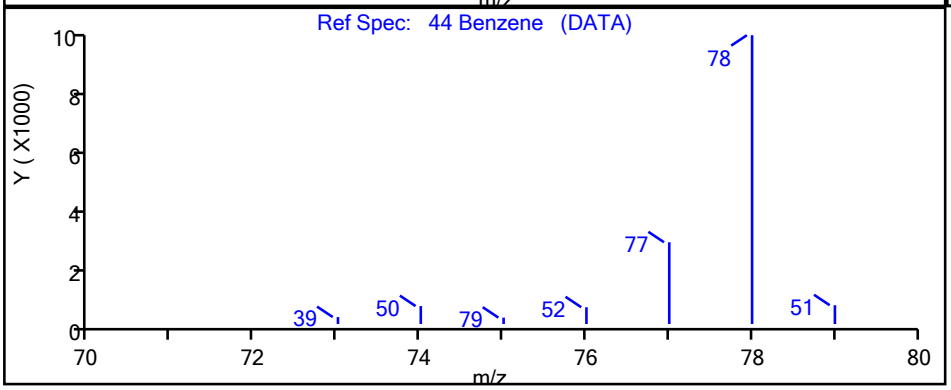
Processing Results











RT	Mass	Response	Amount
10.47	78.00	825	0.016670
10.45	77.00	116	

Reviewer: bunmaa, 20-Jan-2023 08:16:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Burlington

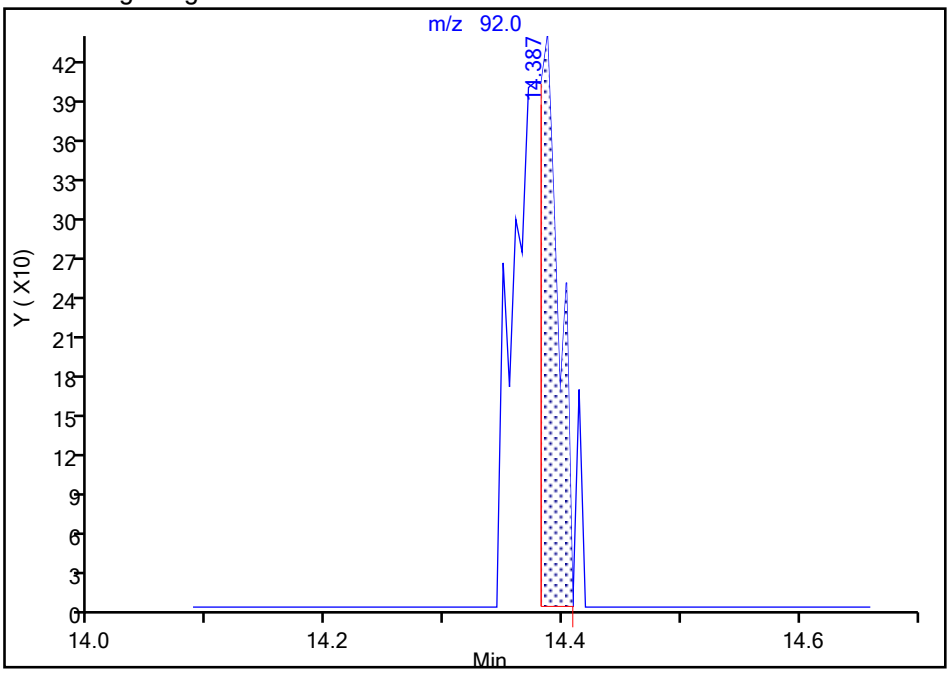
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-007.D				
Injection Date:	19-Jan-2023 14:25:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-12	Lab Sample ID:	200-66478-12		
Client ID:	5709				
Operator ID:	vtp	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

60 Toluene, CAS: 108-88-3

Signal: 1

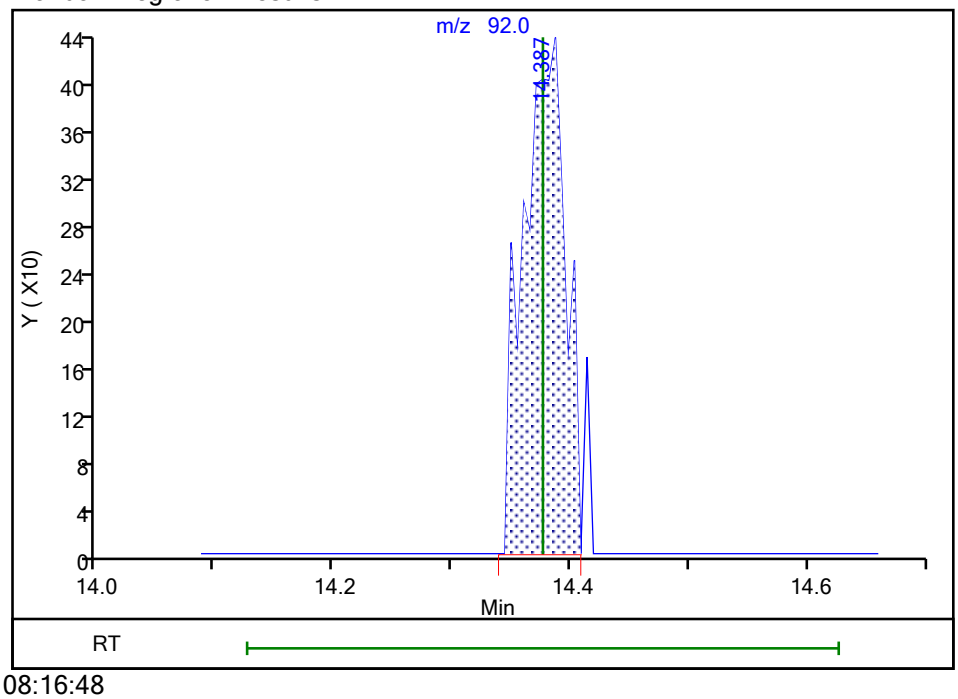
Processing Integration Results

RT: 14.39
Area: 496
Amount: 0.014529
Amount Units: ppb v/v



Manual Integration Results

RT: 14.39
Area: 1068
Amount: 0.031283
Amount Units: ppb v/v



Reviewer: bunmaa, 20-Jan-2023 08:16:48
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Burlington

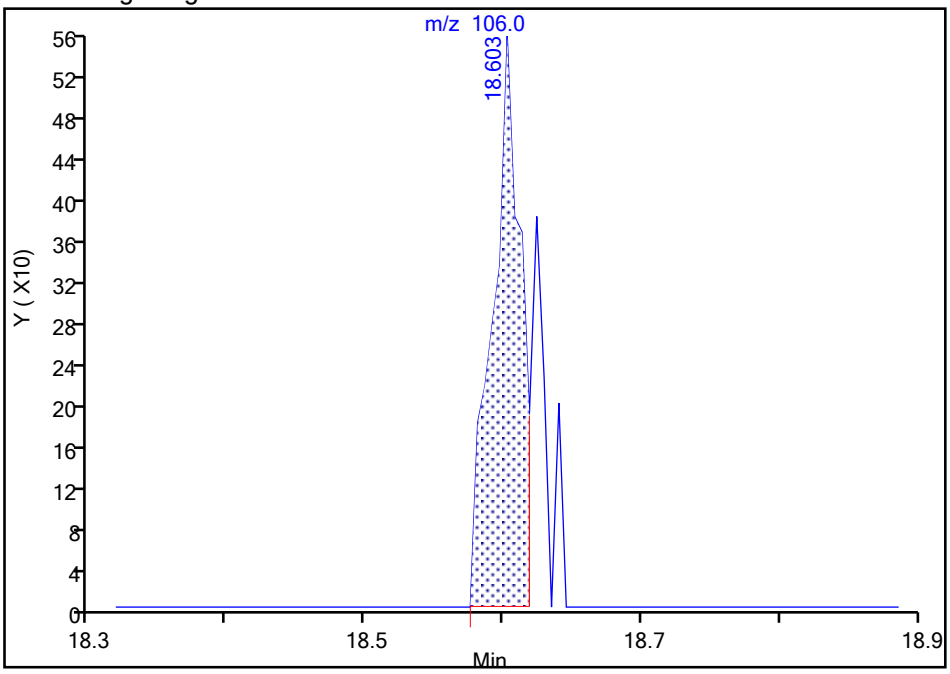
Data File:	\\chromfs\Burlington\ChromData\CHG.i\20230119-54045.b\200-54045-007.D				
Injection Date:	19-Jan-2023 14:25:30	Instrument ID:	CHG.i		
Lims ID:	200-66478-A-12	Lab Sample ID:	200-66478-12		
Client ID:	5709				
Operator ID:	vtp	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 o-Xylene, CAS: 95-47-6

Signal: 1

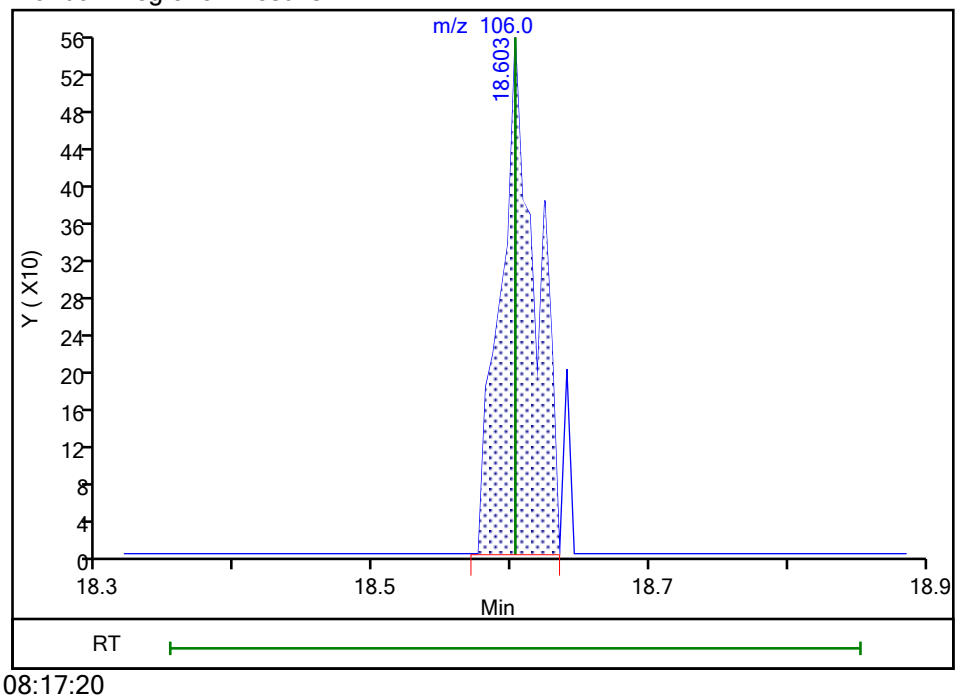
Processing Integration Results

RT: 18.60
Area: 798
Amount: 0.026912
Amount Units: ppb v/v



Manual Integration Results

RT: 18.60
Area: 991
Amount: 0.033420
Amount Units: ppb v/v



Reviewer: bunmaa, 20-Jan-2023 08:17:20
Audit Action: Manually Integrated Audit Reason: Assign Peak

APPENDIX 5

VMS Discharge Sampling Laboratory Report

Pace Analytical Laboratory Report 10601404, April 04, 2022

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

April 04, 2022

David Zolp
Geosyntec
W67/N222 Evergreen Blvd.
Suite 113
Cedarburg, WI 53012

RE: Project: CHE80940Q MNSC
Pace Project No.: 10601404

Dear David Zolp:

Enclosed are the analytical results for sample(s) received by the laboratory on March 21, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout
carolynne.trout@pacelabs.com
1(612)607-6351
Project Manager

Enclosures

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10601404001	**EP-1**	Air	03/18/22 11:12	03/21/22 10:37
10601404002	**EP-2**	Air	03/18/22 11:38	03/21/22 10:37
10601404003	**EP-2 DUP**	Air	03/18/22 11:38	03/21/22 10:37
10601404004	**EP-3**	Air	03/18/22 11:00	03/21/22 10:37

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10601404001	**EP-1**	TO-15	HMH	61
10601404002	**EP-2**	TO-15	HMH	61
10601404003	**EP-2 DUP**	TO-15	HMH	61
10601404004	**EP-3**	TO-15	HMH	61

PASI-M = Pace Analytical Services - Minneapolis

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Sample: EP-1 **Lab ID: 10601404001** Collected: 03/18/22 11:12 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Acetone	**18.9**	ug/m3	11.3	3.4	1.87		03/31/22 18:14	67-64-1	
Benzene	**<0.21**	ug/m3	0.61	0.21	1.87		03/31/22 18:14	71-43-2	
Benzyl chloride	**<1.7**	ug/m3	4.9	1.7	1.87		03/31/22 18:14	100-44-7	
Bromodichloromethane	**<0.44**	ug/m3	2.5	0.44	1.87		03/31/22 18:14	75-27-4	
Bromoform	**<3.0**	ug/m3	9.8	3.0	1.87		03/31/22 18:14	75-25-2	
Bromomethane	**<0.28**	ug/m3	1.5	0.28	1.87		03/31/22 18:14	74-83-9	
1,3-Butadiene	**<0.22**	ug/m3	0.84	0.22	1.87		03/31/22 18:14	106-99-0	
2-Butanone (MEK)	**6.2**	ug/m3	5.6	0.87	1.87		03/31/22 18:14	78-93-3	
Carbon disulfide	**6.7**	ug/m3	1.2	0.24	1.87		03/31/22 18:14	75-15-0	
Carbon tetrachloride	**<0.52**	ug/m3	2.4	0.52	1.87		03/31/22 18:14	56-23-5	
Chlorobenzene	**<0.29**	ug/m3	1.8	0.29	1.87		03/31/22 18:14	108-90-7	
Chloroethane	**<0.42**	ug/m3	1.0	0.42	1.87		03/31/22 18:14	75-00-3	
Chloroform	**<0.34**	ug/m3	0.93	0.34	1.87		03/31/22 18:14	67-66-3	
Chloromethane	**<0.16**	ug/m3	0.79	0.16	1.87		03/31/22 18:14	74-87-3	
Cyclohexane	**2.1J**	ug/m3	3.3	0.41	1.87		03/31/22 18:14	110-82-7	
Dibromochloromethane	**<0.96**	ug/m3	3.2	0.96	1.87		03/31/22 18:14	124-48-1	
1,2-Dibromoethane (EDB)	**<0.56**	ug/m3	1.5	0.56	1.87		03/31/22 18:14	106-93-4	
1,2-Dichlorobenzene	**<0.76**	ug/m3	5.7	0.76	1.87		03/31/22 18:14	95-50-1	
1,3-Dichlorobenzene	**<0.95**	ug/m3	5.7	0.95	1.87		03/31/22 18:14	541-73-1	
1,4-Dichlorobenzene	**<1.6**	ug/m3	5.7	1.6	1.87		03/31/22 18:14	106-46-7	
Dichlorodifluoromethane	**25.4**	ug/m3	1.9	0.35	1.87		03/31/22 18:14	75-71-8	
1,1-Dichloroethane	**<0.31**	ug/m3	1.5	0.31	1.87		03/31/22 18:14	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/m3	1.5	0.36	1.87		03/31/22 18:14	107-06-2	
1,1-Dichloroethene	**<0.26**	ug/m3	1.5	0.26	1.87		03/31/22 18:14	75-35-4	
cis-1,2-Dichloroethene	**3.1**	ug/m3	1.5	0.36	1.87		03/31/22 18:14	156-59-2	
trans-1,2-Dichloroethene	**<0.31**	ug/m3	1.5	0.31	1.87		03/31/22 18:14	156-60-5	
1,2-Dichloropropane	**<0.50**	ug/m3	1.8	0.50	1.87		03/31/22 18:14	78-87-5	
cis-1,3-Dichloropropene	**<0.48**	ug/m3	4.3	0.48	1.87		03/31/22 18:14	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/m3	4.3	1.0	1.87		03/31/22 18:14	10061-02-6	
Dichlorotetrafluoroethane	**<0.38**	ug/m3	2.7	0.38	1.87		03/31/22 18:14	76-14-2	
Ethanol	**11.9**	ug/m3	3.6	1.1	1.87		03/31/22 18:14	64-17-5	
Ethyl acetate	**<0.24**	ug/m3	1.4	0.24	1.87		03/31/22 18:14	141-78-6	
Ethylbenzene	**<0.58**	ug/m3	1.7	0.58	1.87		03/31/22 18:14	100-41-4	
4-Ethyltoluene	**<0.88**	ug/m3	4.7	0.88	1.87		03/31/22 18:14	622-96-8	
n-Heptane	**<0.34**	ug/m3	1.6	0.34	1.87		03/31/22 18:14	142-82-5	
Hexachloro-1,3-butadiene	**<2.3**	ug/m3	10.1	2.3	1.87		03/31/22 18:14	87-68-3	
n-Hexane	**<0.36**	ug/m3	1.3	0.36	1.87		03/31/22 18:14	110-54-3	
2-Hexanone	**<0.83**	ug/m3	7.8	0.83	1.87		03/31/22 18:14	591-78-6	
Methylene Chloride	**<1.1**	ug/m3	6.6	1.1	1.87		03/31/22 18:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	**2.0J**	ug/m3	7.8	0.60	1.87		03/31/22 18:14	108-10-1	
Methyl-tert-butyl ether	**<0.24**	ug/m3	6.8	0.24	1.87		03/31/22 18:14	1634-04-4	
Naphthalene	**<4.1**	ug/m3	5.0	4.1	1.87		03/31/22 18:14	91-20-3	
2-Propanol	**<0.95**	ug/m3	4.7	0.95	1.87		03/31/22 18:14	67-63-0	
Propylene	**1.9**	ug/m3	1.6	0.24	1.87		03/31/22 18:14	115-07-1	
Styrene	**<0.72**	ug/m3	1.6	0.72	1.87		03/31/22 18:14	100-42-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Sample: EP-1 **Lab ID: 10601404001** Collected: 03/18/22 11:12 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
1,1,2,2-Tetrachloroethane	**<0.70**	ug/m3	2.6	0.70	1.87		03/31/22 18:14	79-34-5	
Tetrachloroethene	**426**	ug/m3	6.4	2.7	9.35		04/01/22 12:41	127-18-4	
Tetrahydrofuran	**6.4**	ug/m3	1.1	0.34	1.87		03/31/22 18:14	109-99-9	
Toluene	**3.7**	ug/m3	1.4	0.46	1.87		03/31/22 18:14	108-88-3	
1,2,4-Trichlorobenzene	**<9.1**	ug/m3	14.1	9.1	1.87		03/31/22 18:14	120-82-1	
1,1,1-Trichloroethane	**<0.35**	ug/m3	2.1	0.35	1.87		03/31/22 18:14	71-55-6	
1,1,2-Trichloroethane	**<0.37**	ug/m3	1.0	0.37	1.87		03/31/22 18:14	79-00-5	
Trichloroethene	**9.9**	ug/m3	1.0	0.37	1.87		03/31/22 18:14	79-01-6	
Trichlorofluoromethane	**228**	ug/m3	2.1	0.44	1.87		03/31/22 18:14	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<0.54**	ug/m3	2.9	0.54	1.87		03/31/22 18:14	76-13-1	
1,2,4-Trimethylbenzene	**<0.66**	ug/m3	1.9	0.66	1.87		03/31/22 18:14	95-63-6	
1,3,5-Trimethylbenzene	**<0.54**	ug/m3	1.9	0.54	1.87		03/31/22 18:14	108-67-8	
Vinyl acetate	**<0.39**	ug/m3	1.3	0.39	1.87		03/31/22 18:14	108-05-4	
Vinyl chloride	**<0.16**	ug/m3	0.49	0.16	1.87		03/31/22 18:14	75-01-4	
m&p-Xylene	**1.3J**	ug/m3	3.3	1.2	1.87		03/31/22 18:14	179601-23-1	
o-Xylene	**<0.51**	ug/m3	1.7	0.51	1.87		03/31/22 18:14	95-47-6	

Sample: EP-2 **Lab ID: 10601404002** Collected: 03/18/22 11:38 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Acetone	**16.0**	ug/m3	10.7	3.2	1.77		03/31/22 18:48	67-64-1	
Benzene	**0.77**	ug/m3	0.58	0.20	1.77		03/31/22 18:48	71-43-2	
Benzyl chloride	**<1.6**	ug/m3	4.7	1.6	1.77		03/31/22 18:48	100-44-7	
Bromodichloromethane	**<0.42**	ug/m3	2.4	0.42	1.77		03/31/22 18:48	75-27-4	
Bromoform	**<2.9**	ug/m3	9.3	2.9	1.77		03/31/22 18:48	75-25-2	
Bromomethane	**<0.27**	ug/m3	1.4	0.27	1.77		03/31/22 18:48	74-83-9	
1,3-Butadiene	**<0.21**	ug/m3	0.80	0.21	1.77		03/31/22 18:48	106-99-0	
2-Butanone (MEK)	**3.7J**	ug/m3	5.3	0.82	1.77		03/31/22 18:48	78-93-3	
Carbon disulfide	**<0.23**	ug/m3	1.1	0.23	1.77		03/31/22 18:48	75-15-0	
Carbon tetrachloride	**<0.50**	ug/m3	2.3	0.50	1.77		03/31/22 18:48	56-23-5	
Chlorobenzene	**<0.27**	ug/m3	1.7	0.27	1.77		03/31/22 18:48	108-90-7	
Chloroethane	**<0.40**	ug/m3	0.95	0.40	1.77		03/31/22 18:48	75-00-3	
Chloroform	**0.42J**	ug/m3	0.88	0.32	1.77		03/31/22 18:48	67-66-3	
Chloromethane	**<0.15**	ug/m3	0.74	0.15	1.77		03/31/22 18:48	74-87-3	
Cyclohexane	**2.7J**	ug/m3	3.1	0.39	1.77		03/31/22 18:48	110-82-7	
Dibromochloromethane	**<0.91**	ug/m3	3.1	0.91	1.77		03/31/22 18:48	124-48-1	
1,2-Dibromoethane (EDB)	**<0.53**	ug/m3	1.4	0.53	1.77		03/31/22 18:48	106-93-4	
1,2-Dichlorobenzene	**<0.72**	ug/m3	5.4	0.72	1.77		03/31/22 18:48	95-50-1	
1,3-Dichlorobenzene	**<0.90**	ug/m3	5.4	0.90	1.77		03/31/22 18:48	541-73-1	
1,4-Dichlorobenzene	**<1.6**	ug/m3	5.4	1.6	1.77		03/31/22 18:48	106-46-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Sample: EP-2 **Lab ID: 10601404002** Collected: 03/18/22 11:38 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Dichlorodifluoromethane	**4.1**	ug/m3	1.8	0.33	1.77		03/31/22 18:48	75-71-8	
1,1-Dichloroethane	**<0.29**	ug/m3	1.5	0.29	1.77		03/31/22 18:48	75-34-3	
1,2-Dichloroethane	**<0.34**	ug/m3	1.5	0.34	1.77		03/31/22 18:48	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/m3	1.4	0.24	1.77		03/31/22 18:48	75-35-4	
cis-1,2-Dichloroethene	**15.8**	ug/m3	1.4	0.35	1.77		03/31/22 18:48	156-59-2	
trans-1,2-Dichloroethene	**<0.30**	ug/m3	1.4	0.30	1.77		03/31/22 18:48	156-60-5	
1,2-Dichloropropane	**<0.48**	ug/m3	1.7	0.48	1.77		03/31/22 18:48	78-87-5	
cis-1,3-Dichloropropene	**<0.45**	ug/m3	4.1	0.45	1.77		03/31/22 18:48	10061-01-5	
trans-1,3-Dichloropropene	**<0.96**	ug/m3	4.1	0.96	1.77		03/31/22 18:48	10061-02-6	
Dichlorotetrafluoroethane	**<0.36**	ug/m3	2.5	0.36	1.77		03/31/22 18:48	76-14-2	
Ethanol	**25.9**	ug/m3	3.4	1.0	1.77		03/31/22 18:48	64-17-5	
Ethyl acetate	**<0.23**	ug/m3	1.3	0.23	1.77		03/31/22 18:48	141-78-6	
Ethylbenzene	**36.3**	ug/m3	1.6	0.55	1.77		03/31/22 18:48	100-41-4	
4-Ethyltoluene	**2.2J**	ug/m3	4.4	0.84	1.77		03/31/22 18:48	622-96-8	
n-Heptane	**<0.32**	ug/m3	1.5	0.32	1.77		03/31/22 18:48	142-82-5	
Hexachloro-1,3-butadiene	**<2.2**	ug/m3	9.6	2.2	1.77		03/31/22 18:48	87-68-3	
n-Hexane	**3.9**	ug/m3	1.3	0.34	1.77		03/31/22 18:48	110-54-3	
2-Hexanone	**<0.78**	ug/m3	7.4	0.78	1.77		03/31/22 18:48	591-78-6	
Methylene Chloride	**<1.0**	ug/m3	6.2	1.0	1.77		03/31/22 18:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.57**	ug/m3	7.4	0.57	1.77		03/31/22 18:48	108-10-1	
Methyl-tert-butyl ether	**<0.22**	ug/m3	6.5	0.22	1.77		03/31/22 18:48	1634-04-4	
Naphthalene	**<3.8**	ug/m3	4.7	3.8	1.77		03/31/22 18:48	91-20-3	
2-Propanol	**<0.90**	ug/m3	4.4	0.90	1.77		03/31/22 18:48	67-63-0	
Propylene	**4.9**	ug/m3	1.5	0.23	1.77		03/31/22 18:48	115-07-1	
Styrene	**<0.68**	ug/m3	1.5	0.68	1.77		03/31/22 18:48	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.66**	ug/m3	2.5	0.66	1.77		03/31/22 18:48	79-34-5	
Tetrachloroethene	**779**	ug/m3	6.1	2.6	8.85		04/01/22 13:12	127-18-4	
Tetrahydrofuran	**<0.32**	ug/m3	1.1	0.32	1.77		03/31/22 18:48	109-99-9	
Toluene	**16.6**	ug/m3	1.4	0.43	1.77		03/31/22 18:48	108-88-3	
1,2,4-Trichlorobenzene	**<8.6**	ug/m3	13.3	8.6	1.77		03/31/22 18:48	120-82-1	
1,1,1-Trichloroethane	**<0.33**	ug/m3	2.0	0.33	1.77		03/31/22 18:48	71-55-6	
1,1,2-Trichloroethane	**<0.35**	ug/m3	0.98	0.35	1.77		03/31/22 18:48	79-00-5	
Trichloroethene	**20.5**	ug/m3	0.97	0.35	1.77		03/31/22 18:48	79-01-6	
Trichlorofluoromethane	**125**	ug/m3	2.0	0.41	1.77		03/31/22 18:48	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<0.51**	ug/m3	2.8	0.51	1.77		03/31/22 18:48	76-13-1	
1,2,4-Trimethylbenzene	**4.7**	ug/m3	1.8	0.63	1.77		03/31/22 18:48	95-63-6	
1,3,5-Trimethylbenzene	**1.6J**	ug/m3	1.8	0.51	1.77		03/31/22 18:48	108-67-8	
Vinyl acetate	**<0.37**	ug/m3	1.3	0.37	1.77		03/31/22 18:48	108-05-4	
Vinyl chloride	**<0.15**	ug/m3	0.46	0.15	1.77		03/31/22 18:48	75-01-4	
m&p-Xylene	**110**	ug/m3	3.1	1.1	1.77		03/31/22 18:48	179601-23-1	
o-Xylene	**22.9**	ug/m3	1.6	0.48	1.77		03/31/22 18:48	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Sample: EP-2 DUP **Lab ID: 10601404003** Collected: 03/18/22 11:38 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Acetone	**14.7**	ug/m3	11.1	3.3	1.83		03/31/22 19:22	67-64-1	
Benzene	**0.78**	ug/m3	0.59	0.21	1.83		03/31/22 19:22	71-43-2	
Benzyl chloride	**<1.6**	ug/m3	4.8	1.6	1.83		03/31/22 19:22	100-44-7	
Bromodichloromethane	**<0.43**	ug/m3	2.5	0.43	1.83		03/31/22 19:22	75-27-4	
Bromoform	**<3.0**	ug/m3	9.6	3.0	1.83		03/31/22 19:22	75-25-2	
Bromomethane	**<0.27**	ug/m3	1.4	0.27	1.83		03/31/22 19:22	74-83-9	
1,3-Butadiene	**<0.22**	ug/m3	0.82	0.22	1.83		03/31/22 19:22	106-99-0	
2-Butanone (MEK)	**3.0J**	ug/m3	5.5	0.85	1.83		03/31/22 19:22	78-93-3	
Carbon disulfide	**4.7**	ug/m3	1.2	0.24	1.83		03/31/22 19:22	75-15-0	
Carbon tetrachloride	**<0.51**	ug/m3	2.3	0.51	1.83		03/31/22 19:22	56-23-5	
Chlorobenzene	**<0.28**	ug/m3	1.7	0.28	1.83		03/31/22 19:22	108-90-7	
Chloroethane	**<0.41**	ug/m3	0.98	0.41	1.83		03/31/22 19:22	75-00-3	
Chloroform	**0.55J**	ug/m3	0.91	0.33	1.83		03/31/22 19:22	67-66-3	
Chloromethane	**<0.16**	ug/m3	0.77	0.16	1.83		03/31/22 19:22	74-87-3	
Cyclohexane	**2.8J**	ug/m3	3.2	0.40	1.83		03/31/22 19:22	110-82-7	
Dibromochloromethane	**<0.94**	ug/m3	3.2	0.94	1.83		03/31/22 19:22	124-48-1	
1,2-Dibromoethane (EDB)	**<0.55**	ug/m3	1.4	0.55	1.83		03/31/22 19:22	106-93-4	
1,2-Dichlorobenzene	**<0.74**	ug/m3	5.6	0.74	1.83		03/31/22 19:22	95-50-1	
1,3-Dichlorobenzene	**<0.93**	ug/m3	5.6	0.93	1.83		03/31/22 19:22	541-73-1	
1,4-Dichlorobenzene	**<1.6**	ug/m3	5.6	1.6	1.83		03/31/22 19:22	106-46-7	
Dichlorodifluoromethane	**4.2**	ug/m3	1.8	0.34	1.83		03/31/22 19:22	75-71-8	
1,1-Dichloroethane	**<0.30**	ug/m3	1.5	0.30	1.83		03/31/22 19:22	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/m3	1.5	0.36	1.83		03/31/22 19:22	107-06-2	
1,1-Dichloroethene	**<0.25**	ug/m3	1.5	0.25	1.83		03/31/22 19:22	75-35-4	
cis-1,2-Dichloroethene	**18.8**	ug/m3	1.5	0.36	1.83		03/31/22 19:22	156-59-2	
trans-1,2-Dichloroethene	**<0.31**	ug/m3	1.5	0.31	1.83		03/31/22 19:22	156-60-5	
1,2-Dichloropropane	**1.7J**	ug/m3	1.7	0.49	1.83		03/31/22 19:22	78-87-5	
cis-1,3-Dichloropropene	**<0.47**	ug/m3	4.2	0.47	1.83		03/31/22 19:22	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/m3	4.2	1.0	1.83		03/31/22 19:22	10061-02-6	
Dichlorotetrafluoroethane	**<0.37**	ug/m3	2.6	0.37	1.83		03/31/22 19:22	76-14-2	
Ethanol	**20.2**	ug/m3	3.5	1.1	1.83		03/31/22 19:22	64-17-5	
Ethyl acetate	**<0.24**	ug/m3	1.3	0.24	1.83		03/31/22 19:22	141-78-6	
Ethylbenzene	**40.1**	ug/m3	1.6	0.57	1.83		03/31/22 19:22	100-41-4	
4-Ethyltoluene	**2.5J**	ug/m3	4.6	0.86	1.83		03/31/22 19:22	622-96-8	
n-Heptane	**<0.33**	ug/m3	1.5	0.33	1.83		03/31/22 19:22	142-82-5	
Hexachloro-1,3-butadiene	**<2.3**	ug/m3	9.9	2.3	1.83		03/31/22 19:22	87-68-3	
n-Hexane	**4.3**	ug/m3	1.3	0.35	1.83		03/31/22 19:22	110-54-3	
2-Hexanone	**<0.81**	ug/m3	7.6	0.81	1.83		03/31/22 19:22	591-78-6	
Methylene Chloride	**<1.1**	ug/m3	6.5	1.1	1.83		03/31/22 19:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.59**	ug/m3	7.6	0.59	1.83		03/31/22 19:22	108-10-1	
Methyl-tert-butyl ether	**<0.23**	ug/m3	6.7	0.23	1.83		03/31/22 19:22	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.9	4.0	1.83		03/31/22 19:22	91-20-3	
2-Propanol	**<0.93**	ug/m3	4.6	0.93	1.83		03/31/22 19:22	67-63-0	
Propylene	**4.7**	ug/m3	1.6	0.24	1.83		03/31/22 19:22	115-07-1	
Styrene	**<0.70**	ug/m3	1.6	0.70	1.83		03/31/22 19:22	100-42-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Sample: EP-2 DUP **Lab ID: 10601404003** Collected: 03/18/22 11:38 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
1,1,2,2-Tetrachloroethane	**<0.68**	ug/m3	2.6	0.68	1.83		03/31/22 19:22	79-34-5	
Tetrachloroethene	**845**	ug/m3	6.3	2.7	9.15		04/01/22 13:44	127-18-4	
Tetrahydrofuran	**<0.33**	ug/m3	1.1	0.33	1.83		03/31/22 19:22	109-99-9	
Toluene	**15.8**	ug/m3	1.4	0.45	1.83		03/31/22 19:22	108-88-3	
1,2,4-Trichlorobenzene	**<8.9**	ug/m3	13.8	8.9	1.83		03/31/22 19:22	120-82-1	
1,1,1-Trichloroethane	**<0.34**	ug/m3	2.0	0.34	1.83		03/31/22 19:22	71-55-6	
1,1,2-Trichloroethane	**<0.36**	ug/m3	1.0	0.36	1.83		03/31/22 19:22	79-00-5	
Trichloroethene	**23.7**	ug/m3	1.0	0.36	1.83		03/31/22 19:22	79-01-6	
Trichlorofluoromethane	**138**	ug/m3	2.1	0.43	1.83		03/31/22 19:22	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<0.53**	ug/m3	2.9	0.53	1.83		03/31/22 19:22	76-13-1	
1,2,4-Trimethylbenzene	**5.7**	ug/m3	1.8	0.65	1.83		03/31/22 19:22	95-63-6	
1,3,5-Trimethylbenzene	**2.0**	ug/m3	1.8	0.53	1.83		03/31/22 19:22	108-67-8	
Vinyl acetate	**<0.38**	ug/m3	1.3	0.38	1.83		03/31/22 19:22	108-05-4	
Vinyl chloride	**<0.16**	ug/m3	0.48	0.16	1.83		03/31/22 19:22	75-01-4	
m&p-Xylene	**128**	ug/m3	3.2	1.2	1.83		03/31/22 19:22	179601-23-1	
o-Xylene	**25.7**	ug/m3	1.6	0.50	1.83		03/31/22 19:22	95-47-6	

Sample: EP-3 **Lab ID: 10601404004** Collected: 03/18/22 11:00 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Acetone	**22.2**	ug/m3	11.1	3.3	1.83		03/31/22 19:56	67-64-1	
Benzene	**0.69**	ug/m3	0.59	0.21	1.83		03/31/22 19:56	71-43-2	
Benzyl chloride	**<1.6**	ug/m3	4.8	1.6	1.83		03/31/22 19:56	100-44-7	
Bromodichloromethane	**<0.43**	ug/m3	2.5	0.43	1.83		03/31/22 19:56	75-27-4	
Bromoform	**<3.0**	ug/m3	9.6	3.0	1.83		03/31/22 19:56	75-25-2	
Bromomethane	**0.34J**	ug/m3	1.4	0.27	1.83		03/31/22 19:56	74-83-9	
1,3-Butadiene	**<0.22**	ug/m3	0.82	0.22	1.83		03/31/22 19:56	106-99-0	
2-Butanone (MEK)	**7.9**	ug/m3	5.5	0.85	1.83		03/31/22 19:56	78-93-3	
Carbon disulfide	**<0.24**	ug/m3	1.2	0.24	1.83		03/31/22 19:56	75-15-0	
Carbon tetrachloride	**<0.51**	ug/m3	2.3	0.51	1.83		03/31/22 19:56	56-23-5	
Chlorobenzene	**<0.28**	ug/m3	1.7	0.28	1.83		03/31/22 19:56	108-90-7	
Chloroethane	**<0.41**	ug/m3	0.98	0.41	1.83		03/31/22 19:56	75-00-3	
Chloroform	**<0.33**	ug/m3	0.91	0.33	1.83		03/31/22 19:56	67-66-3	
Chloromethane	**0.70J**	ug/m3	0.77	0.16	1.83		03/31/22 19:56	74-87-3	
Cyclohexane	**2.3J**	ug/m3	3.2	0.40	1.83		03/31/22 19:56	110-82-7	
Dibromochloromethane	**<0.94**	ug/m3	3.2	0.94	1.83		03/31/22 19:56	124-48-1	
1,2-Dibromoethane (EDB)	**<0.55**	ug/m3	1.4	0.55	1.83		03/31/22 19:56	106-93-4	
1,2-Dichlorobenzene	**<0.74**	ug/m3	5.6	0.74	1.83		03/31/22 19:56	95-50-1	
1,3-Dichlorobenzene	**<0.93**	ug/m3	5.6	0.93	1.83		03/31/22 19:56	541-73-1	
1,4-Dichlorobenzene	**<1.6**	ug/m3	5.6	1.6	1.83		03/31/22 19:56	106-46-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Sample: EP-3 **Lab ID: 10601404004** Collected: 03/18/22 11:00 Received: 03/21/22 10:37 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Dichlorodifluoromethane	**3.1**	ug/m3	1.8	0.34	1.83		03/31/22 19:56	75-71-8	
1,1-Dichloroethane	**<0.30**	ug/m3	1.5	0.30	1.83		03/31/22 19:56	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/m3	1.5	0.36	1.83		03/31/22 19:56	107-06-2	
1,1-Dichloroethene	**<0.25**	ug/m3	1.5	0.25	1.83		03/31/22 19:56	75-35-4	
cis-1,2-Dichloroethene	**<0.36**	ug/m3	1.5	0.36	1.83		03/31/22 19:56	156-59-2	
trans-1,2-Dichloroethene	**<0.31**	ug/m3	1.5	0.31	1.83		03/31/22 19:56	156-60-5	
1,2-Dichloropropane	**<0.49**	ug/m3	1.7	0.49	1.83		03/31/22 19:56	78-87-5	
cis-1,3-Dichloropropene	**<0.47**	ug/m3	4.2	0.47	1.83		03/31/22 19:56	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/m3	4.2	1.0	1.83		03/31/22 19:56	10061-02-6	
Dichlorotetrafluoroethane	**<0.37**	ug/m3	2.6	0.37	1.83		03/31/22 19:56	76-14-2	
Ethanol	**16.9**	ug/m3	3.5	1.1	1.83		03/31/22 19:56	64-17-5	
Ethyl acetate	**<0.24**	ug/m3	1.3	0.24	1.83		03/31/22 19:56	141-78-6	
Ethylbenzene	**0.59J**	ug/m3	1.6	0.57	1.83		03/31/22 19:56	100-41-4	
4-Ethyltoluene	**<0.86**	ug/m3	4.6	0.86	1.83		03/31/22 19:56	622-96-8	
n-Heptane	**<0.33**	ug/m3	1.5	0.33	1.83		03/31/22 19:56	142-82-5	
Hexachloro-1,3-butadiene	**<2.3**	ug/m3	9.9	2.3	1.83		03/31/22 19:56	87-68-3	
n-Hexane	**3.5**	ug/m3	1.3	0.35	1.83		03/31/22 19:56	110-54-3	
2-Hexanone	**<0.81**	ug/m3	7.6	0.81	1.83		03/31/22 19:56	591-78-6	
Methylene Chloride	**<1.1**	ug/m3	6.5	1.1	1.83		03/31/22 19:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.59**	ug/m3	7.6	0.59	1.83		03/31/22 19:56	108-10-1	
Methyl-tert-butyl ether	**<0.23**	ug/m3	6.7	0.23	1.83		03/31/22 19:56	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.9	4.0	1.83		03/31/22 19:56	91-20-3	
2-Propanol	**<0.93**	ug/m3	4.6	0.93	1.83		03/31/22 19:56	67-63-0	
Propylene	**1.5J**	ug/m3	1.6	0.24	1.83		03/31/22 19:56	115-07-1	
Styrene	**<0.70**	ug/m3	1.6	0.70	1.83		03/31/22 19:56	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.68**	ug/m3	2.6	0.68	1.83		03/31/22 19:56	79-34-5	
Tetrachloroethene	**88.7**	ug/m3	1.3	0.53	1.83		03/31/22 19:56	127-18-4	
Tetrahydrofuran	**<0.33**	ug/m3	1.1	0.33	1.83		03/31/22 19:56	109-99-9	
Toluene	**4.1**	ug/m3	1.4	0.45	1.83		03/31/22 19:56	108-88-3	
1,2,4-Trichlorobenzene	**<8.9**	ug/m3	13.8	8.9	1.83		03/31/22 19:56	120-82-1	
1,1,1-Trichloroethane	**<0.34**	ug/m3	2.0	0.34	1.83		03/31/22 19:56	71-55-6	
1,1,2-Trichloroethane	**<0.36**	ug/m3	1.0	0.36	1.83		03/31/22 19:56	79-00-5	
Trichloroethene	**<0.36**	ug/m3	1.0	0.36	1.83		03/31/22 19:56	79-01-6	
Trichlorofluoromethane	**60.0**	ug/m3	2.1	0.43	1.83		03/31/22 19:56	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<0.53**	ug/m3	2.9	0.53	1.83		03/31/22 19:56	76-13-1	
1,2,4-Trimethylbenzene	**0.65J**	ug/m3	1.8	0.65	1.83		03/31/22 19:56	95-63-6	
1,3,5-Trimethylbenzene	**<0.53**	ug/m3	1.8	0.53	1.83		03/31/22 19:56	108-67-8	
Vinyl acetate	**<0.38**	ug/m3	1.3	0.38	1.83		03/31/22 19:56	108-05-4	
Vinyl chloride	**<0.16**	ug/m3	0.48	0.16	1.83		03/31/22 19:56	75-01-4	
m&p-Xylene	**1.9J**	ug/m3	3.2	1.2	1.83		03/31/22 19:56	179601-23-1	
o-Xylene	**0.81J**	ug/m3	1.6	0.50	1.83		03/31/22 19:56	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
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QUALITY CONTROL DATA

Project: CHE80940Q MNSC
Pace Project No.: 10601404

QC Batch: 806641
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10601404001, 10601404002, 10601404003, 10601404004

METHOD BLANK: 4281678 Matrix: Air
Associated Lab Samples: 10601404001, 10601404002, 10601404003, 10601404004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.19	1.1	03/31/22 11:25	
1,1,2,2-Tetrachloroethane	ug/m3	<0.37	1.4	03/31/22 11:25	
1,1,2-Trichloroethane	ug/m3	<0.20	0.56	03/31/22 11:25	
1,1,2-Trichlorotrifluoroethane	ug/m3	<0.29	1.6	03/31/22 11:25	
1,1-Dichloroethane	ug/m3	<0.16	0.82	03/31/22 11:25	
1,1-Dichloroethene	ug/m3	<0.14	0.81	03/31/22 11:25	
1,2,4-Trichlorobenzene	ug/m3	<4.9	7.5	03/31/22 11:25	
1,2,4-Trimethylbenzene	ug/m3	<0.35	1.0	03/31/22 11:25	
1,2-Dibromoethane (EDB)	ug/m3	<0.30	0.78	03/31/22 11:25	
1,2-Dichlorobenzene	ug/m3	<0.40	3.1	03/31/22 11:25	
1,2-Dichloroethane	ug/m3	<0.19	0.82	03/31/22 11:25	
1,2-Dichloropropane	ug/m3	<0.27	0.94	03/31/22 11:25	
1,3,5-Trimethylbenzene	ug/m3	<0.29	1.0	03/31/22 11:25	
1,3-Butadiene	ug/m3	<0.12	0.45	03/31/22 11:25	
1,3-Dichlorobenzene	ug/m3	<0.51	3.1	03/31/22 11:25	
1,4-Dichlorobenzene	ug/m3	<0.88	3.1	03/31/22 11:25	
2-Butanone (MEK)	ug/m3	<0.46	3.0	03/31/22 11:25	
2-Hexanone	ug/m3	<0.44	4.2	03/31/22 11:25	
2-Propanol	ug/m3	<0.51	2.5	03/31/22 11:25	
4-Ethyltoluene	ug/m3	<0.47	2.5	03/31/22 11:25	
4-Methyl-2-pentanone (MIBK)	ug/m3	<0.32	4.2	03/31/22 11:25	
Acetone	ug/m3	<1.8	6.0	03/31/22 11:25	
Benzene	ug/m3	<0.11	0.32	03/31/22 11:25	
Benzyl chloride	ug/m3	<0.89	2.6	03/31/22 11:25	
Bromodichloromethane	ug/m3	<0.24	1.4	03/31/22 11:25	
Bromoform	ug/m3	<1.6	5.2	03/31/22 11:25	
Bromomethane	ug/m3	<0.15	0.79	03/31/22 11:25	
Carbon disulfide	ug/m3	<0.13	0.63	03/31/22 11:25	
Carbon tetrachloride	ug/m3	<0.28	1.3	03/31/22 11:25	
Chlorobenzene	ug/m3	<0.16	0.94	03/31/22 11:25	
Chloroethane	ug/m3	<0.22	0.54	03/31/22 11:25	
Chloroform	ug/m3	<0.18	0.50	03/31/22 11:25	
Chloromethane	ug/m3	<0.085	0.42	03/31/22 11:25	
cis-1,2-Dichloroethene	ug/m3	<0.20	0.81	03/31/22 11:25	
cis-1,3-Dichloropropene	ug/m3	<0.26	2.3	03/31/22 11:25	
Cyclohexane	ug/m3	<0.22	1.8	03/31/22 11:25	
Dibromochloromethane	ug/m3	<0.52	1.7	03/31/22 11:25	
Dichlorodifluoromethane	ug/m3	<0.19	1.0	03/31/22 11:25	
Dichlorotetrafluoroethane	ug/m3	<0.20	1.4	03/31/22 11:25	
Ethanol	ug/m3	<0.59	1.9	03/31/22 11:25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE80940Q MNSC
Pace Project No.: 10601404

METHOD BLANK: 4281678 Matrix: Air
Associated Lab Samples: 10601404001, 10601404002, 10601404003, 10601404004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethyl acetate	ug/m3	<0.13	0.73	03/31/22 11:25	
Ethylbenzene	ug/m3	<0.31	0.88	03/31/22 11:25	
Hexachloro-1,3-butadiene	ug/m3	<1.2	5.4	03/31/22 11:25	
m&p-Xylene	ug/m3	<0.64	1.8	03/31/22 11:25	
Methyl-tert-butyl ether	ug/m3	<0.13	3.7	03/31/22 11:25	
Methylene Chloride	ug/m3	<0.59	3.5	03/31/22 11:25	
n-Heptane	ug/m3	<0.18	0.83	03/31/22 11:25	
n-Hexane	ug/m3	<0.19	0.72	03/31/22 11:25	
Naphthalene	ug/m3	<2.2	2.7	03/31/22 11:25	
o-Xylene	ug/m3	<0.27	0.88	03/31/22 11:25	
Propylene	ug/m3	<0.13	0.88	03/31/22 11:25	
Styrene	ug/m3	<0.38	0.87	03/31/22 11:25	
Tetrachloroethene	ug/m3	<0.29	0.69	03/31/22 11:25	
Tetrahydrofuran	ug/m3	<0.18	0.60	03/31/22 11:25	
Toluene	ug/m3	<0.24	0.77	03/31/22 11:25	
trans-1,2-Dichloroethene	ug/m3	<0.17	0.81	03/31/22 11:25	
trans-1,3-Dichloropropene	ug/m3	<0.54	2.3	03/31/22 11:25	
Trichloroethene	ug/m3	<0.20	0.55	03/31/22 11:25	
Trichlorofluoromethane	ug/m3	<0.23	1.1	03/31/22 11:25	
Vinyl acetate	ug/m3	<0.21	0.72	03/31/22 11:25	
Vinyl chloride	ug/m3	<0.087	0.26	03/31/22 11:25	

LABORATORY CONTROL SAMPLE: 4281679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	59.3	61.9	104	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	75.4	71.1	94	70-132	
1,1,2-Trichloroethane	ug/m3	59.6	57.2	96	70-131	
1,1,2-Trichlorotrifluoroethane	ug/m3	83.6	87.6	105	70-130	
1,1-Dichloroethane	ug/m3	43.9	41.5	94	70-130	
1,1-Dichloroethene	ug/m3	43.5	43.2	99	70-130	
1,2,4-Trichlorobenzene	ug/m3	177	171	97	70-130	
1,2,4-Trimethylbenzene	ug/m3	54	65.6	121	70-137	
1,2-Dibromoethane (EDB)	ug/m3	82.5	83.1	101	70-137	
1,2-Dichlorobenzene	ug/m3	66.2	67.5	102	70-131	
1,2-Dichloroethane	ug/m3	44.4	45.9	103	70-134	
1,2-Dichloropropane	ug/m3	50.6	49.4	98	70-130	
1,3,5-Trimethylbenzene	ug/m3	53.7	58.5	109	70-131	
1,3-Butadiene	ug/m3	24.2	20.6	85	70-139	
1,3-Dichlorobenzene	ug/m3	66.3	65.8	99	70-134	
1,4-Dichlorobenzene	ug/m3	66.3	68.1	103	70-131	
2-Butanone (MEK)	ug/m3	32.3	32.8	102	70-133	
2-Hexanone	ug/m3	44.8	38.4	86	70-136	
2-Propanol	ug/m3	149	129	87	65-133	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE80940Q MNSC
Pace Project No.: 10601404

LABORATORY CONTROL SAMPLE: 4281679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Ethyltoluene	ug/m3	53.7	51.3	96	70-130	
4-Methyl-2-pentanone (MIBK)	ug/m3	44.9	43.3	96	70-130	
Acetone	ug/m3	128	114	89	60-134	
Benzene	ug/m3	34.8	34.5	99	70-130	
Benzyl chloride	ug/m3	57.6	54.5	95	70-130	
Bromodichloromethane	ug/m3	73.1	79.2	108	70-130	
Bromoform	ug/m3	114	116	101	70-138	
Bromomethane	ug/m3	42.5	39.8	94	68-131	
Carbon disulfide	ug/m3	34.4	33.0	96	70-130	
Carbon tetrachloride	ug/m3	69.4	74.4	107	70-132	
Chlorobenzene	ug/m3	50.2	55.9	111	70-130	
Chloroethane	ug/m3	28.8	24.3	84	70-134	
Chloroform	ug/m3	52.4	55.6	106	70-130	
Chloromethane	ug/m3	22.6	20.7	92	68-131	
cis-1,2-Dichloroethene	ug/m3	43.4	44.2	102	70-136	
cis-1,3-Dichloropropene	ug/m3	49.4	50.3	102	70-130	
Cyclohexane	ug/m3	37.4	33.0	88	70-131	
Dibromochloromethane	ug/m3	93.2	102	109	70-134	
Dichlorodifluoromethane	ug/m3	54.6	55.3	101	70-130	
Dichlorotetrafluoroethane	ug/m3	71.2	67.4	95	70-130	
Ethanol	ug/m3	124	110	89	55-145	
Ethyl acetate	ug/m3	38.9	34.2	88	70-135	
Ethylbenzene	ug/m3	47.8	50.3	105	70-133	
Hexachloro-1,3-butadiene	ug/m3	133	133	100	70-132	
m&p-Xylene	ug/m3	95.4	100	105	70-134	
Methyl-tert-butyl ether	ug/m3	39.6	37.2	94	70-131	
Methylene Chloride	ug/m3	190	180	95	65-132	
n-Heptane	ug/m3	44.6	39.4	88	70-130	
n-Hexane	ug/m3	38	35.6	94	70-132	
Naphthalene	ug/m3	65.2	60.6	93	70-130	
o-Xylene	ug/m3	47.6	50.6	106	70-134	
Propylene	ug/m3	18.9	16.8	89	69-133	
Styrene	ug/m3	47	48.0	102	70-135	
Tetrachloroethene	ug/m3	73.4	81.4	111	70-134	
Tetrahydrofuran	ug/m3	32.1	29.7	93	70-140	
Toluene	ug/m3	41.6	43.5	105	70-136	
trans-1,2-Dichloroethene	ug/m3	43.6	40.2	92	70-134	
trans-1,3-Dichloropropene	ug/m3	50.5	46.9	93	70-131	
Trichloroethene	ug/m3	58.4	63.2	108	70-134	
Trichlorofluoromethane	ug/m3	62	65.2	105	63-130	
Vinyl acetate	ug/m3	46.4	38.6	83	70-139	
Vinyl chloride	ug/m3	28	25.0	89	70-132	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE80940Q MNSC
Pace Project No.: 10601404

SAMPLE DUPLICATE: 4282988

Parameter	Units	10602605002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.27	<0.27		25	
1,1,2,2-Tetrachloroethane	ug/m3	<0.54	<0.54		25	
1,1,2-Trichloroethane	ug/m3	<0.28	<0.28		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	<0.42	<0.42		25	
1,1-Dichloroethane	ug/m3	<0.24	<0.24		25	
1,1-Dichloroethene	ug/m3	<0.20	<0.20		25	
1,2,4-Trichlorobenzene	ug/m3	<7.0	<7.0		25	
1,2,4-Trimethylbenzene	ug/m3	<0.51	<0.51		25	
1,2-Dibromoethane (EDB)	ug/m3	<0.43	<0.43		25	
1,2-Dichlorobenzene	ug/m3	<0.58	<0.58		25	
1,2-Dichloroethane	ug/m3	<0.28	<0.28		25	
1,2-Dichloropropane	ug/m3	<0.39	<0.39		25	
1,3,5-Trimethylbenzene	ug/m3	<0.42	<0.42		25	
1,3-Butadiene	ug/m3	<0.17	<0.17		25	
1,3-Dichlorobenzene	ug/m3	<0.73	<0.73		25	
1,4-Dichlorobenzene	ug/m3	<1.3	<1.3		25	
2-Butanone (MEK)	ug/m3	13.0	12.7	2	25	
2-Hexanone	ug/m3	<0.64	<0.64		25	
2-Propanol	ug/m3	5.9	5.8	1	25	
4-Ethyltoluene	ug/m3	<0.68	<0.68		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	<0.46	<0.46		25	
Acetone	ug/m3	30.9	30.7	1	25	
Benzene	ug/m3	<0.16	<0.16		25	
Benzyl chloride	ug/m3	<1.3	<1.3		25	
Bromodichloromethane	ug/m3	<0.34	<0.34		25	
Bromoform	ug/m3	<2.3	<2.3		25	
Bromomethane	ug/m3	<0.22	<0.22		25	
Carbon disulfide	ug/m3	<0.19	<0.19		25	
Carbon tetrachloride	ug/m3	<0.40	<0.40		25	
Chlorobenzene	ug/m3	<0.22	<0.22		25	
Chloroethane	ug/m3	<0.32	<0.32		25	
Chloroform	ug/m3	<0.26	<0.26		25	
Chloromethane	ug/m3	1.1	1.1	3	25	
cis-1,2-Dichloroethene	ug/m3	<0.28	<0.28		25	
cis-1,3-Dichloropropene	ug/m3	<0.37	<0.37		25	
Cyclohexane	ug/m3	<0.32	<0.32		25	
Dibromochloromethane	ug/m3	<0.74	<0.74		25	
Dichlorodifluoromethane	ug/m3	3.1	3.0	5	25	
Dichlorotetrafluoroethane	ug/m3	<0.29	<0.29		25	
Ethanol	ug/m3	1120	1090	3	25	E
Ethyl acetate	ug/m3	2.4	2.2	10	25	
Ethylbenzene	ug/m3	0.74J	0.75J		25	
Hexachloro-1,3-butadiene	ug/m3	<1.8	<1.8		25	
m&p-Xylene	ug/m3	3.6	3.4	6	25	
Methyl-tert-butyl ether	ug/m3	<0.18	<0.18		25	
Methylene Chloride	ug/m3	<0.85	<0.85		25	
n-Heptane	ug/m3	<0.26	<0.26		25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE80940Q MNSC
Pace Project No.: 10601404

SAMPLE DUPLICATE: 4282988

Parameter	Units	10602605002 Result	Dup Result	RPD	Max RPD	Qualifiers
n-Hexane	ug/m3	1.7	<0.28		25	
Naphthalene	ug/m3	<3.1	<3.1		25	
o-Xylene	ug/m3	0.95J	0.89J		25	
Propylene	ug/m3	2.8	2.7	1	25	
Styrene	ug/m3	<0.55	<0.55		25	
Tetrachloroethene	ug/m3	<0.42	<0.42		25	
Tetrahydrofuran	ug/m3	5.2	5.1	3	25	
Toluene	ug/m3	0.60J	0.54J		25	
trans-1,2-Dichloroethene	ug/m3	<0.24	<0.24		25	
trans-1,3-Dichloropropene	ug/m3	<0.78	<0.78		25	
Trichloroethene	ug/m3	<0.28	<0.28		25	
Trichlorofluoromethane	ug/m3	1.5J	1.6J		25	
Vinyl acetate	ug/m3	<0.30	<0.30		25	
Vinyl chloride	ug/m3	<0.12	<0.12		25	

SAMPLE DUPLICATE: 4282990

Parameter	Units	10601868007 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<0.26		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.52		25	
1,1,2-Trichloroethane	ug/m3	ND	<0.27		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	0.41J		25	
1,1-Dichloroethane	ug/m3	ND	<0.23		25	
1,1-Dichloroethene	ug/m3	ND	<0.19		25	
1,2,4-Trichlorobenzene	ug/m3	ND	<6.8		25	
1,2,4-Trimethylbenzene	ug/m3	ND	<0.49		25	
1,2-Dibromoethane (EDB)	ug/m3	ND	<0.42		25	
1,2-Dichlorobenzene	ug/m3	ND	<0.56		25	
1,2-Dichloroethane	ug/m3	ND	<0.27		25	
1,2-Dichloropropane	ug/m3	ND	<0.37		25	
1,3,5-Trimethylbenzene	ug/m3	ND	<0.40		25	
1,3-Butadiene	ug/m3	ND	<0.17		25	
1,3-Dichlorobenzene	ug/m3	ND	<0.71		25	
1,4-Dichlorobenzene	ug/m3	ND	<1.2		25	
2-Butanone (MEK)	ug/m3	ND	<0.65		25	
2-Hexanone	ug/m3	ND	<0.61		25	
2-Propanol	ug/m3	ND	2.8J		25	
4-Ethyltoluene	ug/m3	ND	<0.66		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<0.45		25	
Acetone	ug/m3	ND	5.0J		25	
Benzene	ug/m3	ND	<0.16		25	
Benzyl chloride	ug/m3	ND	<1.2		25	
Bromodichloromethane	ug/m3	ND	<0.33		25	
Bromoform	ug/m3	ND	<2.3		25	
Bromomethane	ug/m3	ND	<0.21		25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CHE80940Q MNSC
Pace Project No.: 10601404

SAMPLE DUPLICATE: 4282990

Parameter	Units	10601868007 Result	Dup Result	RPD	Max RPD	Qualifiers
Carbon disulfide	ug/m3	ND	<0.18		25	
Carbon tetrachloride	ug/m3	ND	<0.39		25	
Chlorobenzene	ug/m3	ND	<0.22		25	
Chloroethane	ug/m3	ND	<0.31		25	
Chloroform	ug/m3	ND	<0.25		25	
Chloromethane	ug/m3	0.85	0.91	7	25	
cis-1,2-Dichloroethene	ug/m3	ND	<0.27		25	
cis-1,3-Dichloropropene	ug/m3	ND	<0.35		25	
Cyclohexane	ug/m3	ND	<0.31		25	
Dibromochloromethane	ug/m3	ND	<0.72		25	
Dichlorodifluoromethane	ug/m3	2.6	2.6	0	25	
Dichlorotetrafluoroethane	ug/m3	ND	<0.28		25	
Ethanol	ug/m3	10.1	9.8	2	25	
Ethyl acetate	ug/m3	ND	<0.18		25	
Ethylbenzene	ug/m3	ND	<0.43		25	
Hexachloro-1,3-butadiene	ug/m3	ND	<1.7		25	
m&p-Xylene	ug/m3	ND	<0.89		25	
Methyl-tert-butyl ether	ug/m3	ND	<0.18		25	
Methylene Chloride	ug/m3	ND	<0.82		25	
n-Heptane	ug/m3	ND	<0.25		25	
n-Hexane	ug/m3	ND	<0.27		25	
Naphthalene	ug/m3	ND	<3.0		25	
o-Xylene	ug/m3	ND	<0.38		25	
Propylene	ug/m3	ND	0.83J		25	
Styrene	ug/m3	ND	<0.54		25	
Tetrachloroethene	ug/m3	ND	<0.41		25	
Tetrahydrofuran	ug/m3	ND	<0.25		25	
Toluene	ug/m3	ND	0.57J		25	
trans-1,2-Dichloroethene	ug/m3	ND	<0.23		25	
trans-1,3-Dichloropropene	ug/m3	ND	<0.76		25	
Trichloroethene	ug/m3	ND	<0.27		25	
Trichlorofluoromethane	ug/m3	ND	1.2J		25	
Vinyl acetate	ug/m3	ND	<0.29		25	
Vinyl chloride	ug/m3	ND	<0.12		25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: CHE80940Q MNSC
Pace Project No.: 10601404

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CHE80940Q MNSC
Pace Project No.: 10601404

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10601404001	**EP-1**	TO-15	806641		
10601404002	**EP-2**	TO-15	806641		
10601404003	**EP-2 DUP**	TO-15	806641		
10601404004	**EP-3**	TO-15	806641		

Pace Analytical®
www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

52161

Page: 1 of 1

Section A Required Client Information:
Company: Geosyntec
Address: 10600 N. Port Washington Rd Ste 100 Mequon, WI 53092
Email To: dzob@geosyntec.com
Phone: 262-496-6103 Fax:
Requested Due Date/TAT:

Section B Required Project Information:
Report To: Dave Zob
Copy To:
Purchase Order No.:
Project Name: MNSC
Project Number: CME809400

Section C Invoice Information:
Attention: Frank Dombrowski
Company Name: We Energies
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 37426 #3

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: WI

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level: II. ___ III. ___ IV. ___ Other ___

'Section D Required Client Information

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE - END/GRAB DATE	COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	ER-1	1LC		3/18/22	1112			-28	4	2273	2273										RB
2	ER-2				1138			-27	4	2647	2647										DZ
3	ER-2DUP				1138			-29	4	2499	2499										RB
4	ER-3				1100			-29	4	2229	23										DZ
5	EP-1	1LC		3/18/22	1112			-28	4	2273	2329						X				001
6	EP-2				1138			-27	4	2647	0588						X				002
7	EP-2DUP				1138			-29	4	2499	0628						X				003
8	EP-3				1100			-29	4	2229	0772						X				004
9																					
10																					
11																					
12																					

MT 3/21/22

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	3/18/22	1300		3/21/22	13:00 10:37

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
—	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dave Zob

SIGNATURE of SAMPLER:

DATE Signed (MM / DD / YY): 03/18/22

WO# : 10601404

10601404

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - Air**	Document Revised: 13Oct2021 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0113 Rev.01**	Pace Analytical Services - **Minneapolis**

Air Sample Condition Upon Receipt **Client Name:** Geosyntec **Project #:**

WO# : 10601404
PM: MR2 Due Date: 03/28/22
CLIENT: Geosyntec WI

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 975384491293 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other: _____

Date & Initials of Person Examining Contents: 3-21-22 MI

				Comments:
Chain of Custody Present?	☑ Yes	☐ No		1.
Chain of Custody Filled Out?	☑ Yes	☐ No		2.
Chain of Custody Relinquished?	☑ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No		6.
Rush Turn Around Time Requested?	☐ Yes	☑ No		7.
Sufficient Volume?	☑ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☑ Yes ☑ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: Air Can | Airbag				11. Individually Certified Cans? Y (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☑ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☒ Yes	☐ No		13.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☒ 10AIR17 ☐ 10AIR47 ☐ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
EP-1	2273	2329	-3	+10					
" -2	2647	588	-1.5						
" DUP	2499	628	-2.5						
EP-3	2229	772	-2.5						

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Carolynne Trast **Date:** 3/23/22

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

APPENDIX 6

Air Permit Exemption Documentation

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: May 16, 2022

FID #: 241311510
EXEMPTION: 22-DMM-064-EXM

TO: Michael Szabo

FROM: Dave Minkey

SUBJECT: Review and analysis of a request for exemption under s. NR 406.04(1)(m), Wis. Adm. Code, for a vapor mitigation system (VMS)

General Information

FID:	241311510
Facility Name:	We Energies Metro North Service Center
Location Address:	3100 W North Avenue Milwaukee, Milwaukee County, WI 53208
Responsible Official:	Frank Dombrowski, Principal Environmental Consultant 333 W Everett St, Milwaukee, WI 53203-2803 (414) 221-2156
Application Submitted By:	Frank Dombrowski
Application Fully Received:	May 4, 2022

Project Description

We Energies is proposing to construct a vapor mitigation system (VMS) at the Metro North Service Center (MSNC) site. The VMS is an active submembrane depressurization system installed in the southwest portion of the site building. The VMS includes a submembrane venting system (venting layer with three (3) riser pipes, blowers, and exhaust stacks) and a barrier layer above the venting layer. The venting layer consists of a 6-inch coarse granular layer with incorporated GEOVENT™ conveyance units (1-foot wide by 1-inch thick, three-dimensional vent core wrapped in a non-woven, needle-punched filter fabric). The barrier layer consists of a 20-mil VI-20™ polyethylene geomembrane overlain by a minimum 60-mil LIQUID BOOT® spray-applied barrier. The venting layer is connected to three (3) 4-inch diameter polyvinyl chloride (PVC) riser pipes (EP-1, EP-2 and EP-3). The riser pipes extend to individual blowers installed on the roof. Exhaust stacks extend from the top of each blower. The exhaust stacks extend to a height of approximately 17 feet above the ground surface.

Project Aggregation Evaluation

Based on the information submitted, it appears that the proposed project is not a portion of any other projects, which together may be subject to construction permitting.

Emission Calculations

VMS air emissions samples were collected from each riser pipe (EP-1, EP-2 and EP-3) during VMS operational testing on March 18, 2022. A duplicate sample was also collected from EP-2 (EP-2 DUP). The construction permit exemption application includes the VOCs detected, the concentrations of these VOCS that were detected, measured flow velocity and calculated emissions for each riser pipe and the total for the system. The total calculated VOC emission rate for the system is 0.00075 pounds per hour or 6.6 pounds per year with most of the VOCs comprised of tetrachloroethene (PCE).

The VOC emission rate is about four orders of magnitude lower than the s. NR 406.04(1)(m)2., Wis. Adm. Code, threshold of 5.7 pounds per hour. The emission rate of each individual hazardous air contaminant is at least two orders of magnitude below the corresponding threshold value in Table A of s. NR 445.07, Wis. Adm. Code.

Project Status Under Prevention of Significant Deterioration (PSD) / Nonattainment New Source Review (NNSR)

The facility is a minor source for Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) purposes because the potential emissions of each air contaminant subject to regulation are less than the PSD and NNSR major source thresholds. The emissions increases from the project are less than the PSD and NNSR major source thresholds. Therefore, the project is not subject to PSD or NNSR review.

Total Facility Emissions After Completion of Project

The existing facility consists of a service center with an office, garage and storage space. Air pollution emissions from the existing facility are minimal, and the addition of the VMS will only result in a very small increase in emissions.

Impact of Exemption on Source Classification

The facility status will not change as a result of this exemption. The facility will continue to be a minor source under Part 70, PSD and NNSR, and an area source of s. 112(b) federal HAP emissions.

Review of Exemption Applicability

Based on the information provided, the proposed project is exempt from construction permit requirements under s. NR 406.04(1)(m)2., Wis. Adm. Code. This determination is based on the following:

1. The project is not subject to permitting under ch. NR 405, Wis. Adm. Code (PSD) or ch. NR 408, Wis. Adm. Code (NNSR).

2. The potential to emit for each hazardous air contaminant listed in Table A of s. NR 445.07, Wis. Adm. Code is not greater than the threshold value listed in that table for the respective stack height and the VMS is not subject to an emission limitation or emission standard under section 111 or 112 of the Clean Air Act.

3. The potential to emit for organic compounds from the remediation site is at a rate of not more than 5.7 pounds per hour.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2984 Shawano Avenue
Green Bay, WI 54313-6727

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

May 16, 2022

FID NO.: 241311510
EXEMPTION NO.: 22-DMM-064-EXM

AM/7

Frank Dombrowski
Principal Environmental Consultant
We Energies Metro North Service Center
333 W Everett Street
Milwaukee, WI 53203-2803

SUBJECT: Request for an exemption from construction permitting under the Specific Categories of Exempt Sources in s. NR 406.04(1)(m)2., Wis. Adm. Code, for the construction of a vapor mitigation system

Dear Frank Dombrowski:

The Department of Natural Resources has received the air pollution control construction permit exemption request regarding the proposed construction of a vapor mitigation system at a service center located in Milwaukee, Wisconsin.

PROJECT DESCRIPTION

We Energies is proposing to construct a vapor mitigation system (VMS) at the Metro North Service Center (MSNC) site. The VMS is an active submembrane depressurization system installed in the southwest portion of the site building. The VMS includes a submembrane venting system (venting layer with three (3) riser pipes, blowers, and exhaust stacks) and a barrier layer above the venting layer. The venting layer consists of a 6-inch coarse granular layer with incorporated GEOVENT™ conveyance units (1-foot wide by 1-inch thick, three-dimensional vent core wrapped in a non-woven, needle-punched filter fabric). The barrier layer consists of a 20-mil VI-20™ polyethylene geomembrane overlain by a minimum 60-mil LIQUID BOOT® spray-applied barrier. The venting layer is connected to three (3) 4-inch diameter polyvinyl chloride (PVC) riser pipes (EP-1, EP-2 and EP-3). The riser pipes extend to individual blowers installed on the roof. Exhaust stacks extend from the top of each blower. The exhaust stacks extend to a height of approximately 17 feet above the ground surface.

ELIGIBILITY AND APPROVAL

Based on the information provided and the assumptions laid out in the department's exemption analysis memo, the proposed project is exempt from construction permit requirements under s. NR 406.04(1)(m)2., Wis. Adm. Code. This determination is based on the following:

1. The project is not subject to permitting under ch. NR 405, Wis. Adm. Code (PSD) or ch. NR 408, Wis. Adm. Code (NNSR).

2. The potential to emit for each hazardous air contaminant listed in Table A of s. NR 445.07, Wis. Adm. Code is not greater than the threshold value listed in that table for the respective stack height and the VMS is not subject to an emission limitation or emission standard under section 111 or 112 of the Clean Air Act.

3. The potential to emit for organic compounds from the remediation site is at a rate of not more than 5.7 pounds per hour.

Note that this opinion is based on a presumption that this project is not a portion of any other projects, which together may be subject to construction permitting.

Although this project has been determined to be exempt from the requirement to obtain a construction permit under ch. NR 406, Wis. Adm. Code, it is still subject to all applicable requirements in chs. NR 400 - 499, Wis. Adm. Code and any other applicable federal, state or local regulations, including the annual emission reporting requirements of s. NR 438.03, Wis. Adm. Code.

If you have any questions regarding this matter, please feel free to contact me at David.Minkey@wisconsin.gov or (920) 585-0277.

Sincerely,

Dave Minkey

Dave Minkey
Air Management Engineer-Adv

APPENDIX 7

Operation and Maintenance Plan

Geosyntec consultants

10600 N. Port Washington Road, Suite 100
Mequon, WI 53092
PH 262.377.9828
www.geosyntec.com

VAPOR MITIGATION SYSTEM OPERATION AND MAINTENANCE PLAN

Site	Metro North Service Center
Address	3100 West North Avenue Milwaukee, Wisconsin 53208
Owner	Wisconsin Electric Power Company (d.b.a., We Energies)
WDNR ID	BRRTS # 02-41-583015 FID # 241311510
Vapor Mitigation System Type	Active Submembrane Depressurization System
Date	June 23, 2023

This Vapor Mitigation System (VMS) Operation and Maintenance Plan (O&M Plan) was prepared pursuant to NR 724.13 and in general accordance with the "Vapor Mitigation System Operation and Maintenance Plan Checklist" included in Wisconsin Department of Natural Resources (WDNR) guidance RR-981 "Maintenance Plans for Vapor Mitigation Systems/Vapor Intrusion Response Actions/Vapor Barriers".

This O&M Plan includes a general system description and purpose, as-built conditions, baseline conditions, inspection and testing, maintenance, annual discharge sampling, notifications, contacts and a list of attachments.

1. DESCRIPTION AND PURPOSE

A. The Site VMS is an active submembrane depressurization system (SSDS) installed during the reconstruction of the southwest portion of the Site building in 2021. The VMS was commissioned in 2022 and 2023.

B. The VMS location is depicted on **Figure 1 (Attachment 1)**. The VMS generally includes a submembrane venting system [venting layer with three (3) riser pipes, blowers, and exhaust stacks], an approximate 19,200 square foot (sf) barrier layer above the venting layer, and five (5) sub-slab vapor probes.

C. The VMS mitigates the vapor intrusion pathway at the Site related to post-source remedial action residual soil and groundwater impacts. Tetrachloroethene (PCE) is the primary Site contaminant. Source area unsaturated soil and shallow groundwater remedial action was completed in 2021, including the removal of approximately 4,630 tons of PCE-impacted soil from the source area.

2. AS-BUILT CONDITIONS

A. The as-built layout and as-built details of the VMS are depicted on **Figures 2 and 3** (**Attachment 1**), respectively.

B. Construction and as-built photographs are included in **Attachment 2**.

C. Venting System

1. Venting Layer. The venting layer consists of a 6-inch coarse granular layer with incorporated GEOVENT™ conveyance units (1-foot wide by 1-inch thick, three-dimensional vent core wrapped in a non-woven, needle-punched filter fabric). The GEOVENT™ technical data sheet is included in **Attachment 3**. Refer to Photograph 1 (**Attachment 2**).
2. Riser Pipes. The venting layer is connected to three (3) 4-inch diameter polyvinyl chloride (PVC) riser pipes.
3. Blowers and Stacks.

    a. The three (3) riser pipes extend to individual blowers installed on the roof. The blower stacks extend approximately 10 feet above the roof line. Refer to Photographs 7, 10 and 13 (**Attachment 2**).
    b. Blower: Obar GBR76 SOE (16" WC @ Max Flow 155 CFM). The blower manufacturer's product sheet is included in **Attachment 3**. Refer to Photographs 6, 9 and 12 (**Attachment 2**).
    c. The blowers are connected to the building power supply through a dedicated electrical breaker and each blower has a power disconnect switch. The electrical room is depicted on **Figure 2 (Attachment 1)**. Refer to Photographs 17 and 18 (**Attachment 2**) depicting the electrical panel and VMS breakers.

4. Each riser pipe is instrumented with the following [refer to Photographs 5, 8 and 11 (**Attachment 2**)]:

    a. A ball valve for balancing flow.
    b. A pressure gauge (Dwyer Magnehelic® Differential Pressure Gauge) for measuring vacuum. The manufacturer's product sheet for the pressure gauge is included in **Attachment 3**.
    c. A flow monitoring (measurement) port.
    d. A discharge sampling port.

e. An alarm (RadonAway™ Checkpoint IIa 28001-2) to provide an auditory indication that the blower has stopped generating vacuum. The manufacturer's product sheet for the alarm is included in **Attachment 3**.

D. Barrier (Membrane) Layer

1. A barrier (membrane) layer was installed over the venting layer. Refer to Photographs 2 and 3 (**Attachment 2**).
2. The barrier layer consists of a 20-mil VI-20™ polyethylene geomembrane overlain by a minimum 60-mil LIQUID BOOT® spray-applied barrier. Technical data sheets for the VI-20™ polyethylene geomembrane and LIQUID BOOT® products are included in **Attachment 3**.
3. The geomembrane seams were overlapped a minimum of six (6) inches. The geomembrane was cut tight around penetrations and along the perimeter edges. A thin tack coat of LIQUID BOOT® was sprayed over the seams, around the penetrations and along the perimeter edges prior to full LIQUID BOOT® application.
4. Penetrations were sealed (around and up the penetrations).
5. A barrier protection layer (UltraShield™ G-1000 polypropylene, non-woven geotextile) was placed over the barrier layer (to protect the barrier layer from damage during subsequent slab construction). A technical data sheet for the UltraShield™ G-1000 geotextile is included in **Attachment 3**. Refer to Photograph 4 (**Attachment 2**).

E. Vapor Probes

Sub-slab vapor probes were installed at five (5) locations for the purpose of pressure field extension (PFE) (i.e., zone of influence/communication) testing to demonstrate PFE (differential negative pressure) over the VMS area. Refer to Photographs 14, 15 and 16 (**Attachment 2**).

3. BASELINE CONDITIONS

A. The following baseline operational conditions were established during VMS commissioning:

Extraction Point	Blower Setting	Air Flow Range (scfm)	Vacuum Range (inch-H_2O)
EP-1	10	1500 to 1550	-7.5 to -8.0
EP-2	10	1450 to 1500	-7.5 to -8.0
EP-3	10	1400 to 1500	-9.0 to -9.2
Notes: scfm - standard cubic feet per minute			

B. The total system volatile organic compound (VOC) emissions established during VMS commissioning was 0.00075 pounds per hour (lb/hr) or 6.6 pounds per year (lb/yr). The total system PCE emissions was 0.00047 lb/hr (4.14 lb/yr).

4. INSPECTION AND TESTING

A. Frequency: semi-annually for first two (2) years and annually thereafter.
B. Inspection components:

1. Check that each blower is operational.
2. Check that each blower vacuum (pressure gauge reading at riser) and air flow (measured at riser pipe port using a Dwyer Model 471B Digital Thermo Anemometer) are consistent with operational baseline conditions.
3. Check blower housing and roof mounts for damage or wear.
4. Check that blower is secure to roof.
5. Check that blower does not exhibit excessive vibration.
6. Check that blower stack is clear of any obstructions.
7. Check that each riser pipe pressure gauge is operational.
8. Test each blower alarm in accordance with the manufacturer's procedure to verify operation.
9. Check condition of vapor probes and vapor probe covers.

C. Conduct PFE testing using the five (5) vapor probes to demonstrate that the target differential negative pressure of at least 0.004 inch-H_2O is achieved at each of the vapor probe. Utilize TEC DG-8 Digital Pressure Gauge with an accuracy of 0.001 inch-H_2O.
D. Document inspections on a "Vapor Mitigation System Inspection Log" (WDNR Form 4400-321) provided in **Attachment 4**.
E. Maintain a copy of inspection log on-Site.

5. MAINTENANCE

A. VMS adjustments or repairs shall be conducted if the inspection or testing reveals the need for maintenance.
B. Adjustments or repairs may include, but are not limited to, the following:

1. Adjusting blower fan speed.
2. Re-securing blower to roof.
3. Clearing obstructions in blower stack.
4. Repairing damage to or replacing blower.
5. Replacing riser pipe pressure gauge or alarm.
6. Repairing or replacing vapor probes.

C. Minor repairs shall be conducted as soon as possible, but no later than 72 hours after discovery. Major repairs shall be conducted as soon as practical.
D. Document maintenance activities on inspection form or attach a maintenance memorandum to the inspection form.

6. ANNUAL DISCHARGE SAMPLING

A. Conduct annual system volatile organic compound (VOC) discharge sampling to confirm annual emissions of PCE, as well as any other VOCs emitted by the VMS, are below the corresponding NR 438 reporting levels and for comparison to baseline conditions.
B. Collect air samples by connecting a 1-liter batch-certified Summa® canister with Nylaflow™ tubing to the sampling port on each riser pipe and submit the samples to a NR 149 accredited laboratory under standard chain-of-custody protocols for laboratory analysis of VOCs by EPA Method TO-15.
C. Record vacuum and air flow at the time of sampling. Record blower vacuum from the differential pressure gauge mounted on each riser pipe. Measure air flow using a Dwyer Model 471B Digital Thermo Anemometer at the measurement port installed on each riser pipe.
D. Calculate VMS emissions as follows:

$$Mass\ Emitted_{Analyte} = \sum_{EP=1}^{3} Concentration_{Analyte} * Flow\ Rate$$

E. If annual emissions exceed NR 438 reporting levels, report results immediately to Owner contact (refer to Section 7).
F. Document annual discharge sampling in a technical memorandum to the file and maintain a copy on-Site

7. NOTIFICATIONS

Pursuant to NR 727.07(4), the WDNR shall be notified of "change in use of a vapor mitigation system" at least 45 days before making a change.

8. CONTACTS

The following is a list of contacts for VMS O&M:

Owner	We Energies Frank Dombrowski, Principal Environmental Consultant WEC Energy Group - Business Services Environmental Dept. - Land Quality Group 333 Everett Street, Milwaukee, WI 53203 Email: frank.dombrowski@wecenergygroup.com Phone: 414.221.2156
Consultant	Geosyntec Consultants Jeremiah Johnson, P.G., Senior Geologist 10600 North Port Washington Rd. Suite 100, Mequon, WI 53092 Email: jpjohnson@geosyntec.com Phone: 262.377.9828
WDNR Project Manager	Linda Stanek, Hydrogeologist Wisconsin Department of Natural Resources Remediation and Redevelopment 1027 W St Paul Avenue, Milwaukee, WI 53233 Email Address: linda.stanek@wisconsin.gov Phone: 414.316.0208

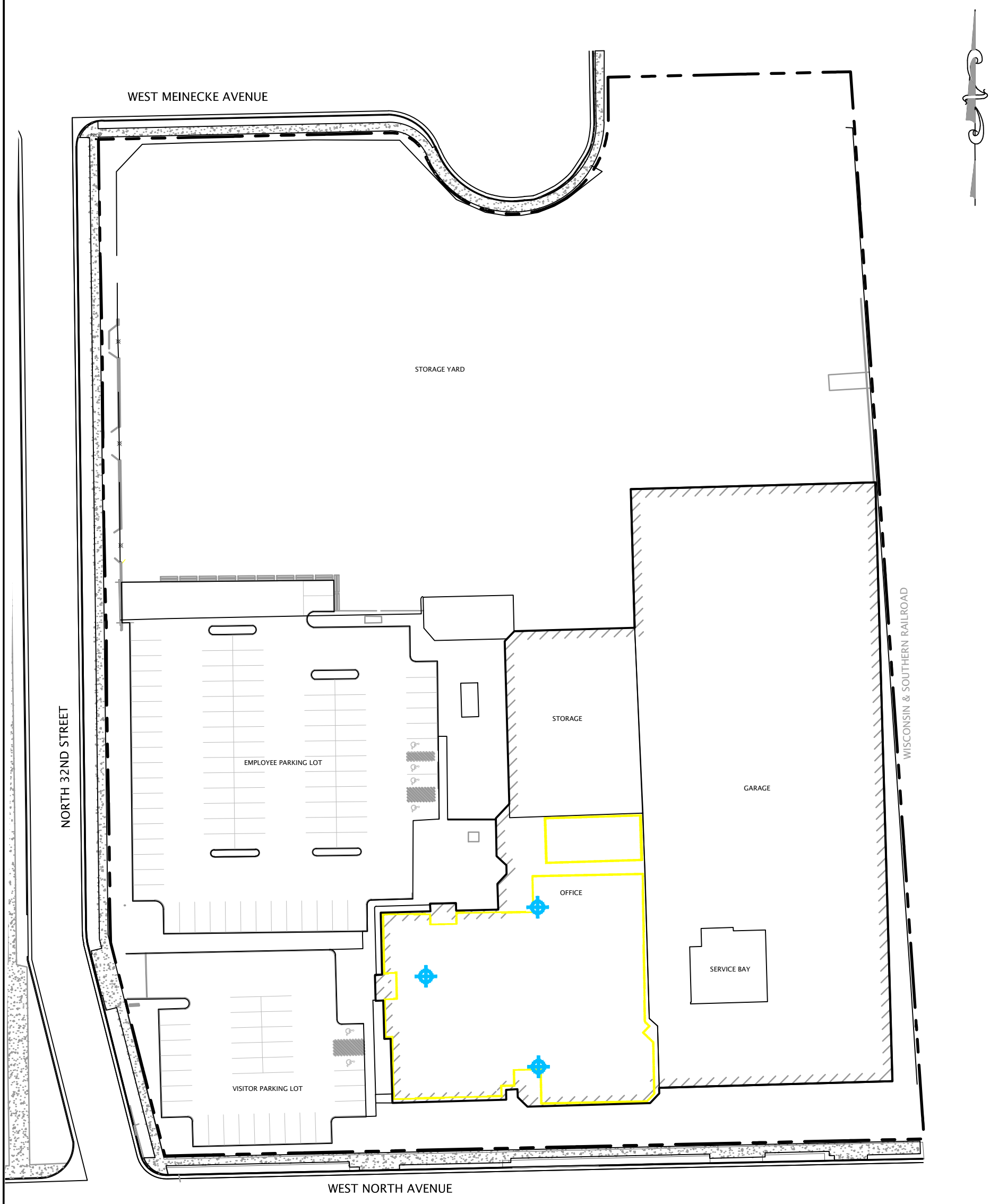
9. LIST OF ATTACHMENTS

The following is the list of the attachments to this VMS O&M Plan:

Attachment 1 - Figures
Attachment 2 - Photographs
Attachment 3 - Product Information
Attachment 4 - Vapor Mitigation System Inspection Log

ATTACHMENT 1

Figures



SCALE IN FEET

0 60'

LEGEND:

- APPROXIMATE SITE PROPERTY LINE
- EXISTING SITE PROPERTY BUILDING
- EXTENT OF VMS BARRIER LAYER
- APPROXIMATE VMS VENTING SYSTEM BLOWER/EXHAUST STACK LOCATION

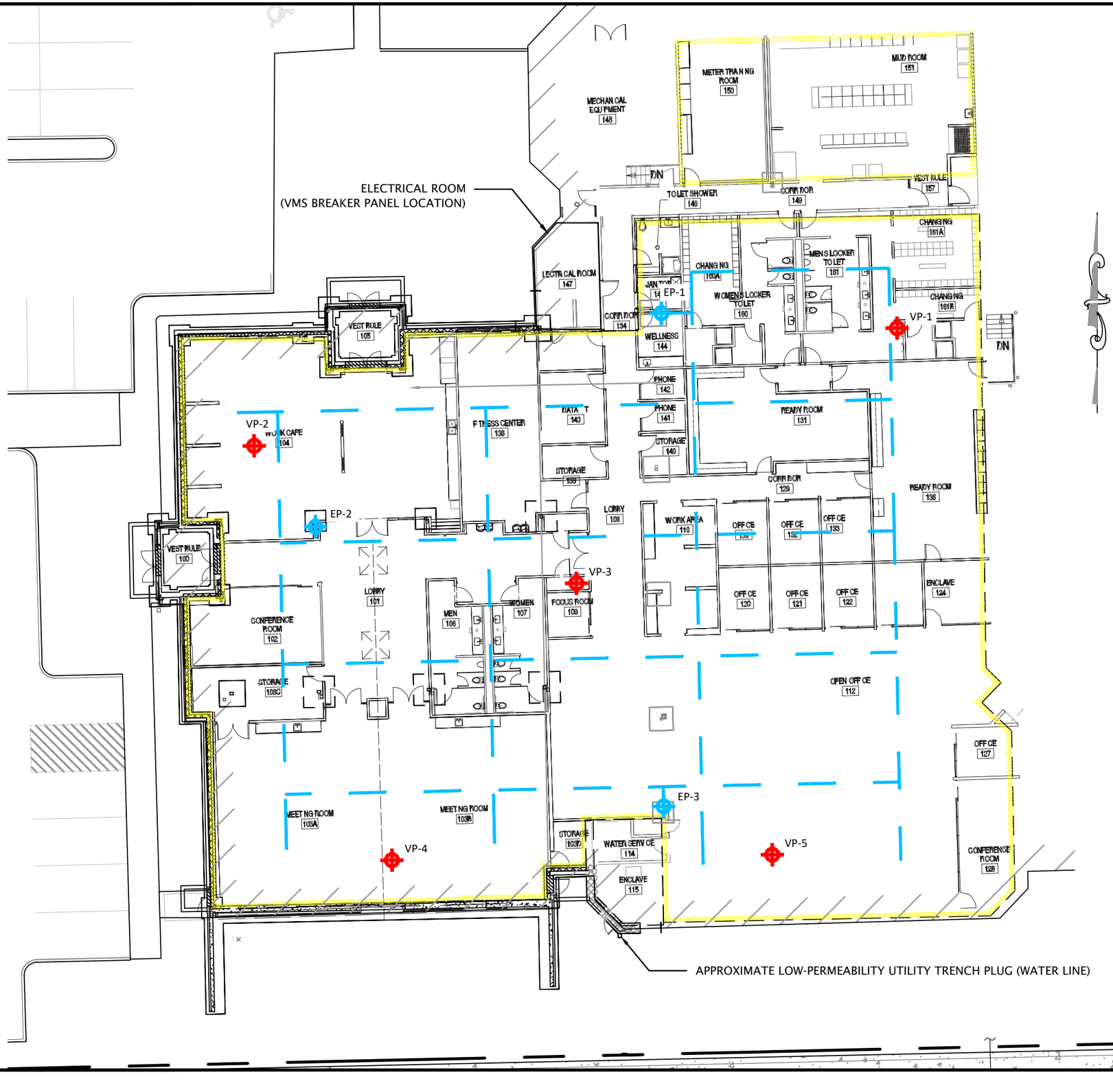
NOTES:

VMS - VAPOR MITIGATION SYSTEM

Geosyntec consultants

CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	SITE LAYOUT MAP

PROJECT: CHE8094OQ	FIGURE NO.: 2	DRAWING NO.: 1 OF 3
DATE: March 19, 2023	FILE NO.: 2301 MNSC011	



LEGEND:

- EXTENT OF VMS BARRIER LAYER
- APPROXIMATE VMS VENTING LAYER GEOVENT™ LOCATION
- EP-1 — APPROXIMATE 4" DIA RISER PIPE LOCATION
- VP-1 — APPROXIMATE VAPOR PROBE LOCATION

NOTES:

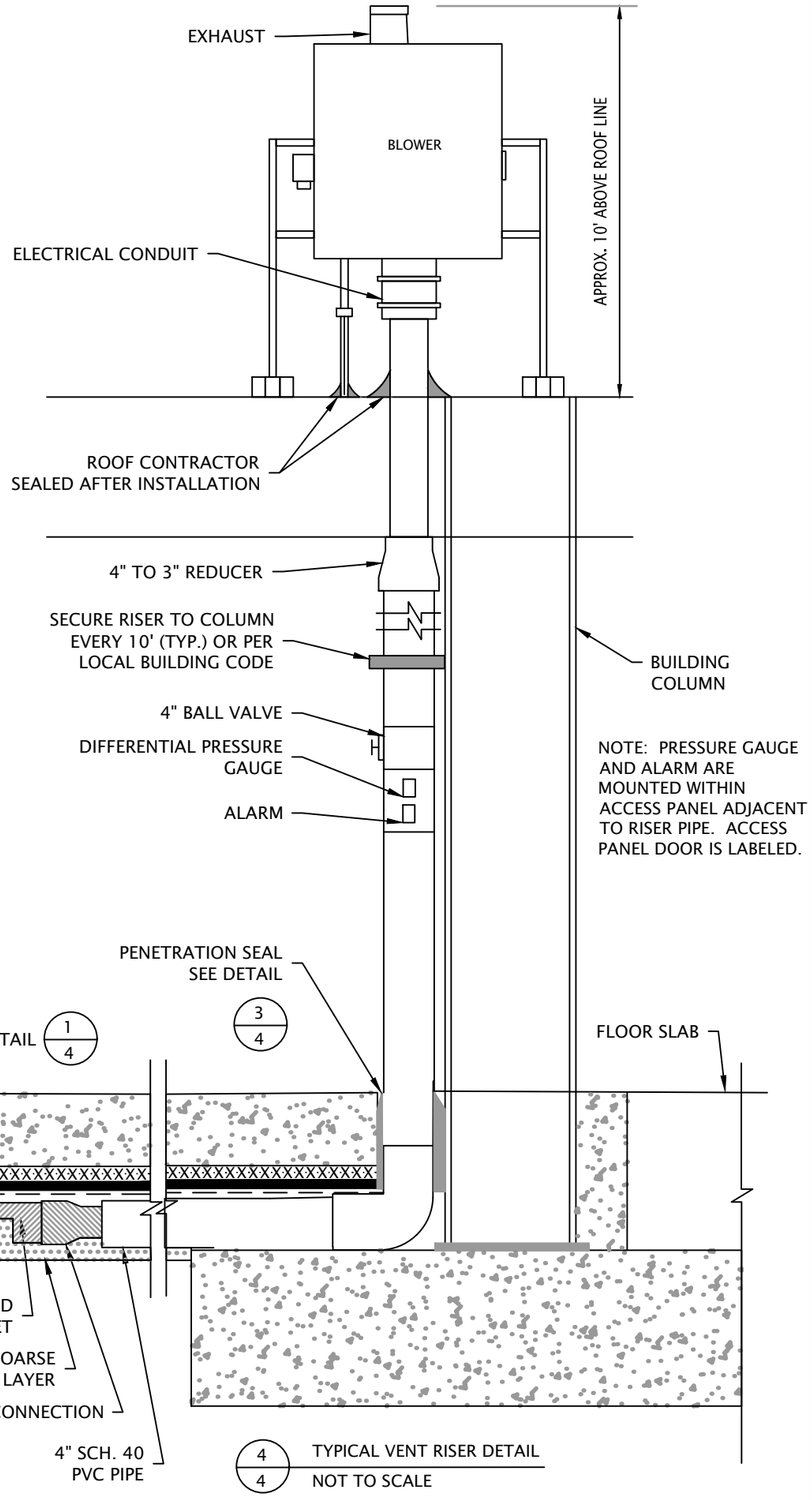
VMS - VAPOR MITIGATION SYSTEM

SCALE IN FEET

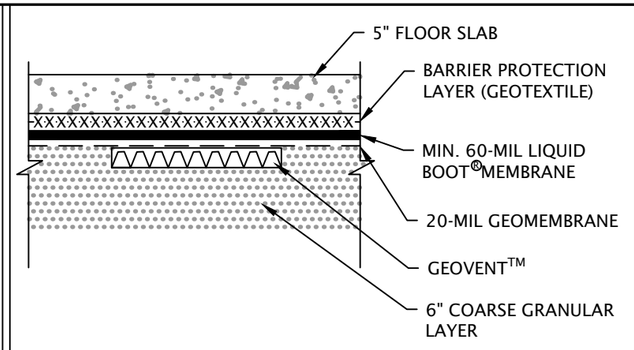
0 60'

Geosyntec consultants

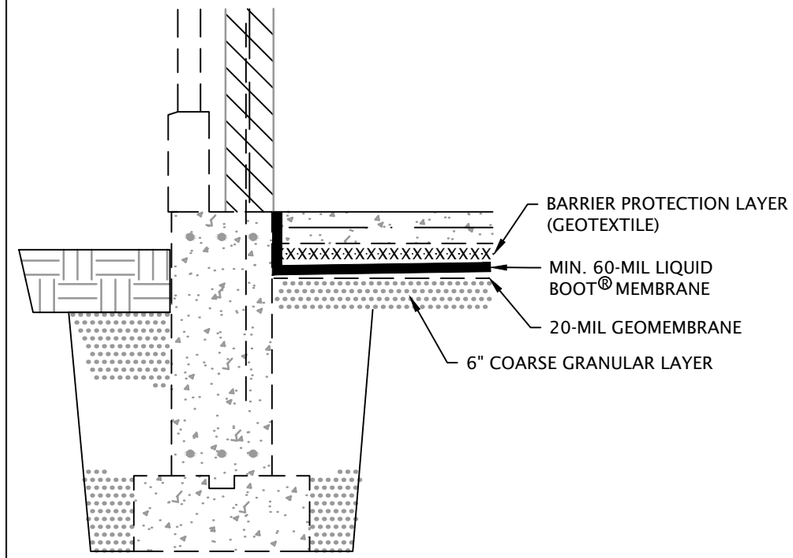
CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	VAPOR MITIGATION SYSTEM AS-BUILT LAYOUT
PROJECT: CHE8094OQ	FIGURE NO.: 2
DATE: March 19, 2023	FILE NO.:23-01 MNSCP 010
DRAWING NO.:	2 OF 3



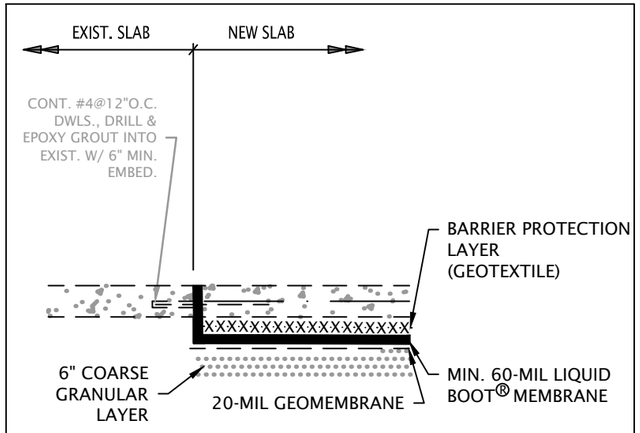
4/4 TYPICAL VENT RISER DETAIL
NOT TO SCALE



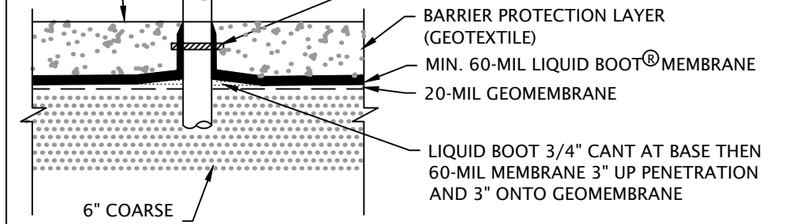
1/4 TYPICAL VAPOR MITIGATION SYSTEM SECTION
NOT TO SCALE



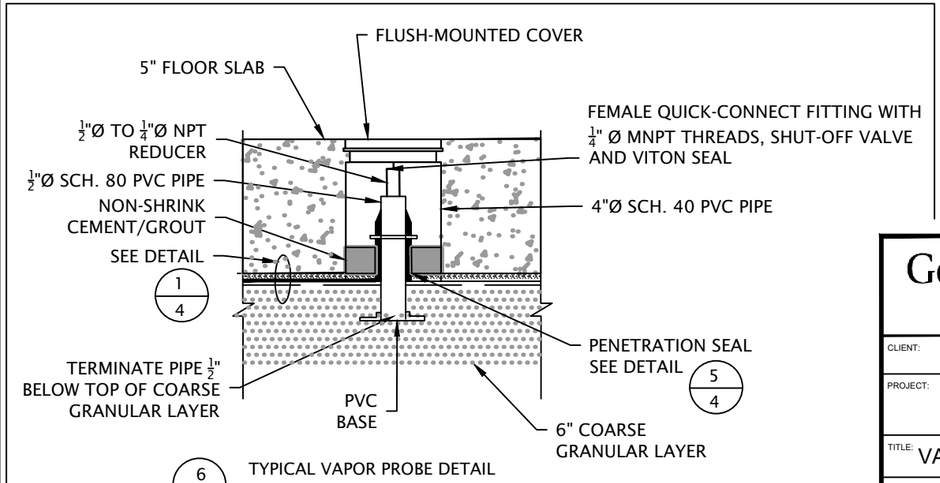
2/4 TYPICAL WALL SECTION
NOT TO SCALE



3/4 TRANSITION BETWEEN EXISTING AND NEW SLAB
NOT TO SCALE



5/4 TYPICAL SLAB PENETRATION DETAIL
NOT TO SCALE



6/4 TYPICAL VAPOR PROBE DETAIL
NOT TO SCALE

Geosyntec consultants

CLIENT: **WE ENERGIES**

PROJECT: METRO NORTH SERVICE CENTER (MNSC)
3100 WEST NORTH AVENUE
MILWAUKEE, WISCONSIN

TITLE: VAPOR MITIGATION SYSTEM AS-BUILT DETAILS

PROJECT: CHE8094OQ	FIGURE NO.: 4	DRAWING NO.: 3 OF 3
DATE: March 23, 2023	FILE NO.: 23-03 MNSC 011	

ATTACHMENT 2

Photographs

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 1

Date: 2/23/2021

Direction: NA

Comments:

venting layer (granular layer and GEOVENT™) installation

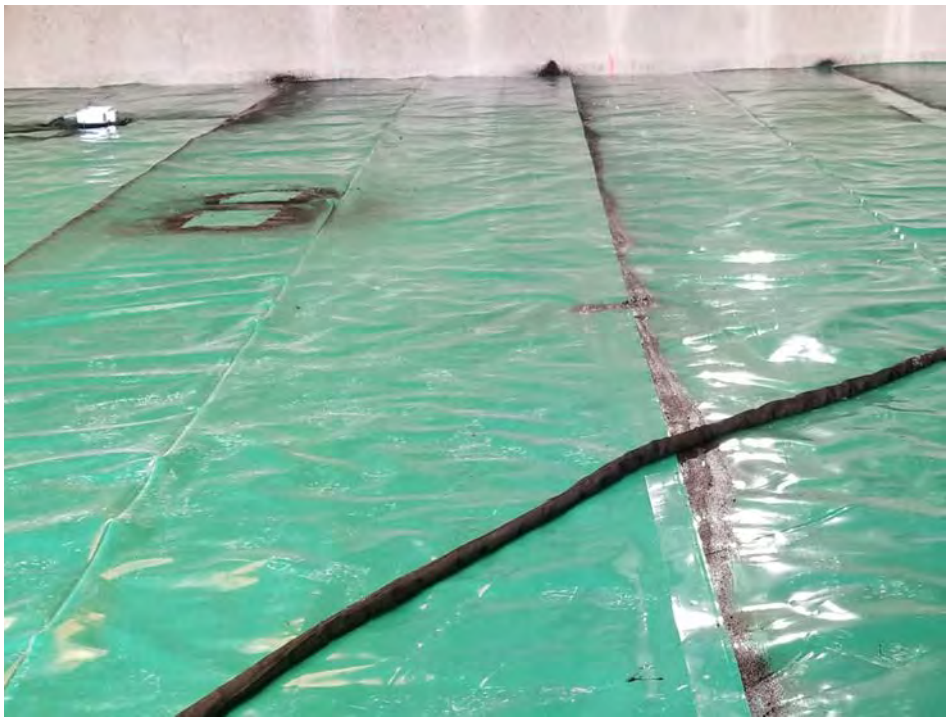
Photograph 2

Date: 2/24/2021

Direction: NA

Comments:

barrier layer (geomembrane and LIQUID BOOT® seams)



GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies **Project Number:** CHE8094OQ

Site Name: Metro North Service Center **Site Location:** Milwaukee, WI

Photograph 3 **Date:** 2/25/2021 **Direction:** NA **Comments:** barrier layer (LIQUID BOOT® over geomembrane)	
Photograph 4 **Date:** 7/28/2021 **Direction:** NA Comments: barrier protection layer (non-woven geotextile) over barrier layer	

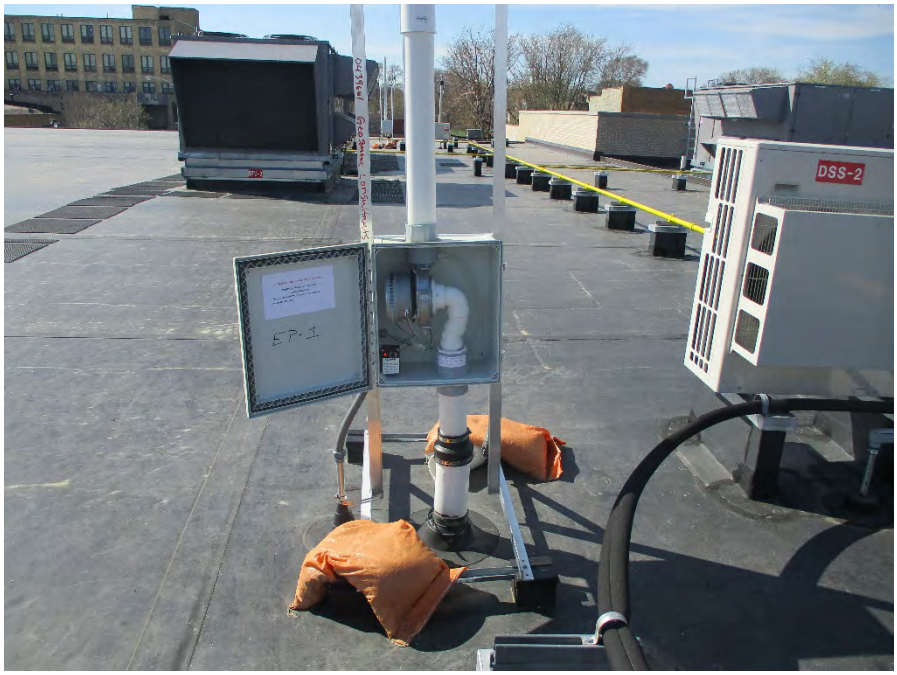
GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 5	
Date: 4/14/2023	
Direction: NA	
Comments: EP-1 riser pipe, ball valve, Magnehelic® differential pressure gauge and alarm	

Photograph 6	
Date: 4/14/2023	
Direction: S	
Comments: EP-1 blower	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 7 **Date:** 4/14/2023 **Direction:** S **Comments:** EP-1 blower and stack	
Photograph 8 **Date:** 4/14/2023 **Direction:** NA **Comments:** EP-2 riser pipe, ball valve, Magnehelic® differential pressure gauge and alarm	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 9 **Date:** 4/14/2023 **Direction:** N **Comments:** EP-2 blower	

Photograph 10 **Date:** 4/14/2023 **Direction:** N **Comments:** EP-2 blower and stack	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 11

Date: 4/14/2023

Direction: NA

Comments:

EP-3 riser pipe, ball valve, Magnehelic® differential pressure gauge and alarm

Photograph 12

Date: 4/14/2023

Direction: S

Comments:

EP-3 blower

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 13 **Date:** 4/14/2023 **Direction:** S **Comments:** EP-3 blower and stack	

Photograph 14 **Date:** 2/23/2021 **Direction:** NA **Comments:** vapor probe	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies	**Project Number:** CHE8094OQ
Site Name: Metro North Service Center	**Site Location:** Milwaukee, WI

Photograph 15 **Date:** 4/14/2023 **Direction:** NA **Comments:** vapor probe cover	

Photograph 16 **Date:** 4/14/2023 **Direction:** NA **Comments:** vapor probe	

GEOSYNTEC CONSULTANTS
Photographic Record

Geosyntec consultants

Client: We Energies | **Project Number:** CHE8094OQ

Site Name: Metro North Service Center | **Site Location:** Milwaukee, WI

Photograph 17

Date: 10/6/2022

Direction: NA

Comments:

electrical panel

Photograph 18

Date: 10/6/2022

Direction: NA

Comments:

VMS breakers 85, 87 and 89

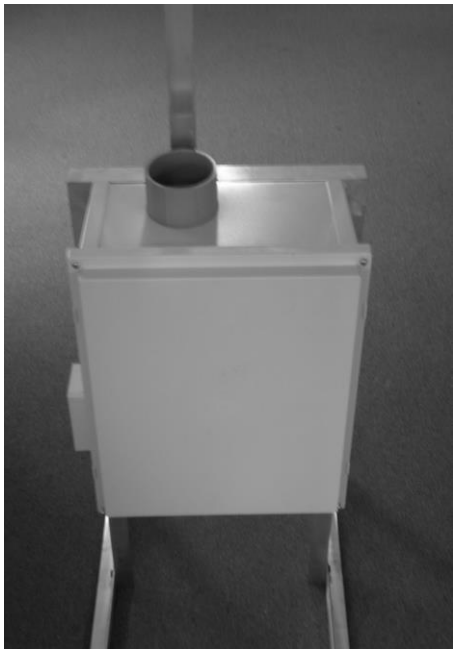
ATTACHMENT 3

Product Information

THE OBAR GBR76

COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR76 WITH ROOF MOUNT

PERFORMANCE

- GBR76 SOE 16" WC @ 0 Max flow 155 CFM.
- GBR76 UD 40" WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty - 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight, so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16"x 14"x 8" weighing only 18 lbs.
- 3" schedule 40 inlet and exhaust.
- Universal Drive model accepts voltage from 120-240V without alteration

COST	GBR76 SOE	GBR76 UD
COMPLETE UNIT	**$1289.00**	**$1489.00**
3 YEAR WARRANTY	**$450.00**	**$550.00**

OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND NJ 07435 800 949 6227

GBR76 SOE	0”	2”	4”	6”	8”	10”	12”	16”	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

GBR SOE performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4” WC

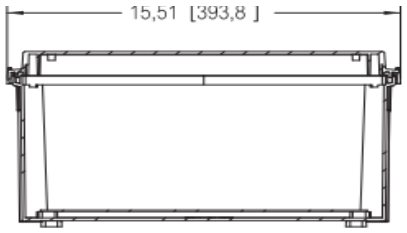
GBR76 UD	0”	10”	20”	30”	37”	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

Blower Specifications

Notes:

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 6 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation) (1 kHz to 10 kHz)
  0 to 10 VDC speed control.
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.
  SPEED CONNECTION: Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.
  Mating harnesses available upon request.

Enclosure Specifications



Screw cover

Ratings:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

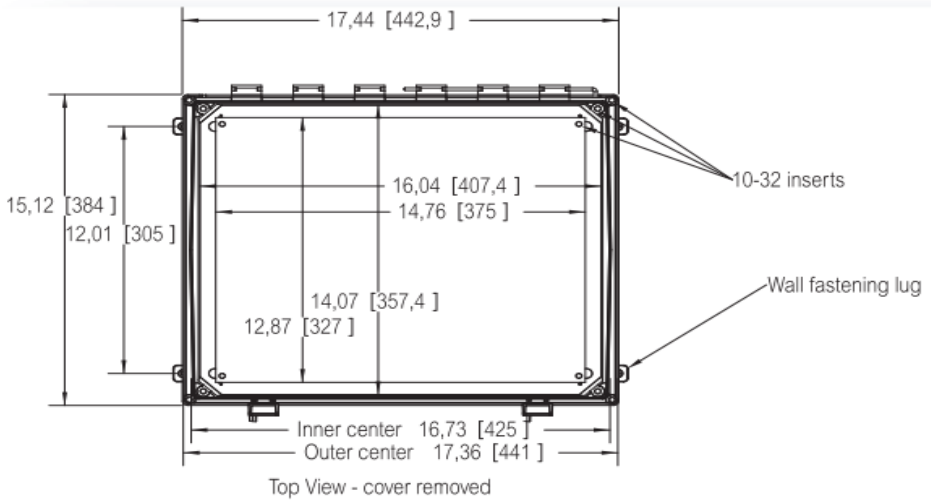
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



Top View - cover removed

Dwyer

SERIES 2000

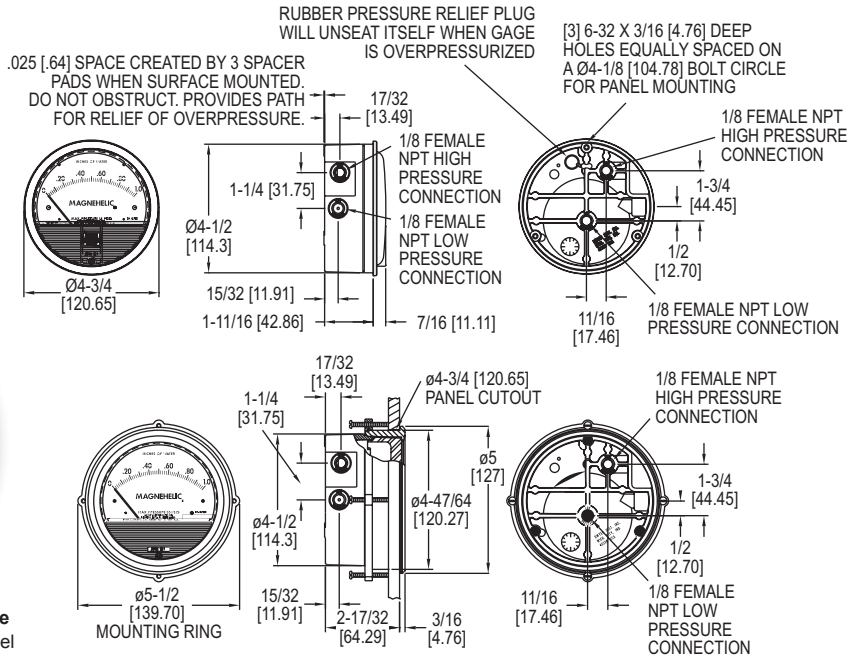
MAGNEHELIC® DIFFERENTIAL PRESSURE GAGES

Indicate Positive, Negative or Differential, Accurate within 1%

5 YEAR LIMITED WARRANTY

Standard Magnehelic® Gage

High Accuracy Magnehelic® Gage
Note: Shown with optional -SS bezel



Select the **SERIES 2000** Magnehelic® Gage for a versatile low differential pressure gage with a wide choice of 81 models and 27 options to choose from. Using Dwyer's simple, frictionless Magnehelic® gage movement, it quickly indicates air or non-corrosive gas pressures--either positive, negative (vacuum) or differential. The design resists shock, vibration, over-pressures and is weatherproof to IP67.
Select the –HA High Accuracy Magnehelic® gage option for an accuracy within 1% of full scale. Also included with the –HA option at no extra cost are a mirrored scale overlay and a 6 point calibration certificate.

FEATURES/BENEFITS

- Easy to read gage through undistorted plastic face permits viewing from far away
- Patented design provides quick response to pressure changes means no delay in assessing critical situations
- Durable and rugged housing and high-quality components combine to provide long-service life and minimized down-time
- High accuracy option is twice as accurate as the standard Magnehelic® gage

APPLICATIONS

- Filter monitoring
- Air velocity with Dwyer pitot tube
- Blower vacuum monitoring
- Fan pressure indication
- Duct, room or building pressures
- Clean room positive pressure indication

SPECIFICATIONS	
Service: Air and non-combustible, compatible gases (natural gas option available). **Note:** May be used with hydrogen. Order a Buna-N diaphragm. Pressures must be less than 35 psi. **Wetted Materials:** Consult factory. **Housing:** Die cast aluminum case and bezel, with acrylic cover. Exterior finish is coated gray to withstand 168 hour salt spray corrosion test. **Accuracy:** ±2% (-HA model ±1) of FS (±3% (-HA ±1.5%) on -0, -100PA, -125PA, -10MM and ±4% (-HA ±2%) on -00, -60PA, -6MM ranges), throughout range at 70°F (21.1°C). **Pressure Limits:** -20 in Hg to 15 psig (-0.677 to 1.034 bar); MP option: 35 psig (2.41 bar); HP option: 80 psig (5.52 bar). **Enclosure Rating:** IP67. **Overpressure:** Relief plug opens at approximately 25 psig (1.72 bar), standard gages only.❶	**Temperature Limits:** 20 to 140°F* (-6.67 to 60°C). -20°F (-28°C) with low temperature option. **Size:** 4″ (101.6 mm) diameter dial face. **Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations. **Process Connections:** 1/8″ female NPT duplicate high and low pressure taps - one pair side and one pair back. **Weight:** 1 lb 2 oz (510 g), MP & HP 2 lb 2 oz (963 g). **Standard Accessories:** Two 1/8″ NPT plugs for duplicate pressure taps, two 1/8″ pipe thread to rubber tubing adapter, and three flush mounting adapters with screws. (Mounting and snap ring retainer substituted for three adapters in MP & HP gage accessories.) **Agency Approvals:** Meets the technical requirements of EU Directive 2011/65/EU (RoHS II). **Note:** -SP models not RoHS approved.
Note: For applications with high cycle rate within gage total pressure rating, next higher rating is recommended. See Medium and High pressure options.	
*Low temperature models available as special options.	

ACCESSORIES	
Model	**Description**
A-432	Portable kit; combine carrying case with any Magnehelic® gage of standard range, except high pressure connection. Includes 9 ft (2.7 m) of 3/16″ ID rubber tubing, standhang bracket and terminal tube with holder
A-605	Air filter gage accessory kit; adapts any standard Magnehelic® gage for use as an air filter gage. Includes aluminum surface mounting bracket with screws, two 5 ft (1.5 m) lengths of 1/4″ aluminum tubing, two static pressure tips and two molded plastic vent valves, integral compression fittings on both tips and valves
A-605B	Air filter gage accessory kit; air filter kit with two plastic open/close valves, two 4″ steel static tips, plastic tubing and mounting flange
A-605C	Air filter gage accessory kit; air filter kit with two plastic open/close valves, two plastic static tips, plastic tubing and mounting flange

A-432

A-605

❶Over Protection Note: See page 21 (Series 2000)

Dwyer

SERIES 2000

MAGNEHELIC® DIFFERENTIAL PRESSURE GAGES

Indicate Positive, Negative or Differential, Accurate within 1%

Bezel provides flange for flush mounting in panel.

Clear plastic face is highly resistant to breakage. Provides undistorted viewing of pointer and scale.

Precision litho-printed scale is accurate and easy to read.

Calibrated range spring is flat spring steel. Small amplitude of motion assures consistency and long life. It reacts to pressure on diaphragm. Live length adjustable for calibration.

Red tipped pointer of heat treated aluminum tubing is easy to see. It is rigidly mounted on the helix shaft.

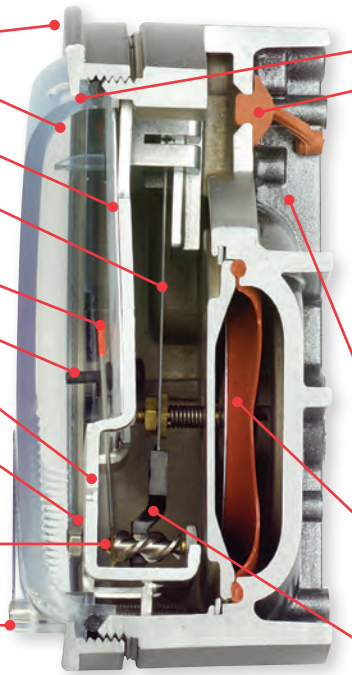
Pointer stops of molded rubber prevent pointer over-travel without damage.

"Wishbone" assembly provides mounting for helix, helix bearings and pointer shaft.

Jeweled bearings are shock-resistant mounted; provide virtually friction-free motion for helix. Motion damped with high viscosity silicone fluid.

Helix is precision made from an alloy of high magnetic permeability. Mounted in jeweled bearings, it turns freely, following the magnetic field to move the pointer across the scale.

Zero adjustment screw is conveniently located in the plastic cover, and is accessible without removing cover. O-ring seal provides pressure tightness.



O-ring seal for cover assures pressure integrity of case.

OVERPRESSURE PROTECTION
Blowout plug is comprised of a rubber plug on the rear which functions as a relief valve by unseating and venting the gage interior when over pressure reaches approximately 25 psig (1.7 bar). To provide a free path for pressure relief, there are four spacer pads which maintain 0.023″ clearance when gage is surface mounted. Do not obstruct the gap created by these pads.
The blowout plug is not used on models above 180″ of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm.
The blowout plug should not be used as a system overpressure control. High supply pressures may still cause the gage to fail due to over pressurization, resulting in property damage or serious injury. Good engineering practices should be utilized to prevent your system from exceeding the ratings of any component.

Die cast aluminum case is precision made and iridite-dipped to withstand 168 hour salt spray corrosion test. Exterior finished in baked dark gray hammerloid. One case size is used for all standard pressure options, and for both surface and flush mounting.

Silicone rubber diaphragm with integrally molded O-ring is supported by front and rear plates. It is locked and sealed in position with a sealing plate and retaining ring. Diaphragm motion is restricted to prevent damage due to overpressures.

Samarium Cobalt magnet mounted at one end of range spring rotates helix without mechanical linkages.

MODEL CHART

Model	Range, Inches of Water
2000-00N†••	.05-0-.2
2000-00†••	0-.25
2000-0†•	0-.50
2001	0-1.0
2002	0-2.0
2003	0-3.0
2004	0-4.0
2005	0-5.0
2006	0-6.0
2008	0-8.0
2010	0-10
2012	0-12
2015	0-15
2020	0-20
2025	0-25
2030	0-30
2040	0-40
2050	0-50
2060	0-60
2080	0-80
2100	0-100
2120	0-120
2150	0-150
2160	0-160
2180*	0-180
2250*	0-250
Zero Center Ranges	
2300-00†••	0.125-0-0.125
2300-0†•	.25-0-.25
2301	.5-0-.5
2302	1-0-1
2304	2-0-2
2310	5-0-5
2320	10-0-10
2330	15-0-15

Model	Range, PSI
2201	0-1
2202	0-2
2203	0-3
2204	0-4
2205	0-5
2210*	0-10
2215*	0-15
2220*	0-20
2230**	0-30

Model	Range, CM of Water
2000-15CM	0-15
2000-20CM	0-20
2000-25CM	0-25
2000-50CM	0-50
2000-80CM	0-80
2000-100CM	0-100
2000-150CM	0-150
2000-200CM	0-200
2000-250CM	0-250
2000-300CM	0-300
Zero Center Ranges	
2300-4CM	2-0-2
2300-10CM	5-0-5
2300-30CM	15-0-15

Model	Range, MM of Water
2000-6MM†••	0-6
2000-10MM†•	0-10
2000-15MM	0-15
2000-25MM	0-25
2000-30MM	0-30
2000-50MM	0-50
2000-80MM	0-80
2000-100MM	0-100
2000-125MM	0-125
2000-150MM	0-150
2000-200MM	0-200
2000-250MM	0-250
2000-300MM	0-300
Zero Center Ranges	
2300-6MM†••	3-0-3
2300-10MM†•	5-0-5
2300-20MM†•	10-0-10

Model	Range, Pa
2000-60NPA†••	10-0-50
2000-60PA†••	0-60
2000-100PA†•	0-100
2000-125PA†•	0-125
2000-250PA	0-250
2000-300PA	0-300
2000-500PA	0-500
2000-750PA	0-750
2000-1000PA	0-1000
Zero Center Ranges	
2300-60PA†••	30-0-30
2300-100PA†•	50-0-50
2300-120PA	60-0-60
2300-200PA	100-0-100
2300-250PA	125-0-125
2300-300PA	150-0-150
2300-500PA	250-0-250
2300-1000PA	500-0-500

Model	Range, kPa
2000-0.5KPA	0-0.5
2000-1KPA	0-1
2000-1.5KPA	0-1.5
2000-2KPA	0-2
2000-2.5KPA	0-2.5
2000-3KPA	0-3
2000-4KPA	0-4
2000-5KPA	0-5
2000-8KPA	0-8
2000-10KPA	0-10
2000-15KPA	0-15
2000-20KPA	0-20
2000-25KPA	0-25
2000-30KPA	0-30
Zero Center Ranges	
2300-1KPA	.5-0-.5
2300-2KPA	1-0-1
2300-2.5KPA	1.25-0-1.25
2300-3KPA	1.5-0-1.5

Dual Scale Air Velocity Units
For use with pitot tube

Model	Range, in w.c./ Velocity F.P.M.
2000-00AV†••	0-.25/ 300-2000
2000-0AV†•	0-.50/ 500-2800
2001AV	0-1.0/ 500-4000
2002AV	0-2.0/ 1000-5600
2005AV	0-5.0/ 2000-8800
2010AV	0-10/ 2000-12500

Dual Scale English/Metric Models

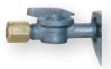
Model	Range, in w.c.	Range, Pa or kPa
2000-00D†••	0-.25	0-62 Pa
2000-0D†•	0-0.5	0-125 Pa
2001D	0-1.0	0-250 Pa
2002D	0-2.0	0-500 Pa
2003D	0-3.0	0-750 Pa
2004D	0-4.0	0-1.0 kPa
2005D	0-5.0	0-1.25 kPa
2006D	0-6.0	0-1.5 kPa
2008D	0-8.0	0-2.0 kPa
2010D	0-10	0-2.5 kPa
2015D	0-15	0-3.7 kPa
2020D	0-20	0-5 kPa
2025D	0-25	0-6.2 kPa
2050D	0-50	0-12.4 kPa
2060D	0-60	0-15 kPa

†These ranges calibrated for vertical scale position • Accuracy ±3% •• Accuracy ±4% *MP option standard **HP option standard

VELOCITY AND VOLUMETRIC FLOW UNITS
Scales are available on the Magnehelic® gage that read in velocity units (FPM, m/s) or volumetric flow units (SCFM, m^3/s, m^3/h). Stocked velocity units with dual range scales in inches w.c. and feet per minute are shown above. For other ranges contact the factory. When ordering volumetric flow scales please specify the maximum flow rate and its corresponding pressure.
Example: 0.5 in w.c. = 16,000 CFM.

ACCESSORIES

Model	Description
A-321	Safety relief valve
A-448	3-piece magnet kit for mounting Magnehelic® gage directly to magnetic surface
A-135	Rubber gasket for panel mounting
A-401	Plastic carry case
A-310A	3-way vent valves. In applications where pressure is continuous and the Magnehelic® gage is connected by metal or plastic tubing which cannot be easily removed, we suggest using Dwyer A-310A vent valves to connect gage. Pressure can then be removed to check or re-zero the gage.

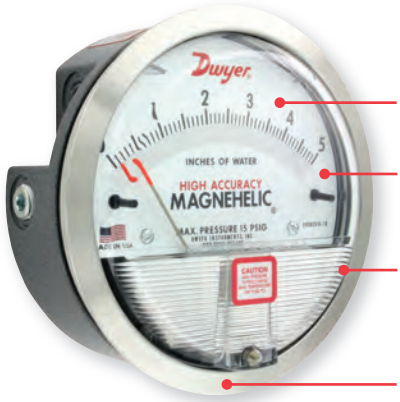


A-310A

Dwyer

HIGH ACCURACY MAGNEHELIC® DIFFERENTIAL PRESSURE GAGE

5 YEAR LIMITED WARRANTY



- Twice as accurate as the standard Magnehelic® gage
- Mirrored scale overlay eliminates parallax error
- IP67 weatherproof housing
- Optional brushed SS bezel

6-Point Calibration Certificate Included

OPTIONS - HIGH ACCURACY MAGNEHELIC® GAGE	
To order add suffix:	Description
-HA	High Accuracy Magnehelic® Gage. Accuracy within 1% and weatherproof. Also includes mirrored scale overlay and a six point calibration certificate
-SS	Corrosion resistant brushed 304 stainless steel bezel

Accuracy Specifications: See page 20 (Series 2000)

ADDITIONAL GAGE OPTIONS

OPTIONS - OTHER OPTIONAL BEZELS	
To order add suffix:	Description
-CB	Chrome bezel option: A chrome plated aluminum bezel for an aesthetically pleasing finish when mounting on metal surfaces such as control panels.
-SB	Stainless steel bezel option: 304 stainless steel electro polished Ra 16 finished bezel.
-SS	Corrosion resistant brushed 304 stainless steel bezel

LED Setpoint Indicator

Adjustable Signal Flag

Transparent Overlay

Mirrored Scale Overlay

Integrated Mounting Plate

OPTIONS - LED SETPOINT INDICATOR	
To order add suffix:	Description
-SP	Bright red LED on right scale shows when setpoint is reached. Field adjustable from gage face, unit operates on 12-24 VDC. Setpoint indicator option comes with medium pressure (MP) bezel.
Note: 4-13/16″ hole for flush mounting.	
OPTIONS - ADJUSTABLE SIGNAL FLAG	
To order add suffix:	Description
-ASF	Integral with plastic gage cover. Available for most models except those with medium or high pressure construction. Can be ordered with gage or separate.
OPTIONS - TRANSPARENT OVERLAYS	
To order add suffix:	Description
-G	Green (to highlight and emphasize critical pressures)
-R	Red (to highlight and emphasize critical pressures)
-Y	Yellow (to highlight and emphasize critical pressures)
OPTIONS - MIRRORED SCALE OVERLAY	
To order add suffix:	Description
-M	A mirrored scale overlay is also available to assist in reducing parallax error.
OPTIONS - INTEGRATED MOUNTING PLATE	
To order add suffix:	Description
-AHU1	Furnished with attached surface mounting plate
-AHU2	Furnished with attached surface mounting plate and including A-481 installer kit (2 plastic static pressure tips and 7´of PVC tubing)

OPTIONS - FOR HIGH STATE PRESSURE APPLICATIONS	
To order add suffix:	Description
-HP	High pressure option: for pressures to 80 psig
-MP	Medium pressure option: for pressures to 35 psig

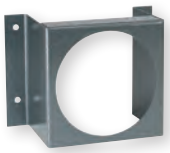
OPTIONS	
To order add suffix:	Description
-FC	Factory calibration certificate
-LT	Low temperatures to -20°F (-28°C)
-NIST	NIST traceable calibration certificate

MAGNEHELIC® GAGE MOUNTING ACCESSORIES

A-610

A-369

A-464



A-299

A-286

A-300

A-368

A-371

A single case size is used for most models of Magnehelic® gages. They can be flush or surface mounted with standard hardware supplied. Complete mounting and connection fittings plus instructions are furnished with each instrument. A 4-9/16″ hole is required for flush panel mounting.

Flush mounting is easily accomplished with the new A-300 Flush Mounting bracket. This bracket provides a solution to quickly and conveniently flush mount the Magnehelic® gage. The A-300 is ideal for mounting the Magnehelic® gage on control panel doors.

The A-368 is a simple bracket for quickly surface mounting the Magnehelic® gage. After securing the Magnehelic® gage to the A-368 bracket, mount the bracket on any flat surface.

The A-369 allows the Magnehelic® gage to be easily carried to locations where pressure readings need to be taken. The A-369 can stand on its own or hang on a nail or hook.

ACCESSORIES	
Model	**Description**
A-610	Pipe mounting kit for installing on 1-1/4″ to 2″ horizontal or vertical pipe
A-286	Magnehelic® gage panel mounting flange
A-369	Stand-hang bracket, aluminum, for Magnehelic® gage
A-300	Flush mounting bracket
A-464	Flush mount kit for Magnehelic® gage
A-368	Surface mounting plate, aluminum, for Magnehelic® gage
A-299	Mounting bracket, flush mount for Magnehelic® gage, bracket is then surface mounted, steel with gray hammerloid epoxy finish
A-371	Surface mounting bracket, use with medium pressure (-MP) or high pressure (-HP) models only

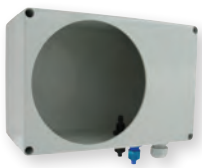
SERIES A-320

INSTRUMENT ENCLOSURE

Protects Various Instruments

A-320-A

A-320-A With Gage Installed



A-320-B

A-320-B With Gage Installed

SERIES A-320 Instrument Enclosure protects instruments in all applications. The A-320-A fits standard Magnehelic® size instruments (4-9/16″ diameter) and the A-320-B fits standard 3000MR Photohelic® switch/gage size instruments (4-13/16″ diameter). Both models include silicone tubing, gage barbs and mounting hardware.

MODEL CHART	
Model	**Compatible Instruments**
A-320-A	2000 Magnehelic® Gage, DM-1000 Digital Differential Pressure Gage, DM-2000 Differential Pressure Transmitter
A-320-B	3000MR Photohelic® Switch/Gage, Series 605 Magnehelic® Differential Pressure Transmitter, DH3 Digihelic® Pressure Controller, 2000 Magnehelic® Gage with medium and high pressure options

SPECIFICATIONS
Housing: ABS.
Process Connections: Anodized aluminum.
Enclosure Rating: NEMA 1 (IP10). Note: Check instruments rating.
Weight: Model A-320-A: 11.29 oz (320 g); A-320-B: 16.23 oz (420 g).
Gage Size Opening: A-320-A: 4-9/16 in (115.89 mm); A-320-B: 4-13/16 in (122.24 mm).

INSTALLATION & OPERATING INSTRUCTIONS
Instruction P/N IN015 Rev E
FOR *CHECKPOINT IIa* TM P/N 28001-2 & 28001-3
RADON SYSTEM ALARM

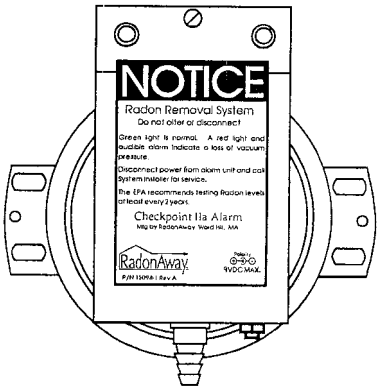
INSTALLATION INSTRUCTIONS
(WALL MOUNTING)

Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. **NOTE: The Checkpoint IIa is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.**

Drill two ¼" holes 4" apart horizontally where the unit is to be mounted.

Install the two ¼" wall anchors provided.

Hang the CHECKPOINT IIa from the two mouting holes located on the mounting bracket. Tighten the mounting screws so the unit fits snugly and securely against the wall.



Drill a 5/16" hole into the side of the vent pipe about 6" higher than the top of the unit.

Insert the vinyl tubing provided about 1" inside the suction pipe.

Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

CALIBRATION AND OPERATION.

The CHECKPOINT IIa units are calibrated and sealed at the factory to alarm when the vacuum pressure falls below the factory setting and should not normally require field calibration. Factory Settings are:
28001-2 -.25" WC Vacuum
28001-3 -.10" WC Vacuum

To Verify Operation:

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on in about two or three seconds and the green light should go out.

WARRANTY INFORMATION

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective material and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. **No returns can be accepted without an RMA.** If factory return is required, the customer assumes all shipping costs to and from factory.

Manufactured by:
RadonAway
Ward Hill, MA

GEOVENT™

ACTIVE/PASSIVE GAS VENTING SYSTEM

DESCRIPTION

GEOVENT™ consists of a three-dimensional vent core that is wrapped in a non-woven, needle-punched filter fabric.

GEOVENT™ End Outlets are available for use in conjunction with GEOVENT™ active/passive gas venting systems.

APPLICATION

GEOVENT™ is designed for use in the following application:

- An active or passive venting when used with CETCO vapor intrusion mitigation systems.

BENEFITS

- Installed directly on subgrade eliminating trenching and potential interference or damage to existing underground utilities
- Placed in closer proximity to the vapor intrusion barrier allowing for more effective venting of any accumulated gas
- Greater opening area per lineal foot of pipe and integral filter fabric allows for higher ventilation efficiency

PACKAGING

GEOVENT™ is available in the following packaging option:

- 1 ft. x 165 ft. (0.3 m x 50 m) Rolls

GEOVENT™ allows for ease of installation directly on the subgrade, eliminating the need for costly and labor-intensive trenching.

GEOVENT™ allows for ease of installation directly on the subgrade, eliminating the need for costly and labor-intensive trenching.

PHYSICAL PROPERTIES

CORE PROPERTY	TEST METHOD	RESULTS
Compressive Strength	ASTM D 1621	8,500 – 11,000 psf (407 – 527 kN/m²)
Thickness	ASTM D 1777	1.0 in. (2.54 cm)
Flow Rate (Hydraulic gradient = .1)	ASTM D 4716	30 gpm/ft width (372 lpm/m)

FABRIC PROPERTY	TEST METHOD	RESULTS
A.O.S.	ASTM D 4751	70 US Sieve (0.212 mm)
Grab Tensile Strength	ASTM D 4632	100 lbs. (0.45 kN)
CBR Puncture Strength	ASTM D 6241	250 lbs. (1.11 kN)
Flow Rate	ASTM D 4491	140 gpm/ft² (5,704 lpm/m²)

North America: 847.851.1800 | 800.527.9948 | www.cetco.com

UPDATED: MAY 2017

FORM: TDS_GEOVENT_AM_EN_201705_V2

VI-20™ GEOMEMBRANE

HIGH-PERFORMANCE VAPOR INTRUSION BARRIER

DESCRIPTION

VI-20™ is a 7-layer co-extruded geomembrane made using high quality virgin-grade polyethylene and EVOH resins that provide unmatched impact strength as well as superior resistance to VOC vapor transmission. EVOH technology serves as a highly resilient underslab and vertical wall barrier designed to restrict methane, radon and other harmful chemicals. Applications for EVOH originated in the manufacturing of automotive fuel systems to control emissions of hydrocarbons, whose use was mandated by the US EPA and the CA Air Resources Board (CARB) to reduce VOC emissions.

APPLICATION

VI-20™ is a 20-mil, high performance polyethylene-EVOH copolymer geomembrane, specially designed for use as a VOC barrier when used in conjunction with Liquid Boot® spray-applied vapor intrusion membrane to minimize vapor intrusion and nuisance water (non-hydrostatic conditions) migration into buildings. VI-20™ is ideal for applications with chlorinated solvents, BTEX and other PAHs.

BENEFITS

- Polyethylene layers provide excellent chemical resistance and physical properties
- EVOH barrier technology provides superior protection against diffusion of chemicals when compared to typical HDPE geomembranes
- Manufactured at ISO 9001:2008 certified plant

INSTALLATION

For use as a component of the Liquid Boot® Plus system, VI-20™ geomembrane is rolled out on prepared sub-grade, overlapping seams a minimum of six inches (6”). The geomembrane is cut around penetrations so that it lays flat on the sub-grade and tight at all inside corners. A thin (20 mil) tack coat of Liquid Boot® (“A” side without catalyst) is sprayed within the seam overlap. Once the VI-20™ geomembrane is installed, penetrations are then treated with VI-20™ Detailing Fabric prior to installation of the Liquid Boot® spray-applied vapor intrusion membrane and UltraShield™ G-1000 protection course.

EVOH technology provided in VI-20™ geomembrane has been shown to have VOC diffusion coefficients 20 times lower than an 80 mil (2 mm) HDPE geomembrane.

PACKAGING

VI-20™ Geomembrane is available in the following packaging option:

- 10 ft. x 150 ft. (3 m x 45 m) Rolls

VI-20™ GEOMEMBRANE

HIGH-PERFORMANCE VAPOR INTRUSION BARRIER

VI-20™ CHEMICAL & PHYSICAL PROPERTIES		
CHEMICAL PROPERTY	TEST METHOD	RESULT
Benzene Diffusion Coefficient	EPA Method 8260	4.5×10^{-15} m²/s
Ethylbenzene Diffusion Coefficient	EPA Method 8260	4.0×10^{-15} m²/s
m&p-Xylenes Diffusion Coefficient	EPA Method 8260	3.7×10^{-15} m²/s
Methane Permeance	ASTM D1434	$< 1.7 \times 10^{-10}$ m²/d•atm
o-Xylene Diffusion Coefficient	EPA Method 8260	3.7×10^{-15} m²/s
Radon Diffusion Coefficient	SP Test Method	$<0.25 \times 10^{-12}$ m²/s
Toluene Diffusion Coefficient	EPA Method 8260	4.2×10^{-15} m²/s
PHYSICAL PROPERTY	TEST METHOD	RESULT
Membrane Composite Thickness	ASTM D5199	20 mil (0.5 mm)
Impact Resistance	ASTM D1709	2,600 g
Tensile Strength	ASTM E154 Section. 9	58 lbf/in (1.0 N/m)
Water Vapor Transmission	ASTM E154 & E96	0.004 grains/hr-ft² (0.0028 g/hr-m²)
Water Vapor Retarder Classification	ASTM E1745	Class A, B & C

NOTE:
These are typical property values.

North America: 847.851.1800 | 800.527.9948 | www.cetco.com

UPDATED: MAY 2017

FORM: TDS_VI-20_GEOMEMBRANE_AM_EN_201705_V2

LIQUID BOOT®

SPRAY-APPLIED GAS VAPOR BARRIER

DESCRIPTION

LIQUID BOOT® is a seamless, spray-applied, water-based membrane containing no VOCs, which provides a barrier against vapor intrusion into structures. LIQUID BOOT® is installed under slab and on below grade vertical walls as a gas vapor barrier to minimize vapor and nuisance water migration into buildings. LIQUID BOOT® spray-application directly to penetrations, footings, grade beams, pile caps and other irregular surfaces, provides for a fully-adhered gas vapor barrier system.

APPLICATIONS

LIQUID BOOT® is used as an underslab and below-grade vertical wall gas vapor barrier, used to minimize vapor and nuisance water (non-hydrostatic conditions) migration into buildings. LIQUID BOOT® is ideal for methane migration control. LIQUID BOOT® is also NSF® certified for use as a potable water liner in concrete water reservoirs and tanks greater than 300,000 gallons to protect the concrete from water seepage.

BENEFITS

- Spray-application provides excellent sealing of penetrations, eliminating the need for mechanical fastening
- Seamless, monolithic membrane eliminates seaming-related membrane failures
- Unique formulation provides superior protection from methane gases and water vapor
- Fully adhered system reduces risk of gas migration
- Protection from methane gas, VOCs, chlorinated solvents and other contaminates

INSTALLATION

Protect all adjacent areas not to receive gas vapor barrier. Ambient temperature shall be within manufacturer's specifications. All plumbing, electrical, mechanical and structural items to be under or passing through the gas vapor barrier shall be secured in their proper positions and appropriately protected prior to membrane application. Gas vapor barrier shall be installed before placement of rein-forcing steel. Expansion joints must be filled with a conventional waterproof expansion joint material. Surface preparation shall be per manufacturer's specification. A minimum thickness of 60 dry mils, unless specified otherwise.

LIMITED WARRANTY

CETCO warrants its products to be free of defects. This warranty only applies when the product is applied by Approved Applicators trained by CETCO. As factors which affect the result obtained from this product, including weather, equipment, construction, workmanship and other variables are all beyond CETCO's control, we warrant only that the material herein conforms to our product specifications. Under this warranty we will replace at no charge any product proved to be defective within 12 months of manufacture, provided it has been applied in accordance with our written directions for uses we recommend as suitable for this product. This warranty is in lieu of any and all other warranties expressed or implied (including any implied warranty of merchantability or fitness for a particular use), and the Manufacturer shall have no further liability of any kind including liability for consequential or incidental damages resulting from any defects or any delays caused by replacement or otherwise. This warranty shall become valid only when the product has been paid for in full.

In addition to superior chemical resistance performance, LIQUID BOOT® spray-application effectively seals penetrations, footings, grade beams and other irregular surfaces that are considered critical vapor intrusion pathways.

EQUIPMENT

- COMPRESSOR: Minimum output of 155–185 cubic feet per minute (CFM)
- PUMPS: For "A" drum, an air-powered piston pump of 4:1 ratio (suggested model: Graco, 4:1 Bulldog). For "B" drum, an air-powered diaphragm pump (0–100 psi)
- HOSES: For "A" drum, ½" wire hose with a solvent resistant core (for diesel cleaning flush), hose rated for 500 psi minimum. For "B" drum, a 3/8" fluid hose rated at only 300 psi may be used.
- SPRAY WAND: Only the spray wand sold by CETCO is approved for the application of LIQUID BOOT®.
- SPRAY TIPS: Replacement tips can be purchased separately from CETCO.

PACKAGING

LIQUID BOOT® is available in the following packaging options:

- 55 Gallon Drum
- 275 Gallon Tote

LIQUID BOOT®

SPRAY-APPLIED GAS VAPOR BARRIER

TESTING DATA

CHEMICAL & PHYSICAL PROPERTIES		
CHEMICAL PROPERTY	TEST METHOD	RESULT
Acid Exposure (10% H_2SO_4 for 90 days)	ASTM D543	Less than 1% weight change
Benzene Diffusion Test	Tested at 43,000 ppm	2.90 x 10^{-11} m^2/day
Chemical Resistance: VOCs, BTEXs (tested at 20,000 ppm)	ASTM D543	Less than 1% weight change
Chromate Exposure (10% Chromium6+ salt for 31 days)	ASTM E96	Less than 1% weight change
Diesel (1000 mg/l), Ethylbenzene (1000 mg/l), Naphthalene (5000 mg/l) and Acetone (500 mg/l) Exposure for 7 days	ASTM D543	Less than 1% weight change; Less than 1% tensile strength change
Hydrogen Sulfide Gas Permeability	ASTM D1434	None Detected
Methane Permeability	**ASTM 1434-82**	**Passed***
Microorganism Resistance	**ASTM D4068-88**	**Passed***
Oil Resistance	**ASTM D543-87**	**Passed***
PCE Diffusion Coefficient	Tested at 120 mg/L	1.32 x 10^{-13} m^2/sec
Radon Permeability	Tested by US Dept. of Energy	Zero permeability to Radon (222Rn)
TCE Diffusion Coefficient	Tested at 524 mg/L	9.07 x 10^{-13} m^2/sec

LIQUID BOOT®

SPRAY-APPLIED GAS VAPOR BARRIER

TESTING DATA

CHEMICAL & PHYSICAL PROPERTIES		
PHYSICAL PROPERTY	TEST METHOD	RESULT
Accelerated Weathering and Ultraviolet Exposure	ASTM D822	No adverse effect after 500 hours
Air Infiltration	ASTM E283-91	0 cfm/sq. ft.
Bonded Seam Strength Tests	ASTM D6392	Passed*
Coefficient of Friction (with geotextile both sides)	ASTM D5321	0.72
Cold Bend Test	ASTM D146	Passed. Ø cracking at –25°F
Dead Load Seam Strength	City of Los Angeles	Passed*
Electric Volume Resistivity	ASTM D257	1.91 x 1010 ohms-cm
Elongation	ASTM D412	1,332% Ø reinforcement, 90% recovery
Elongation w/8 oz. non-woven geotextile both sides	ASTM D751	100% (same as geotextile tested separately)
Environmental Stress-Cracking	ASTM D1693-78	Passed*
Flame Spread	ASTM E108	Class A with top coat (comparable to UL790)
Freeze-Thaw Resistance (100 Cycles)	ASTM A742	Meets criteria. Ø spalling or disbondment
Heat Aging	ASTM D4068-88	Passed*
Hydrostatic Head Resistance	ASTM D751	Tested to 138 feet or 60 psi
Potable Water Containment	ANSI/NSF 61	NSF Certified for tanks >300,000 gal
Puncture Resistance w/8 oz. non-woven geotextile both sides	ASTM D4833	286 lbs. (travel of probe = 0.756 in)
Sodium Sulfate (2% water solution)	ASTM D543, D412, D1434	Less than 1% weight change
Soil Burial	ASTM E154-88	Passed
Tensile Bond Strength to Concrete	ASTM D413	2,556 lbs/ft² uplift force
Tensile Strength	ASTM D412	58 psi without reinforcement
Tensile Strength w/8 oz. non-woven geotextile both sides	ASTM D751	196 psi (same as geotextile tested separately)
Toxicity Test	22 CCR 66696	Passed
Water Penetration Rate	ASTM D2434	$<7.75 \times 10^{-9}$ cm/sec
Water Vapor Permeance	ASTM E96	0.069 perms

North America: 847.851.1800 | 800.527.9948 | www.cetco.com

UPDATED: DECEMBER 2017

FORM: TDS_LIQUID_BOOT_AM_EN_201712_V3

ULTRASHIELD™ G-1000

NON-WOVEN GEOTEXTILE FABRIC

DESCRIPTION

ULTRASHIELD™ G-1000 is a polypropylene, staple fiber, non-woven geotextile. The fibers are needled-punched, forming a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and biological and chemical environments found in soils. Manufacturing Quality Control tests have been performed and are accredited by the Geosynthetic Accreditation Institute's Laboratory Accreditation Program (GAI-LAP).

APPLICATION

ULTRASHIELD™ G-1000 is designed for use as a underslab adhesion protection course specially designed and required for underslab LIQUID BOOT® applications where the membrane must remain attached to the underslab of the building. This is to ensure the membrane remains in place despite soil settlement, which is common when building is on a landfill.

BENEFITS

ULTRASHIELD™ G-1000 is installed directly over the finished LIQUID BOOT® vapor intrusion barrier, providing superior protection from other trades.

PACKAGING

- 15 ft. x 180 ft. (4.5 m x 55 m) Rolls

ULTRASHIELD™ G-1000 is a needle-punched, non-woven geotextile with superior tensile strength and puncture resistance.

TESTING DATA

PHYSICAL PROPERTIES			
PROPERTY	TEST METHOD	RESULT (ENGLISH)	RESULT (METRIC)
Tensile Bond Strength to Concrete[3]	ASTM C 297-94	7 psi	
Mass/Unit Area	ASTM D 5261	10.0 oz/yd²	339 g/m²
Thickness	ASTM D 5199	105 mils	2.7 mm
Tensile Strength	ASTM D 4632	270 lbs.	1202 N
Elongation	ASTM D 4632	50%	50%
CBR Puncture Strength	ASTM D6241	725 lbs.	3226 N
Trapezoid Tear	ASTM D 4533	105 lbs.	467 N
UV Resistance	ASTM D 4355	70%	70%
A.O.S.	ASTM D 4751	100 U.S. Sieve	0.150 mm
Permittivity	ASTM D 4491	1.2 sec^{-1}	1.2 sec^{-1}
Permeability	ASTM D 4491	0.30 cm/sec	0.30 cm/sec
Water Flow Rate	ASTM D 4491	85 gal/min//ft²	3463 l/min/m²

NOTES:

1. The property values listed above are effective 04/2011 and are subject to change without notice.
2. All values shown are in weaker principal direction and are Minimum average roll values (MARV), except for AOS, which is a Maximum average roll value.
3. Historical value, based on past testing.

North America: 847.851.1800 | 800.527.9948 | www.cetco.com

UPDATED: MAY 2017

FORM: TDS_ULTRASHIELD_G-1000_AM_EN_201705_V2

ATTACHMENT 4

Vapor Mitigation System Inspection Log

Vapor Mitigation System Operation and Maintenance Plan
Metro North Service Center
3100 West North Avenue
Milwaukee, Wisconsin
WDNR BRRTS # 02-41-583015
WDNR FID # 241311510

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

Notice: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain vapor-related continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31-19.39, Wis. Stats.].

Directions: This form was developed to provide the results of a site inspection of a vapor related continuing obligation, typically a vapor mitigation system. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. The closure letter may be found in the database, BRRTS on the Web, by searching for the site using the BRRTS ID number, and then looking in the "Action" section, for code 56.

Activity (Site) Name: Metro North Service Center BRRTS No. 02-41-583015

Date of Inspection:

When submittal of this form is required, submit an electronic version or a scanned copy of this completed form to the RR Submittal Portal.

HOW TO USE THIS FORM
The Activity (Site) Name, BRRTS No. and Date of Inspection entered below will auto-populate the table. Complete only the applicable rows/components. Check "Not Applicable" for components that do not apply. For example, if there is no sump sealed and vented as part of the system, check "Not Applicable" in the "NOTES" section for that component.

Multiple components: For systems with multiple components (e.g., two manometers or two fans), add an additional row for that component by clicking the "+" (plus) symbol at the end of the row. After a system component row is added, a "-" (minus) symbol is shown so the added row may be deleted.

Photos: Click on the placeholder photo shown in each row to replace it with your own site-specific photo. Site-specific photos are optional but strongly recommended. Enter specific details and observations within the "NOTES" section to assist the DNR in understanding status of the system components.

SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Manometer or Differential Pressure Gauge	Measures differential pressure between vacuum side of vent pipe and indoor space. This measurement confirms there is a vacuum being pulled by the fan.	Liquid Level on Manometer or Gauge	Liquid level in manometer should be offset (not level with each other).	A change in liquid level indicates a change in the vacuum below foundation. This could be caused by failure of fan, blockage of vent pipe, change in water level below building, or other conditions. Hire a professional to identify cause and repair if needed.

PHOTO

NOTES: (Record the reading on the gauge. Identify specific building and location description:)

☐ Not Applicable

BRRTS No. 02-41-583015

Site Name: Metro North Service Center

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Fan	Fan creates a vacuum and lowers pressure below foundation. The fan also removes soil gases from below foundation for discharge to atmosphere.	Fan Operation Fan Location Motor Noise	Fan is on. Fan mounted outside & secure. Fan motor is quiet (loud motor may indicate problem).	Replace the fan immediately once the fan stops running. Fans typically run for 10-20 years, but it may be less. Replacement fan to have similar specifications as original with respect to flow and vacuum. After a fan is replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings. **Original Fan Make and Model:**

PHOTO

NOTES: (Identify specific building and location description:)

☐ Not Applicable

BRRTS No. 02-41-583015

Site Name: Metro North Service Center

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Suction Drop Point w/ Vent Pipe	**Suction Point :** Soil gases are collected in a void space below the foundation, and tight seal prevents soil gas from getting inside the home. **Vent Pipe:** Pipe conveys the vacuum from the fan, and collects soil gases for discharge to the atmosphere.	Suction Point Seal Vent Pipe Condition	Seal is air tight around pipe penetration. Vent pipe is connected to fan, has not cracked.	Suction point seal or vent pipe may need to be sealed or replaced if cracks or leaks appear. If any piping or sealing of the system is altered or replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.

PHOTO

NOTES: (Identify specific building and location description:)

☐ Not Applicable

BRRTS No. 02-41-583015

Site Name: Metro North Service Center

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Sealed Sump w/Vent Pipe	**Sump Cover:** Soil gases are collected in sump and the cover prevents soil gas from getting inside home. **Vent Pipe:** Pipe transports the soil gas from the sump for discharge to the atmosphere.	Suction Point Seal Vent Pipe Seal Condition	Seal is airtight to floor. Vent pipe is connected to the sump cover and is not cracked.	Sump cover or vent pipe may need to be sealed or replaced if cracks or leaks appear. If any piping or sealing of the system is altered or replaced, the system should be evaluated by a plumber or a mitigation professional to verify effectiveness, which includes pressure readings.

PHOTO

NOTES: (Identify specific building and location description:)

☒ Not Applicable

BRRTS No. 02-41-583015

Site Name: Metro North Service Center

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Outdoor Vent Pipe	Pipe transports the soil gas from beneath the foundation for discharge to the atmosphere.	Vent Pipe Condition Vent Pipe Location	Vent pipe remains connected to fan. End of pipe free from obstructions. The exhaust is more than 15 feet from windows or air intakes.	Vent pipe may require replacement, or cleaning to remove ice or debris. If any piping or sealing of the system is altered or replaced, the system should be evaluated by a mitigation professional to verify effectiveness, which includes pressure readings.

PHOTO

NOTES: (Identify specific building and location description:)

☐ Not Applicable

BRRTS No. 02-41-583015

Site Name: Metro North Service Center

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Foundation Floor	Foundation is a barrier that minimizes soil gas entry into building, and helps fan to work efficiently.	Foundation Condition Foundation Footprint	No penetrating cracks or holes in foundation. Check if there have been alterations or additions to building or footprint.	Seal cracks or other penetrations as you would to prevent water from entering. If building floor plan has changed, notify DNR and contact a mitigation professional to evaluate if modifications to the vapor mitigation system are necessary.

PHOTO

NOTES: (Identify specific building and location description:)

☐ Not Applicable

BRRTS No. 02-41-583015

Site Name: Metro North Service Center

Vapor Mitigation System Inspection Log

Form 4400-321 (R 02/21)

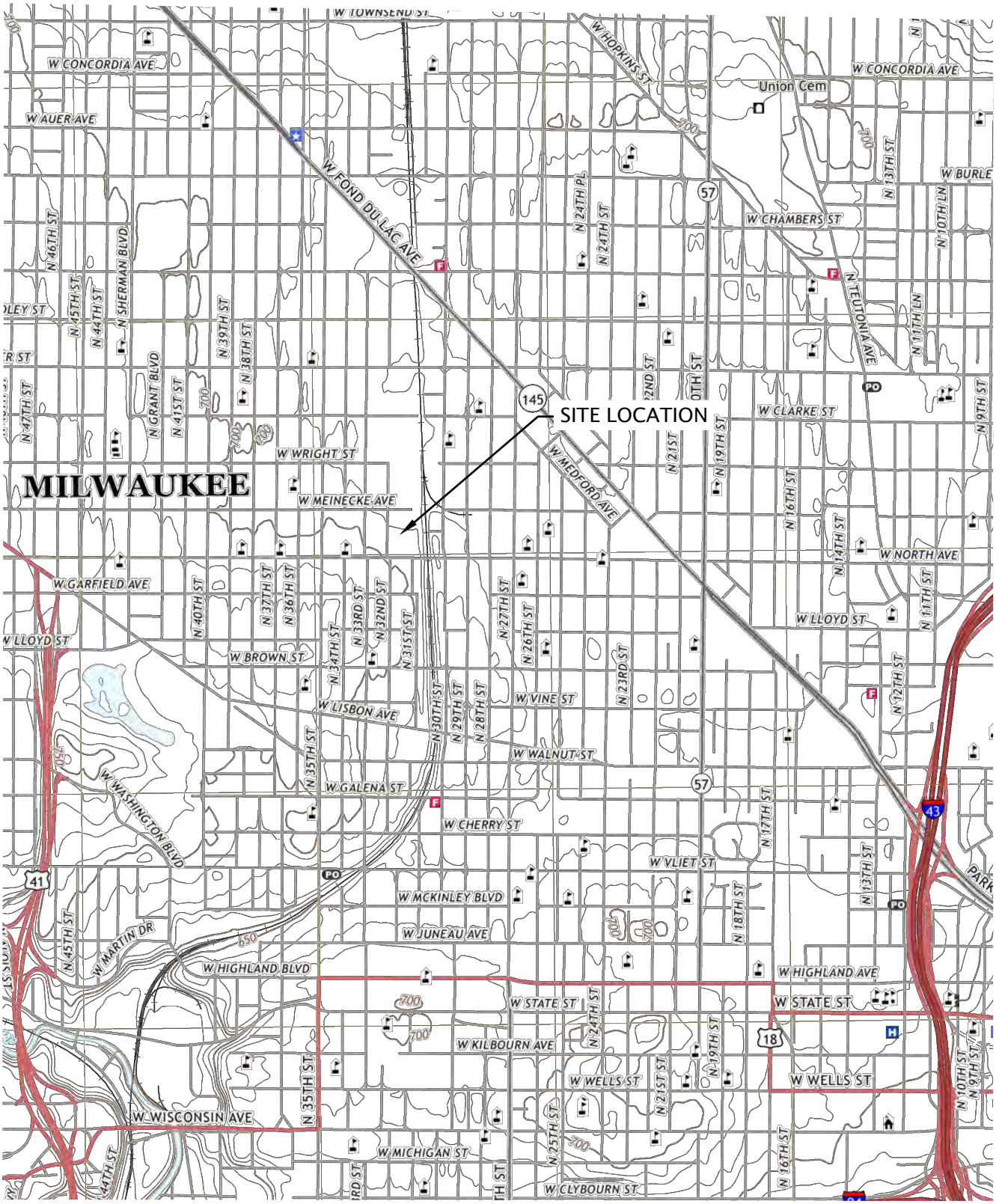
SYSTEM COMPONENT NAME	WHAT DOES IT DO?	WHAT DO I CHECK?	WHAT SHOULD I SEE?	DATE: WHAT TO FIX?
Sub Slab Vapor Port	This is a sample port to measure vacuum or take sample of soil gas if needed. It needs to remain sealed when not in use to prevent soil gas entry into the home.	Port Seal/Cap	If able to measure the vacuum with a micromanometer, the pressure differential should be at least 0.004 inches of H_2O or at least one Pascal.	Repair or replace the seal and cover as needed.
		Port Condition	Port is sealed and capped when not in use.	Permanently seal hole if sample port is ever removed.

PHOTO

NOTES: (If taken, record the pressure differential reading. Identify specific building and location description:)

☐ Not Applicable

FIGURES



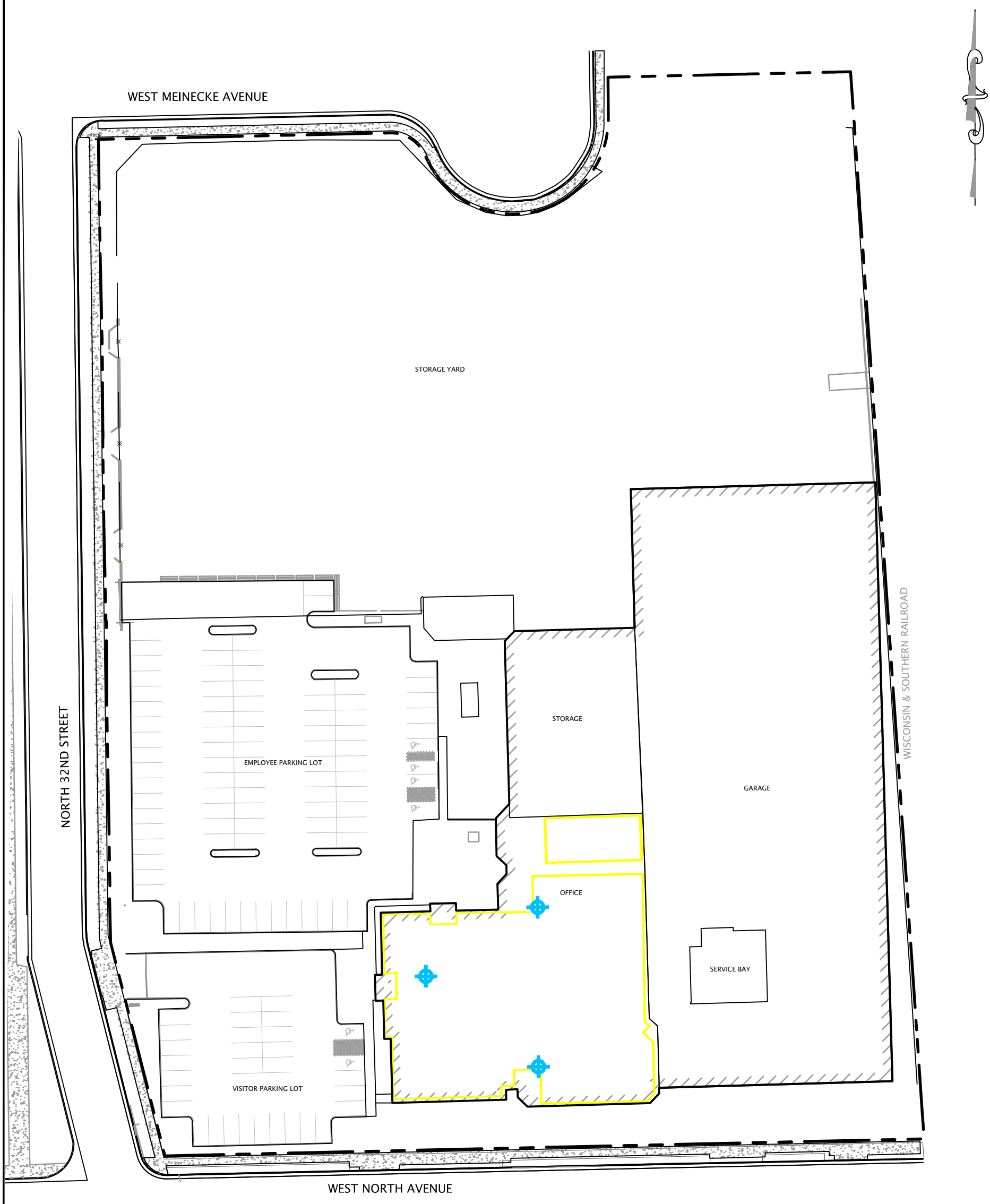
SOURCE: USGS MILWAUKEE, WISCONSIN QUADRANGLE
TOPOGRAPHIC MAPS 2018

SCALE IN FEET

0 2,000'

Geosyntec consultants

CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	SITE LOCATION MAP
PROJECT: CHE8094OQ	FIGURE NO.: 1
DATE: April 20, 2022	FILE NO.: 2005MNSCP2001
DRAWING NO.:	1 of 5



SCALE IN FEET

0 60'

LEGEND:

- APPROXIMATE SITE PROPERTY LINE
- EXISTING SITE PROPERTY BUILDING
- EXTENT OF VMS BARRIER LAYER
- APPROXIMATE VMS VENTING SYSTEM BLOWER/EXHAUST STACK LOCATION

NOTES:

VMS - VAPOR MITIGATION SYSTEM

Geosyntec consultants

CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	SITE LAYOUT MAP

PROJECT: CHE8094OQ	FIGURE NO.: 2	DRAWING NO.: 2 OF 5
DATE: March 19, 2023	FILE NO.: 2301 MNSC011	

ELECTRICAL ROOM
(VMS BREAKER PANEL LOCATION)

MECHAN CAL EQUIPMENT 148
METER TRA N NG ROOM 150
MUD ROOM 151
VEST BULE 157
TO LET SHOWER 146
COR DOR 149
CHANG NG 161A
MEN'S LOCKER TO LET 161
CHANG NG 160A
ELECTR CAL ROOM 147
JAN TOR 14
EP-1
W OMEN'S LOCKER TO LET 160
CHANG NG 161B
VP-1
CORR DOR 134
WELLNESS 144
VEST BULE 105
PHONE 142
PHONE 141
DATA T 143
READY ROOM 131
VP-2
W O K CAFE 104
F TNESS CENTER 138
STORAGE 140
STORAGE 139
CORR DOR 129
READY ROOM 136
LOBBY 108
EP-2
WORK AREA 110
OFF CE 130
OFF CE 132
OFF CE 133
VEST BULE 100
VP-3
LOBBY 101
FOCUS ROOM 109
ENCLAVE 124
CONFERENCE ROOM 102
MEN 106
WOMEN 107
OFF CE 120
OFF CE 121
OFF CE 122
STORAGE 103C
OPEN OFF CE 112
OFF CE 127
EP-3
MEET NG ROOM 103A
MEET NG ROOM 103B
STORAGE 103D
WATER SERV CE 114
VP-4
VP-5
ENCLAVE 115
CONFERENCE ROOM 128

APPROXIMATE LOW-PERMEABILITY UTILITY TRENCH PLUG (WATER LINE)

LEGEND:

- EXTENT OF VMS BARRIER LAYER
- APPROXIMATE VMS VENTING LAYER GEOVENT™ LOCATION
- EP-1 — APPROXIMATE 4" DIA RISER PIPE LOCATION
- VP-1 — APPROXIMATE VAPOR PROBE LOCATION

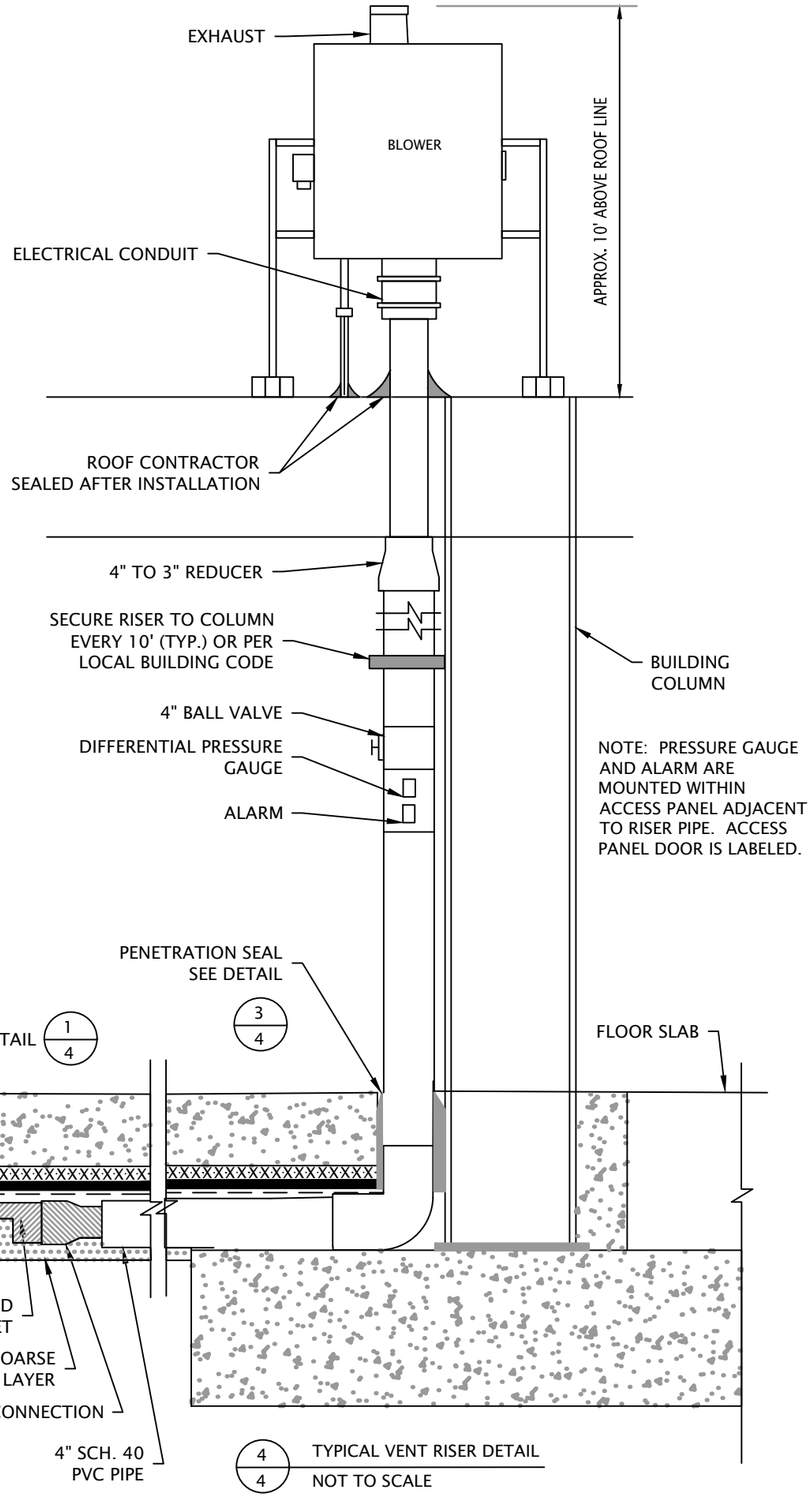
NOTES:

VMS - VAPOR MITIGATION SYSTEM

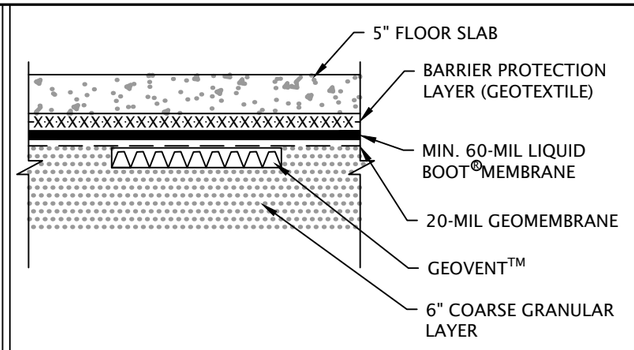
SCALE IN FEET
0 60'

Geosyntec consultants

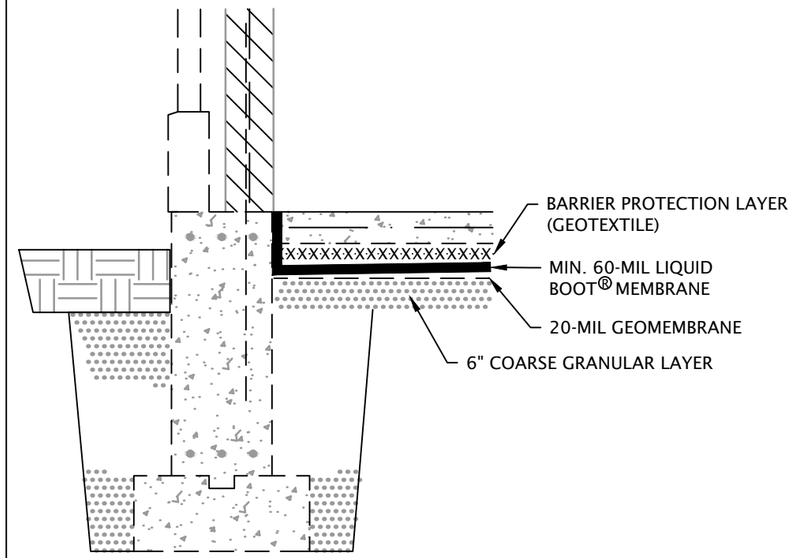
CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	VAPOR MITIGATION SYSTEM AS-BUILT LAYOUT
PROJECT: CHE8094OQ	FIGURE NO.: 2
DATE: March 19, 2023	FILE NO.:23-01 MNSCP 010
DRAWING NO.:	3 OF 5



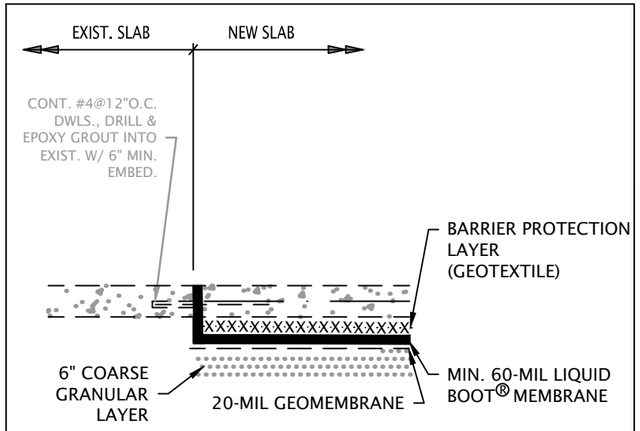
4/4 TYPICAL VENT RISER DETAIL
NOT TO SCALE



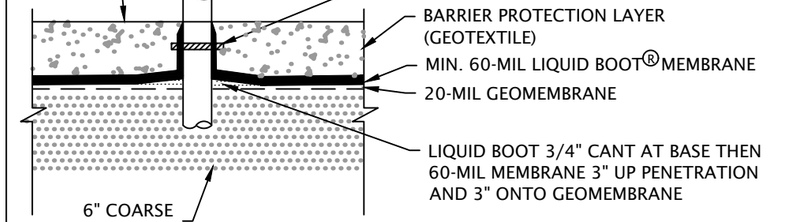
1/4 TYPICAL VAPOR MITIGATION SYSTEM SECTION
NOT TO SCALE



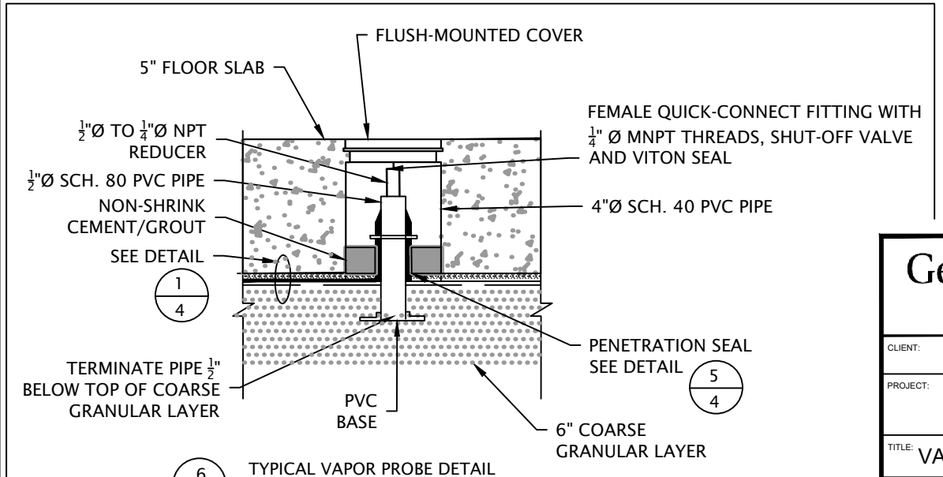
2/4 TYPICAL WALL SECTION
NOT TO SCALE



3/4 TRANSITION BETWEEN EXISTING AND NEW SLAB
NOT TO SCALE



5/4 TYPICAL SLAB PENETRATION DETAIL
NOT TO SCALE

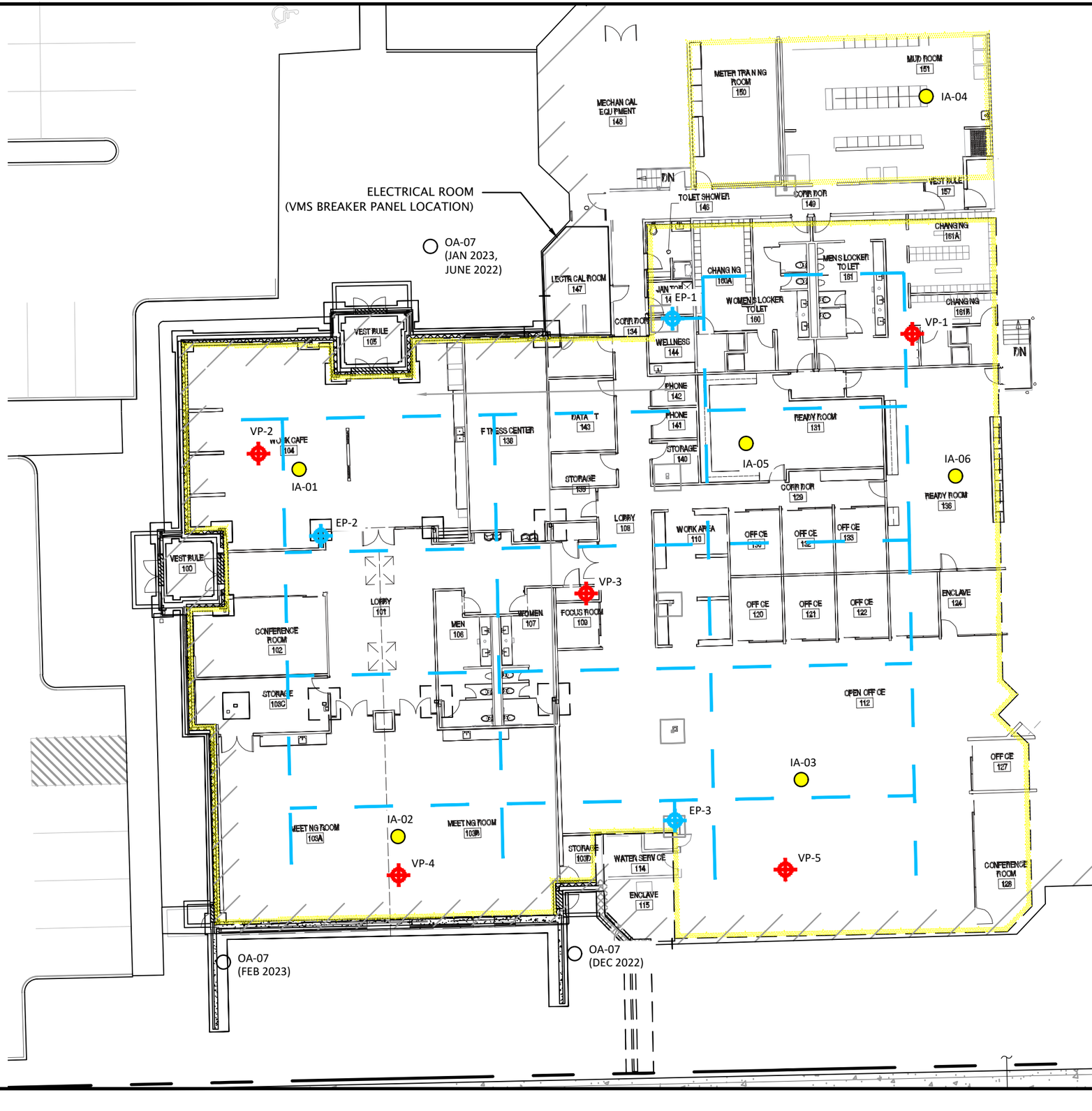


6/4 TYPICAL VAPOR PROBE DETAIL
NOT TO SCALE

Geosyntec consultants

CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	VAPOR MITIGATION SYSTEM AS-BUILT DETAILS

PROJECT: CHE8094OQ	FIGURE NO.: 4	DRAWING NO.: 4 OF 5
DATE: March 23, 2023	FILE NO.: 23-03 MNSC 011	



LEGEND:

- EXTENT OF VMS BARRIER LAYER
- APPROXIMATE VMS VENTING LAYER GEOVENT™ LOCATION
- EP-1 — APPROXIMATE 4" DIA RISER PIPE LOCATION
- VP-1 — APPROXIMATE VAPOR PROBE LOCATION
- IA-01 — APPROXIMATE INDOOR AIR SAMPLING LOCATION
- 0A-07 — APPORXIMATE OUTDOOR AIR SAMPLING LOCATION

NOTES:

VMS - VAPOR MITIGATION SYSTEM

SCALE IN FEET

0 60'

Geosyntec consultants

CLIENT:	WE ENERGIES
PROJECT:	METRO NORTH SERVICE CENTER (MNSC) 3100 WEST NORTH AVENUE MILWAUKEE, WISCONSIN
TITLE:	INDOOR AIR SAMPLING MAP
PROJECT: CHE8094OQ	FIGURE NO.: 4
DATE: March 12, 2023	FILE NO.:23-01 MNSCP 010
DRAWING NO.:	5 OF 5

TABLES

Table 1 - Pressure Field Extension (PFE) and Operational Monitoring Data
Table 2 - Indoor Air Sampling Data
Table 3 - Discharge Air Sampling Data

TABLE 1
Pressure Field Extension (PFE) and Operational Monitoring Data
Vapor Mitigation System
Metro North Service Center (MNSC)
3100 West North Avenue
Milwaukee, Wisconsin

DATE	EXTRACTION POINT OPERATIONAL MONITORING DATA															VAPOR PROBE (PFE) MONITORING DATA					COMMENTS
	EP-1					EP-2					EP-3					VP-1	VP-2	VP-3	VP-4	VP-5	
	FLOW		VACUUM	PID	FAN	FLOW		VACUUM	PID	FAN	FLOW		VACUUM	PID	FAN	VACUUM					
	(fm)	(scfm)	(in-H_20)	(ppm)	SETTING	(fm)	(scfm)	(in-H_20)	(ppm)	SETTING	(fm)	(scfm)	(in-H_20)	(ppm)	SETTING	(in-H_20)					
Startup Phase of Commissioning																					
2/9/2022	--		--	--	5	--	--	--	--	5	--	--	--	--	5	--	--	--	--	--	*VMS startup*
2/10/2022	740	59.2	>-3.2	--	5	770	61.6	>-3.2	--	5	21	1.68		--	1	-0.004	-0.048	-0.030	-0.023	0.000	*water observed in EP-3; decreased EP-3 fan setting*
2/11/2022	--	--	-8/1.55	--	7	1,030	82.4	-5.8	--	7	925	74	-6.3	--	7	-0.013	-0.100	-0.077	-0.063	-0.022	*water observed in EP-1; increased EP-1, EP-2 and EP-3 fan settings*
2/17/2022	--	--	-0.5	--	2	--	--	-5.3	--	7	--	--	-3.6	--	5	0.005	-0.077	-0.032	-0.034	-0.015	*water observed in EP-1 and EP-3; decreased EP-1 and EP-3 fan settings*
2/24/2022	373	29.84	-0.7	0	2	1,160	92.8	-5.4	0.7	7	--	--	--	--	2	-0.004	-0.078	-0.031	-0.032	-0.008	*water observed in EP-3; reduced EP-3 fan setting*
3/1/2022	350	28	-1.0	--	2	1,295	103.6	-5.7	--	7	263	21.04	1.0	--	2	-0.002	-0.083	-0.033	-0.034	-0.008	*little water observed in EP-3*
3/9/2022	356	28.48	-1.0	0.6	2	1,294	103.52	-5.7	0.4	7	217	17.36	-1.2	0.4	2	-0.008	-0.008	-0.034	-0.033	-0.008	*little water observed in EP-3*
3/11/2022	342	27.36	-0.8	--	2	1,570	125.6	-7.6	--	8.5	200	16	-1.2	--	2	-0.002	-0.051	-0.100	-0.050	-0.006	*little water observed in EP-3; increased EP-2 fan setting*
3/14/2022	--	--	--	--	2.5	1,515	121.2	-7.6	--	8.5	310	24.8	-1.0	--	2	-0.003	-0.095	-0.034	-0.034	-0.012	*little water observed in EP-3; increased EP-1 fan setting*
3/16/2022	326	26.08	-1.0	--	2.5*	1,533	122.64	-7.6	--	8.5	317	25.36	-1.2	--	2	-0.004	-0.107	-0.047	-0.043	-0.009	**EP-1 valve turned down to reduce water*
Performance Verification Monitoring and Establishment of Baseline Conditions																					
3/18/2022	423	33.84	-1.0	--	2.5	1,500	120	-7.6	--	8.5	253	20.24	-1.0	--	2	-0.006	-0.110	-0.050	-0.048	-0.011	*performed exhaust sampling*
5/24/2022	708	56.64	-2.4	0	4	1488	119.04	-7.8	0	8.5	622	49.76	-2.7	0	4	-0.014	-0.125	-0.068	-0.065	-0.024	*increased EP-1 and EP-3 fan settings*
6/2/2022	713	57.04	-2.4	0	4	1535	122.8	-7.8	0	8.5	645	51.6	-2.7	0	4	-0.015	-0.121	-0.065	-0.064	-0.025	
7/29/2022	730	58.4	-2.2	0	4	1435	114.8	-7.7	0.3	8.5	607	48.56	-2.8	0	4	-0.012	-0.123	-0.063	-0.060	-0.025	
7/29/2022	1400	112	-7.4	0.8	8	1430	114.4	-7.7	0.3	8.5	1218	97.44	-8.2	0.6	8	-0.021	-0.133	-0.088	-0.081	-0.042	*increased EP-1 and EP-3 fan settings*
9/19/2022	1355	108.4	-7.5	0.9	8	1390	111.2	-7.6	4.8	8.5	1180	94.4	-8.3	1.1	8	-0.028	-0.139	-0.092	-0.083	-0.048	
10/27/2022	1407	112.56	-7.7	0	8	1390	111.2	-7.8	0	8.5	1260	100.8	-8.4	0	8	-0.027	-0.129	-0.088	-0.077	-0.040	
11/18/2022	1312	104.96	-7.4	0.3	8	1270	101.6	-7.8	0.3	8.5	1160	92.8	-8.4	0.3	8	-0.022	-0.120	-0.085	-0.068	-0.034	
12/20/2022	1414	113.12	-7.6	0.1	8	1460	116.8	-7.9	0	8.5	1320	105.6	-8.4	0	8	-0.020	-0.122	-0.079	-0.075	-0.035	
1/13/2023	1516	121.28	-8.0	0.2	10	1464	117.12	-8.0	0.2	10	1470	117.6	-9.2	0.2	10	-0.020	-0.124	-0.079	-0.071	-0.036	*increased fan settings to 10 on 12/21/2022*
2/17/2023	1520	121.6	-8.0	0.3	10	1480	118.4	-7.7	0.1	10	1402	112.2	-9.0	0.1	10	-0.022	-0.122	-0.082	-0.071	-0.037	

Notes:
EP - extraction point
fm - feet per minute
in-H_20 - inches of water
PFE - pressure field extension
PID - photo-ionization detector
ppm - part per million
scfm - standard cubic feet per minute
VMS - vapor mitigation system
VP - vapor probe

TABLE 2
Indoor Air Sampling Data
Vapor Mitigation System
Metro North Service Center (MNSC)
3100 West North Avenue
Milwaukee, Wisconsin

Sample Location	Sample ID	Laboratory	Sample Collection Date	Analyzed VOCs (ug/m^3)				
				Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride
IA-01	IA-01-062022	Pace	6/4/2022	1.9	<0.29	<0.28	<0.25	<0.13
	IA-01-122022	Pace	12/10/2022	71.7	<0.38	<0.34	<0.67	<0.15
	IA-01-012023	Pace	1/13/2023	0.83 J	<0.33	<0.29	1.2	<0.13
	IA-01-012023	EurofinsTestAmerica	1/13/2023	0.67 J	0.95 J	0.39 J	0.80	<0.054
	IA-01-022023	Pace	2/17/2023	5.0	<0.36	<0.32	<0.62	<0.14
	IA-01-022023	EurofinsTestAmerica	2/17/2023	2.8	0.22 J	<0.083	<0.091	<0.054
IA-02	IA-02-062022	Pace	6/4/2022	2.8	<0.30	<0.30	<0.26	<0.13
	IA-02-122022	Pace	12/10/2022	93.3	<0.33	<0.30	<0.58	<0.13
	IA-02-012023	Pace	1/13/2023	0.80 J	<0.33	<0.29	1.0 J	<0.13
	IA-02-012023	EurofinsTestAmerica	1/13/2023	0.50 J	1.5	<0.083	<0.091	<0.054
	IA-02-022023	Pace	2/17/2023	5.2	<0.35	<0.31	<0.61	<0.14
	IA-02-022023	EurofinsTestAmerica	2/17/2023	1.0 J	<0.13	<0.083	<0.091	<0.054
IA-03	IA-03-062022	Pace	6/4/2022	1.5	<0.28	<0.28	<0.24	<0.12
	IA-03DUP-062022	Pace	6/4/2022	1.8	<0.29	<0.28	<0.25	<0.13
	IA-03-1322022	Pace	12/10/2022	**182**	<0.34	<0.31	<0.60	<0.14
	IA-03DUP-1322022	Pace	12/10/2022	178	<0.44	<0.39	<0.76	<0.18
	IA-03-012023	Pace	1/13/2023	2.3	<0.33	<0.30	1.3	<0.13
	IA-03DUP-012023	Pace	1/13/2023	2.2	<0.34	<0.30	1.2	<0.14
	IA-03-012023	EurofinsTestAmerica	1/13/2023	1.3 J	<0.13	<0.083	0.74 J	<0.054
	IA-03-022023	Pace	2/17/2023	12.1	<0.36	<0.32	<0.62	<0.14
	IA-03DUP-022023	Pace	2/17/2023	11.5	0.78 J	<0.32	<0.62	<0.14
	IA-03-022023	EurofinsTestAmerica	2/17/2023	0.32 J	<0.13	<0.083	<0.091	<0.054
	IA-03DUP-022023	EurofinsTestAmerica	2/17/2023	3.2	<0.13	<0.083	<0.091	<0.054
IA-04	IA-04-062022	Pace	6/4/2022	1.7	<0.28	<0.28	<0.24	<0.12
	IA-04-122022	Pace	12/10/2022	159	<0.34	<0.31	<0.60	<0.14
	IA-04-012023	Pace	1/13/2023	4.4	<0.34	<0.30	1.2	<0.14
	IA-04-012023	EurofinsTestAmerica	1/13/2023	1.7	<0.13	<0.083	0.75 J	<0.054
	IA-04-022023	Pace	2/17/2023	14.0	<0.36	<0.32	<0.62	<0.14
	IA-04-022023	EurofinsTestAmerica	2/17/2023	9.0	<0.13	<0.083	<0.091	<0.054
IA-05	IA-05-062022	Pace	6/4/2022	1.5	<0.28	<0.27	<0.24	<0.12
	IA-05-122022	Pace	12/10/2022	**184**	<0.34	<0.31	<0.60	<0.14
	IA-05-012023	Pace	1/13/2023	2.1	<0.34	<0.30	1.2	<0.14
	IA-05-012023	EurofinsTestAmerica	1/13/2023	1.3 J	<0.13	<0.083	0.68 J	<0.054
	IA-05DUP-012023	EurofinsTestAmerica	1/13/2023	1.4	<0.13	<0.083	0.71 J	<0.054
	IA-05-022023	Pace	2/17/2023	11.3	<0.33	<0.30	<0.58	<0.13
	IA-05-022023	EurofinsTestAmerica	2/17/2023	6.4	<0.13	<0.083	0.11 J	<0.054
IA-06	IA-06-062022	Pace	6/4/2022	0.44 J	1.9	<0.28	<0.24	<0.12
	IA-06-122022	Pace	12/10/2022	168	<0.34	<0.30	<0.59	<0.14
	IA-06-012023	Pace	1/13/2023	2.4	<0.33	<0.30	1.2	<0.13
	IA-06-012023	EurofinsTestAmerica	1/13/2023	0.99 J	<0.13	<0.083	0.69 J	<0.054
	IA-06-022023	Pace	2/17/2023	10.7	<0.32	<0.29	<0.56	<0.13
	IA-06-022023	EurofinsTestAmerica	2/17/2023	8.0	<0.13	<0.083	<0.091	<0.054
OA-07 Ambient (Outdoor) Air Sample	OA-07-062022	Pace	6/4/2022	2.0	<0.28	<0.28	<0.24	<0.12
	OA-07-1220722	Pace	12/10/2022	<0.33	<0.32	<0.29	<0.56	<0.13
	OA-07-012023	Pace	1/13/2023	<0.32	<0.31	<0.28	0.94 J	<0.12
	OA-07-012023	EurofinsTestAmerica	1/13/2023	<0.14	<0.13	<0.083	0.55 J	<0.054
	OA-07-022023	Pace	2/17/2023	<0.33	<0.32	<0.29	<0.56	<0.13
	OA-07-022023	EurofinsTestAmerica	2/17/2023	<0.14	<0.13	<0.083	<0.091	<0.054
WDNR Indoor Air VAL				180	8.8	180	180	28

Notes:
bold - reported concentration exceeds the WDNR Indoor Air VAL
J - Estimated concentration at or above the limit of detection and below the limit of quantitation.
ug/m^3 - micrograms per cubic meter
VAL - WDNR vapor action level (large commercial/industrial)
VOCs - volatile organic compounds
WDNR - Wisconsin Department of Natural Resources

TABLE 3
Discharge Air Sampling Data
Vapor Mitigation System
Metro North Service Center (MNSC)
3100 West North Avenue
Milwaukee, Wisconsin

Number of Emissions Stacks	3 (EP-1, EP-2 and EP-3)
Approximate Height of Emissions Stacks	17 ft above ground, 5 ft above roof
Primary Air Contaminant	Tetrachloroethene (PCE)

EP-1, 2 and 3		EP-1 Emissions						EP-2 Emissions						EP-3 Emissions						Total Emissions = EP-1 + EP-2 + EP-3			NR 445 Threshold (emissions from stacks < 25 ft)	
Pipe Diameter	Area of Pipe (1)	Flow Velocity	Vacuum	Flow Rate (2)	Detected Analytes (VOCs)	Conc.	Mass Flux (3)	Flow Velocity	Vacuum	Flow Rate (2)	Detected Analytes (VOCs)	Conc. (4)	Mass Flux (3)	Flow Velocity	Vacuum	Flow Rate (2)	Detected Analytes (VOCs)	Conc.	Mass Flux (3)	Detected Analytes (VOCs)	Total Mass Flux			
in	ft^2	ft/min	$in\text{-}H_2O$	scfm		ug/m^3	lb/hr	ft/min	$in\text{-}H_2O$	scfm		ug/m^3	lb/hr	ft/min	$in\text{-}H_2O$	scfm		ug/m^3	lb/hr		lb/hr	lb/yr	lb/hr	lb/yr
4	**0.0873**	**423**	**1**	**36.8**	**Tetrachloroethene**	**426**	**0.00006**	**1500**	**7.6**	**128.5**	**Tetrachloroethene**	**845**	**0.00041**	**253**	**1**	**22.0**	**Tetrachloroethene**	**88.7**	**0.00001**	**Tetrachloroethene**	**0.00047**	**4.13790**	9.11	301
4	0.0873	423	1	36.8	Acetone	18.9	0.000003	1500	7.6	128.5	Acetone	16	0.00001	253	1	22.0	Acetone	22.2	0.000002	Acetone	0.00001	0.10625	--	--
4	0.0873	423	1	36.8	Benzene	ND	0	1500	7.6	128.5	Benzene	0.78	0.0000004	253	1	22.0	Benzene	0.69	0.0000001	Benzene	0.00000	0.00378	--	228
4	0.0873	423	1	36.8	Bromomethane	ND	0	1500	7.6	128.5	Bromomethane	ND	0	253	1	22.0	Bromomethane	0.34	0.00000003	Bromomethane	0.00000003	0.00025	--	--
4	0.0873	423	1	36.8	2-Butanone (MEK)	6.2	0.000001	1500	7.6	128.5	2-Butanone (MEK)	3.7	0.000002	253	1	22.0	2-Butanone (MEK)	7.9	0.000001	2-Butanone (MEK)	0.000003	0.02878	--	--
4	0.0873	423	1	36.8	Carbon disulfide	6.7	0.000001	1500	7.6	128.5	Carbon disulfide	4.7	0.000002	253	1	22.0	Carbon disulfide	ND	0	Carbon disulfide	0.000003	0.02789	1.67	124,381
4	0.0873	423	1	36.8	Chloroform	ND	0	1500	7.6	128.5	Chloroform	0.55	0.0000003	253	1	22.0	Chloroform	ND	0	Chloroform	0.0000003	0.00232	2.62	77.3
4	0.0873	423	1	36.8	Chloromethane	ND	0	1500	7.6	128.5	Chloromethane	ND	0	253	1	22.0	Chloromethane	0.70	0.0000001	Chloromethane	0.000000	0.00051	5.5	--
4	0.0873	423	1	36.8	Cyclohexane	2.1	0.0000003	1500	7.6	128.5	Cyclohexane	2.8	0.000001	253	1	22.0	Cyclohexane	2.3	0.0000002	Cyclohexane	0.000002	0.01599	--	--
4	0.0873	423	1	36.8	Dichlorodifluoromethane	25.4	0.000004	1500	7.6	128.5	Dichlorodifluoromethane	4.2	0.000002	253	1	22.0	Dichlorodifluoromethane	3.1	0.0000003	Dichlorodifluoromethane	0.00001	0.05060	--	--
4	0.0873	423	1	36.8	cis-1,2-Dichloroethene	3.1	0.0000004	1500	7.6	128.5	cis-1,2-Dichloroethene	18.8	0.000009	253	1	22.0	cis-1,2-Dichloroethene	ND	0	cis-1,2-Dichloroethene	0.00001	0.08294	42.6	--
4	0.0873	423	1	36.8	1,2-Dichloropropane	ND	0	1500	7.6	128.5	1,2-Dichloropropane	1.7	0.000001	253	1	22.0	1,2-Dichloropropane	ND	0	1,2-Dichloropropane	0.000001	0.00716	--	--
4	0.0873	423	1	36.8	Ethanol	11.9	0.000002	1500	7.6	128.5	Ethanol	25.9	0.00001	253	1	22.0	Ethanol	16.9	0.000001	Ethanol	0.00002	0.13567	--	--
4	0.0873	423	1	36.8	Ethylbenzene	ND	0	1500	7.6	128.5	Ethylbenzene	40.1	0.00002	253	1	22.0	Ethylbenzene	0.59	0.00000005	Ethylbenzene	0.00002	0.16934	23.3	177,688
4	0.0873	423	1	36.8	4-Ethyltoluene	ND	0	1500	7.6	128.5	4-Ethyltoluene	2.5	0.000001	253	1	22.0	4-Ethyltoluene	ND	0	4-Ethyltoluene	0.000001	0.01053	--	--
4	0.0873	423	1	36.8	n-Hexane	ND	0	1500	7.6	128.5	n-Hexane	4.3	0.000002	253	1	22.0	n-Hexane	3.5	0.0000003	n-Hexane	0.000002	0.02064	9.47	35,538
4	0.0873	423	1	36.8	MIBK	2.0	0.0000003	1500	7.6	128.5	MIBK	ND	0	253	1	22.0	MIBK	ND	0	MIBK	0.0000003	0.00242	11	--
4	0.0873	423	1	36.8	Propylene	1.9	0.0000003	1500	7.6	128.5	Propylene	4.9	0.000002	253	1	22.0	Propylene	1.5	0.0000001	Propylene	0.000003	0.02402	--	--
4	0.0873	423	1	36.8	Tetrahydrofuran	6.4	0.000001	1500	7.6	128.5	Tetrahydrofuran	ND	0	253	1	22.0	Tetrahydrofuran	ND	0	Tetrahydrofuran	0.000001	0.00773	31.7	--
4	0.0873	423	1	36.8	Toluene	3.7	0.000001	1500	7.6	128.5	Toluene	16.6	0.000008	253	1	22.0	Toluene	4.1	0.0000003	Toluene	0.00001	0.07735	10.1	71,075
4	0.0873	423	1	36.8	Trichloroethene	9.9	0.000001	1500	7.6	128.5	Trichloroethene	23.7	0.000011	253	1	22.0	Trichloroethene	ND	0	Trichloroethene	0.00001	0.11179	14.4	888
4	0.0873	423	1	36.8	Trichlorofluoromethane	228	0.00003	1500	7.6	128.5	Trichlorofluoromethane	138	0.000066	253	1	22.0	Trichlorofluoromethane	60	0.000005	Trichlorofluoromethane	0.00010	0.89995	--	--
4	0.0873	423	1	36.8	1,2,4-Trimethylbenzene	ND	0	1500	7.6	128.5	1,2,4-Trimethylbenzene	5.7	0.000003	253	1	22.0	1,2,4-Trimethylbenzene	0.65	0.0000001	1,2,4-Trimethylbenzene	0.000003	0.02448	6.6	--
4	0.0873	423	1	36.8	1,3,5-Trimethylbenzene	ND	0	1500	7.6	128.5	1,3,5-Trimethylbenzene	2.0	0.000001	253	1	22.0	1,3,5-Trimethylbenzene	ND	0	1,3,5-Trimethylbenzene	0.000001	0.00842		
4	0.0873	423	1	36.8	m&p-Xylene	1.30	0.0000002	1500	7.6	128.5	m&p-Xylene	128	0.00006	253	1	22.0	m&p-Xylene	1.9	0.0000002	m&p-Xylene	0.00006	0.54212	23.3	--
4	0.0873	423	1	36.8	o-Xylene	ND	0	1500	7.6	128.5	o-Xylene	25.7	0.00001	253	1	22.0	o-Xylene	0.81	0.0000001	o-Xylene	0.00001	0.10884		
																				Total VOC Emissions	**0.00075**	**6.61**	5.7 (5)	--

Notes:
(1) Area of Pipe (ft^2) = pipe $radius^2$*Pi
(2) Flow Rate (scfm) = measured Flow Velocity (ft/min) x Area of Pipe (ft^2) x [(standard pressure - measured pipe vacuum)/standard pressue]
(3) Mass Flux (lb/hr) = Flow Rate (scfm) x concentration (ug/m^3) x 0.0283 m^3/ft^3 x 60 min/hr x 1 lb/453,592,370 ug
(4) A duplicate sample was collected from EP-2 (EP-2 DUP). The concentrations presented are the highest detected of these two duplicate samples.
(5) NR 406.04 exemption criteria
-- - not established
conc. - concentration
ft - feet
ft/min - feet per minute
$in\text{-}H_2O$ = inches of water
lb/hr - pounds per hour
lb/yr - pounds per year
MIBK - 4-Methyl-2-pentanone
ND - not detected
r - radius of pipe
scfm - standard cubic feet per minute
standard pressure - 406.78 $in\text{-}H_2O$
ug/m^3 - micrograms per cubic meter
VOCs - volatile organic compounds